

The Austronesians in Madagascar and Their Interaction with the Bantu of the East African Coast: Surveying the Linguistic Evidence for Domestic and Translocated Animals

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The Malagasy language is generally considered part of the Barito languages of Borneo and these, in turn, have recently been linked to the Sama-Bajaw group. The dispersal of the Sama-Bajaw in the seventh century was impelled by the expansion of the Śrīvijaya Malay. Although there is evidence for Austronesian navigators crossing the Indian Ocean prior to 0 AD, they came from a different region of SE Asia, and were not associated with the settlement of Madagascar. The origin of Bantu words in the Malagasy lexicon has been attributed to a wide scatter of East African languages, but it appears that the source of nearly all of them is the Swahili/Sabaki group, which would have dominated the incipient trading networks in this region from the seventh and eighth centuries onwards. This paper takes as a case study the terminology of domestic animals, all of which appears to derive from languages of the Swahili group, except for nineteenth century introductions. Recent zoogeographic research also suggests the translocation of domestic and wild species across the Mozambique Channel and between the islands; and the Malagasy name for the wild pig, lambo, which reflects Austronesian names for 'bovine'. A provisional list of Malagasy borrowings from Sabaki languages is given in an appendix.

1. Introduction

Malagasy is often seen as a poor relation in Austronesian studies, remote from the core area and with little to contribute to comparative research. Nonetheless, it is one of the Austronesian languages with a large number of speakers (ca. 17,000,000) and is well documented. The chronology of the settlement of Madagascar and the place of Malagasy in the Austronesian family tree remain under discussion, reflecting the mixed heritage of the language. Apart from its core structures, Malagasy has picked up substantial amounts of Malay from different eras and areas (Banjar and Sumatra), Bantu lexical items from the adjacent mainland, and possibly words from other, now-vanished speech forms. The occurrence of a large number of Malay nautical terms either indicate intensive interaction with the Malay or perhaps a distinct migration of a Malay-speaking population, a possibility considered by Beaujard (2003). **If nothing else, Malagasy remains of considerable interest** as a test of the comparative method in determining the different strata in the lexicon.

Malagasy has a considerable number of terms of demonstrably Bantu origin, but their exact source within the Bantu domain has never been properly identified. The most comprehensive attempt to consider this issue is Beaujard (1998) whose rich dictionary of Tanala contains many etymological speculations. However, Beaujard tends to quote as many

cognates as he can uncover, including citing proto-Bantu, which does not result in a specific historical hypothesis. Recent observations on the historical origins of Malagasy make it possible to develop a more definite model for the origin of Bantu loanwords. This paper¹ focuses on the terminology for domestic and translocated animals, since the impact of these on the environment has been considerable and also throws unexpected light on prehistoric interactions with the East African mainland. It also considers some other areas of vocabulary in less detail as a way of putting forward suggestions for further etymological research.

2. The settlement of Madagascar

A controversial text, the *Periplus of the Erythraean Sea* (Casson 1989), a first century seaman's guide to the coast, appears to suggest Graeco-Roman mariners or their contacts had some knowledge of Madagascar, which perhaps makes an appearance in the text as the 'Great island of Menouthias', a source for tortoise-shell. The East African coast was almost certainly visited by Austronesian mariners from an early period, probably before 0 AD (Blench 1994, 2007, In press). Chami (1999) has reported evidence for Graeco-Roman trade that confirms the observations of the *Periplus*. Such traders could hardly reach these smaller islands and completely miss Madagascar, but it may imply they did not settle. Pliny, in his geography,² refers to the 'men who come across the great ocean on rafts [*rati*]' in contrast to the coastal traders. These could be Austronesians, if *rati* are outrigger canoes, craft that would have been quite unfamiliar to traders on the east coast of Africa. Pliny was also aware that these traders made use of the seasonal monsoons, in modern terms, the Equatorial counter-current, which reverses itself every six months. Despite this, archaeology in Madagascar has so far uncovered no site earlier than the fifth century AD, which seems remarkably late (Dewar 1994). No Stone Age sites have so far been identified on Madagascar although palynological evidence seems to support older human incursions on the landscape.³ Indirect arguments for earlier dates have been advanced based on butchering marks on bone, faunal extinctions, and vegetation change (Blench 2007). These point strongly to settlement by foragers from the East African mainland by 300 BC. It is most likely that the present-day 'Vazimba' populations represent the remaining traces of these populations but there is no linguistic evidence for this, since they have now been totally assimilated linguistically.

The general settlement pattern is that the highland areas of Madagascar are dominated by lighter-skinned, more 'Indonesian' populations and the coastal lowlands by darker 'African' populations. Not all of these were necessarily of Bantu origin; the Bara, a tall group who are principally pastoralists, rather suggest Nilotes or Cushites. However, all the languages spoken on Madagascar today are Malagasy lects, except for an enclave of

¹ I would like to thank Martin Walsh for general discussions on these topics as well as drawing my attention to the intricate byways of porcine terminology and reviewing the table of etymologies. Sander Adelaar, Derek Nurse, Thilo Schadeberg, and Malcolm Ross have kindly commented on the text of the paper. Paul Sinclair has assisted with discussions of the archaeology of Madagascar and Vincent Porphyre drew my attention to the material on feral pigs. Some of the conclusions of the paper have been radically changed following discussions in Palawan and I would particularly like to acknowledge the paper by Bob Blust on the affiliation of Sama-Bajaw in this respect.

² Online text at http://penelope.uchicago.edu/Thayer/L/Roman/Texts/Pliny_the_Elder/5*.html.

³ However, archaeological survey on Madagascar has been almost entirely of settlement sites, and cave sites in the interior have not been given the attention required to be sure there were no Pleistocene populations (Sinclair, p.c.).

Comorian Swahili in the northwest. Whether this means the African component was forcibly transposed to Madagascar or came over as part of a colonising exercise is hard to determine. Kent (1970) has argued that specific mainland peoples moved across the Mozambique Channel leading to the genesis of particular subgroups, but the precise sources of much of the African component remains indeterminate. Given this rather general model, it would initially seem most probable that Bantu words in Malagasy derive from a whole chain of coastal languages. Which languages these were and what was borrowed would clearly depend on the chronology of settlement of Madagascar, which in turn should reflect the Austronesian source-population and the conditions under which they arrived.

The general identification of the Malagasy language as part of the Barito group can be traced back to Dahl (1951, 1991). The date for this transoceanic migration has been controversial, especially in the light of apparently early Austronesian presence on the East African coast contemporary with the Periplus (Blench 1994), but the archaeological dates for the first settlement in Madagascar are fifth to seventh centuries AD. Trying to develop a single model that would account for both these settlement strands has proven intractable (e.g. Dahl 1991), and it is here proposed that the reason is that the two movements were essentially unrelated. Austronesian navigators *were* crossing the Indian Ocean prior to 0 AD, probably for trade, but may have come from a different region of insular SE Asia, perhaps the Philippines. There is no direct linguistic evidence for this, but cultural evidence is presented in Blench (2007). Blust (2005) has proposed Malagasy, Barito, and Sama-Bajaw are part of the same subgroup of Austronesian and the migration of the ancestors of the Malagasy can be linked to the dispersal of the Sama-Bajaw in the seventh century or thereabouts, impelled by the expansion of the Śrīvijaya Malay.⁴ Pallesen (1985) was apparently the first author to point to the historical layering of the dialects of the Sama and to link it (albeit loosely) with the Śrīvijaya trading state. Youngman (2005) presents an expanded survey of Bajaw lects, especially in Indonesia. Dahl (1991:98) argued that the Vezo of southern Madagascar had specific cultural features that linked them with the Sama, but his linguistic case is rather weak.

3. The Malagasy language and its Bantu neighbours

3.1 Malagasy

Malagasy is the national language of Madagascar and is also spoken by several communities on Mayotte in the Comores. Although it has a standard written form, the exact degree of mutual intelligibility of Malagasy lects is difficult to estimate because of the widespread diffusion of a standard variety. Malagasy is divided into numerous dialects, the most important of which are Merina, Tanala, Betsileo, Antankarana, Tsimehety, and Sakalava. These have a high proportion of common core vocabulary and a similarity in phonology and word structure that suggests Malagasy has undergone levelling in the recent past, perhaps as a consequence of the Merina kingdoms in the highlands. Nonetheless, the dialects also include a significant corpus of ‘rogue’ lexemes whose source is yet to be identified. The origin of these are probably to be found either in the language of the Mikea groups or perhaps in other languages of the East African coast (cf. Simon 1988 for

⁴ In a magnificent leap of historiography, Cojuangco (2005) connects the Samals with the Sam-Ma of Chinese annals and places their origin on the Chinese mainland at 2300 BC.

early pointers in this direction). Beaujard (2003) has attempted to establish a stratification of Austronesian arrivals in Madagascar through loanwords, although his attempts have met with some scepticism, from Adelaar, for example. The Comores, despite their small size, have two distinct Malagasy dialects, Kiantalaotsy and Kiboshy Kimaore. Kiantalaotsy is spoken in just three villages, while all the remaining communities speak Kiboshy Kimaore. In 1987, there were some 19,000 speakers of both Malagasy lects (Gueunier 1988). Some Malagasy dialects have a significant parallel vocabulary associated either with social hierarchy or with possession rituals. The Tandroy and Sakalava, in particular, have elaborate sets of alternative lexemes for many common terms. The origin of these words is often opaque and they are included here in the quest for etymologies, which may include hard-to-recognise Austronesian sources.

The Dutch scholar Adriaan van Reeland recognised the relatedness of Malay, Malagasy, and Polynesian in the early eighteenth century, providing a preliminary outline of the Austronesian phylum (Relandus 1708). Although Malagasy is generally considered to belong genetically to the Barito languages today spoken in Kalimantan (Dahl 1951), it has clearly undergone considerable influence from Malay, from whence it draws many nautical and other technical terms (Simon 1988; Adelaar 1989, 1994, 1995, in press). Other elements in the lexicon are from trade languages of the Indian Ocean, notably Arabic and Hindi (Beaujard 2003). **It is the contention of this paper that the main sources of Bantu lexis in Malagasy were drawn from the Swahili languages as a consequence of these interactions and that loans from other Bantu languages are insignificant. No loans from Cushitic languages have yet been identified, but it would be surprising if they were wholly absent.**

3.2 Bantu

Swahili is the dominant language today along the coast facing Madagascar as far down as Mozambique, with a variety of Bantu languages related to it in the immediate interior (e.g. Rzewski 1979). Even within Mozambique, an isolated language such as Ekoti appears to originate from settlements of Swahili speakers (Schadeberg and Mucanheia 2000). Swahili is part of larger group of coastal lects often referred to as ‘Sabaki’; Nurse and Hinnebusch (1993) contains both a history of Swahili and a lexicon of ‘proto-Sabaki’ reconstructions. Since Bantu loans into Malagasy often retain linguistic features that have disappeared or been transformed in modern lects, these reconstructed forms provide stratigraphic insights into the history of borrowing. Of the offshore islands, the most important are the Comores. Despite their relative proximity to Madagascar, the Comores do not seem to have been settled until the ninth or tenth centuries (Allibert & Verin 1994). Nonetheless, once begun, this process seems to have been strongly linked to the trade between the coast and Madagascar and there has clearly been lexical flow between the Malagasy spoken on the Comores and Comorian proper. The Comorian language is divided into four dialects:

| Dialect | Isle |
|-------------|---------------|
| Shingazidja | Grande Comore |
| Shindzwani | Anjouan |
| Shimwali | Mohéli |
| Shimaore | Mayotte |

Descriptions of these languages are found in Rombi (1979, 1984, 1989). The lexical data has also been compared with Mozambique coastal Bantu languages for which good dictionaries are available, Makhuwa, Ronga, and Ekoti (sources listed in Table 1).

3.3 Sources

Compared with other African languages, early records of Malagasy are surprisingly good. In particular, there is a dictionary broadly representing Southeastern dialects by Etienne de Flacourt dating from 1658 (Ferrand 1905). Other important lexical sources are listed in the reference list and given in Table 1. Dictionaries such as Dubois (1917) and Elli (1988) seem not to be available outside Madagascar, although some information they include is available in cross-citations. There is valuable material available on the internet, www.zomare.com/biblio3.html includes a *Lexique des dialectes du Nord* at www.zomare.com/ldn.html and a *Lexique Sakalava* is posted at www.zomare.com/lts_ab.html. The data tabulated in this paper are drawn from a variety of sources, given in Table 1.

Table 1. Sources for Malagasy citations

| Lect | Source |
|----------------------|---|
| Malagasy | |
| General | Hebert (1964) |
| SE dialects | Ferrand (1905) |
| Merina | Richardson (1885), Abinal & Malzac (1921) |
| Antaisaka | Deschamps (1936) |
| Tanala | Beaujard (1998) |
| NE dialects | www.zomare.com/ldn.html |
| Sakalava | Thomas-Fattier (1982), www.zomare.com/lts_ab.html |
| Tandroy | Rajaonarimanana & Fee (2001) |
| Kifoshy | Gueunier (1987) |
| Sabaki lects | |
| Standard Swahili | Johnson (1939) |
| Swahili dialects | Sacleux (1939) |
| Shingazidja | Lafon (1992), Ahmed Chamanga & Gueunier (1979) |
| Shindzwani | Ahmed Chamanga (1992) |
| Kimaore | Ahmed Chamanga & Gueunier (1979), Blanchy (1996) |
| Bantu coastal | |
| Ekoti | Schadeberg & Mucanheia (2000) |
| Ronga | Quintão (1951), Sá Nogueira (1960) |
| Makua | Matos (1974) |

There are slight variations between sources, mostly arising from orthographic conventions (such as whether a final *-i* is spelt *-i* or *-y*) but the data is generally consistent. Malagasy orthographic ‘o’ is pronounced /u/, but the sources have been quoted as in the original.

4. Domestic and translocated animals

This section discusses the names for individual species of domestic animal and the likely etymologies of their Malagasy names.

4.1 Horse

The horse is probably not very ancient in SE Asia and would have been unknown in Kalimantan 1,500 years ago. Nonetheless, given the many Malay forms in Malagasy, it is surprising the Malay *kuda* is not reflected here. Malagasy simply borrows from French or Arabic (at least in the 1658 source), while Comorian borrows from Arabic. Table 2 shows the terms for ‘horse’ in Malagasy, Coastal Bantu, and Comorian lects.

Table 2. Terms for ‘horse’ in Malagasy, Coastal Bantu, and Comorian lects

| Lect | Attestation | French | Portuguese | Comment |
|-----------------|-----------------|---------------|---------------|--------------|
| Malagasy | | | | |
| SE Dialects | farasa | <i>cheval</i> | | < Arabic سرف |
| NE dialects | sevaly | <i>cheval</i> | | < French |
| Merina | soavaly | <i>cheval</i> | | < French |
| Tanala | soavaly | <i>cheval</i> | | < French |
| Kiboshy | farasy | <i>cheval</i> | | < Arabic سرف |
| Bantu | | | | |
| Shingazidja | farasi | <i>cheval</i> | | < Arabic سرف |
| Shindzwani | farasi | <i>cheval</i> | | < Arabic سرف |
| Shimaore | farasi | <i>cheval</i> | | < Arabic سرف |
| Ekoti | khavalo | horse | | < Portuguese |
| Makua | ekhavalo | | <i>cavalo</i> | < Portuguese |

The date of the introduction of the donkey is uncertain, but de Flacourt gives a word for *âne* in 1658 (Ferrand 1905) so it must predate this era. The donkey has two names in Malagasy, Kiboshy *ampondra*, reflected in Comorian *mpundra*, cognate with Swahili *punda*, and *biriky*, from French *bourrique*. New breeds may well have been introduced in the colonial period.

4.2 Cattle

Wild bovids are found on some SE Asian islands, notably the buffalo, but also other species such as Bali cattle. Domestic buffalo are now widely spread in the

Austronesian region. However, none of the typical terms for wild and domestic bovines in Austronesian, such as **qanuanj*, *karbaw* = [carabao] and **tamaraw* seem to survive in Malagasy. Dempwolff (1938) reconstructed proto-Malayo-Polynesian **lambu* ‘bovine’, based on Malay *lambu* ‘bovine’, and Maanyan *lambu* ‘buffalo’ (see discussion in Adelaar 1995). This term, however, is now applied to ‘pig’ (see Table 5) although there is evidence that it originally applied to cattle when first introduced. Helbig (1982:592) records *lambu* for the wild bovid (*Bos sondaicus*) chased by Dusun hunters in Borneo, and Simon (1988:233) speculates that this term already had the meaning of ‘wild game’. Beaujard (1998:453) notes that the original meaning of *lambo* in Tanala was ‘cattle’ and that this sense still survives in archaic terms such as *lambohamba* ‘twin cows’, the name of the royal shrine of Sandrañanta. However, the dominant term in Malagasy, *ŋombe*, is borrowed from coastal Bantu languages and has virtually entirely displaced **lambu*, which is now applied only to porcines. Table 3 shows the names of ‘cattle’ in Malagasy, Coastal Bantu, and Comorian lects.

Mozambican languages are so similar to Swahili languages that the proximate source cannot easily be decided. Simon (1988:233) points out that the similarity between *lambo* and the term *aombe* for ‘cattle’ may have led to confusion or at least convergence in some cases. In Shimaore, beef is called *ambomaty*, which appears to be a conflation of *lambo* and *aombe* plus ‘dead’. A number of other terms for cattle (given in Table 3) are recorded in specialised vocabulary but no etymologies have been determined.

The Austronesian term *lambo* also survives in the vernacular names of the dugong (*Dugong dugon*). A typical Malagasy form is *lamboharano*, which Decary (1950) translates as *sanglier d’eau*, literally ‘wild boar of the water’. However, there is every reason to believe that this originally meant ‘bovine of the sea’, a presumably parallel metaphor of the antiquated English term ‘sea cow’. To add further to the complexity, the term for dugong in Kiboshy is *lamboara*, which was in turn borrowed into Shimaore, the local Bantu language.⁵ Adelaar (in press) derives this from a Malay name for ‘large fish, whale’, *lembwara*, but another possible etymology is *lambo* ‘pig’ + *ala* ‘forest’, ‘bush’ and perhaps by extension ‘wild’. Table 4 shows the names of the dugong in Malagasy and Comorian lects.

Zoologists⁶ report a small population of dugongs at the southern reefs of Île Sainte-Marie and give the Malagasy name for the dugong as *lambondano*, claimed to mean ‘wild pig of the coral’. This is an error, as the Malagasy for ‘coral’ is *harana*. The correct source is *-ndano* = *-ndrano* < *andrano* ‘in the water’ < *rano* ‘water’ (Gueunier 1988) and the translation should be ‘pig of water’.⁷ The Kiboshy term *lamboara*, apparently loaned into Shimaore, looks suspiciously like the name for ‘wild pig’ (see section 4.3), although it is difficult to see how this would be applied to the dugong, since the *ala* element means ‘forest’. To add to the etymological free-for-all, Adelaar (in press) notes that Malagasy *truzun* ‘whale’, is apparently derived from Malay *duyung* ‘dugong’ and then compounded with ‘pig’ to make a new term for dugong in Sakalava, thereby completing the reversal of ‘whale’ and ‘dugong’ noted above. Dugongs are highly threatened in Madagascar and the Comores and the UNEP action plan for their conservation reports that these names are unknown to younger fishermen.⁸

⁵ Thanks to Martin Walsh for drawing my attention to this.

⁶ <http://www.sirenian.org/sirenews/11APR1989.html>.

⁷ Thanks to Martin Walsh.

⁸ See <http://www.tesag.jcu.edu.au/dugong/doc/dugongactplan.pdf>.

Table 3. Terms for ‘cattle’ in Malagasy, Coastal Bantu, and Comorian lects

| Lect | Attestation | French | English | Comment |
|-----------------|----------------------------|---|---------------------|--|
| Malagasy | | | | |
| SE dialects | anghombe | <i>boeuf</i> | cattle | < Coastal Bantu |
| Merina | umbi | <i>boeuf</i> | cattle | < Coastal Bantu |
| Tanala | a(ñ)omby | <i>boeuf</i> | cattle | < Coastal Bantu |
| Vezo | anumbe | <i>boeuf</i> | cattle | < Coastal Bantu |
| NE dialects | rejy | <i>boeuf immolé pour un enterrement</i> | cattle for a burial | ? |
| NE dialects | baria | <i>boeuf sauvage</i> | wild cattle | ? |
| Sakalava | aumbi | <i>boeuf</i> | cattle | < Coastal Bantu |
| Sakalava | baria | <i>boeuf</i> | cattle | ‘royal’ vocabulary, used during trances |
| Sakalava | sambilu | <i>bœuf mythique</i> | cattle | one-horned cow in folktales |
| Tandroy | añombe, aombe, ambe | <i>boeuf</i> | cattle | < Coastal Bantu |
| Tandroy | bekofoke | <i>boeuf</i> | cattle | <i>doany</i> speech, possession vocabulary |
| Tandroy | be oro | <i>boeuf</i> | cattle | <i>doany</i> speech, possession vocabulary |
| Tandroy | lebefa | <i>boeuf</i> | cattle | <i>doany</i> speech, possession vocabulary. ? < French <i>le boeuf</i> |
| Kifoshy | a(ŋ)umbi | <i>boeuf</i> | cattle | < Coastal Bantu |
| Bantu | | | | |
| Shingazidja | mbe | <i>boeuf</i> | cattle | < Coastal Bantu |
| Shindzwani | ɲombe | <i>boeuf</i> | cattle | < Coastal Bantu |
| Kimaore | ɲombe | <i>boeuf</i> | cattle | < Coastal Bantu |
| Ekoti | mompe | | <i>vaca</i> | Common Bantu |
| Makua | epompe | | <i>vaca</i> | Common Bantu |

4.3 Pig

The history of the domestic pig in Africa is highly controversial (Blench 2000). Conventional wisdom has it that the pig was domesticated in the Near East around 7000 BC and also in Asia at a similar date, as the ancestral wild forms are separated by more than half a million years (Jones 1998; Giuffra et al. 2000). Crossbreeding European with Asian pigs in the nineteenth century has blurred the genetic picture and since both types were brought to Africa the overall picture is very mixed. The ancestor of the Eurasian pig,

Table 4. Terms for ‘dugong’ in Malagasy and Comorian lects

| Lect | Attestation | French | Comment |
|-----------------|---------------------|---------------------------------|---|
| Malagasy | | | |
| Ile St. Marie | lambondano | | |
| Ile St. Marie | lamboaran | | |
| Sakalava | truzun dambu | <i>dugong</i> | lit. ‘whale’ + ‘pig’ |
| Tandroy | lambondriake | <i>vache marine, dugong</i> | <i>riake</i> = ‘sea’ |
| Kiboshy | lambuara | <i>dugong</i> | ? < Malay <i>lembwara</i> , ‘large fish, whale’ |
| Bantu | | | |
| Shingazidja | nguva | <i>dugong</i> | Swahili |
| Shindzwani | nguva | <i>dugong, lamantin, sirène</i> | Swahili |
| Shimaore | lambwara | <i>dugong</i> | < Malagasy |

Sus scrofa, is native to north Africa, and its range extends along the Atlantic coast. Pig populations were found from northwest Africa to the Nile Valley, down the Nile and into the Ethio-Sudan borderlands. Whether they spread any further into Sub-Saharan Africa is still in doubt. Murdock (1959) considered that evidence for cultural embedding made it likely that there were old populations of pigs in various parts of the continent. This is possible, but has yet to be confirmed by archaeozoology.

One of the more surprising pig populations in Africa are the feral pigs (*Potamochoerus larvatus*) on Madagascar and the Comoro islands⁹ (Vercammen et al. 1993; Kingdon 1997; Garbutt 1999). Madagascar has a modern pig industry of French inspiration, but the wild pig is related to the mainland bushpig, *P. larvatus*. These pigs have undergone some adaptive radiation and show signs of semi-domestication, even though there is no evidence for traditional rearing of *P. larvatus* on the mainland. Some zoologists¹⁰ divide these *Potamochoerus spp.* into two subgroups:

Potamochoerus larvatus larvatus from Mayotte (Comoro Is. and western Madagascar);
Potamochoerus larvatus hova from eastern Madagascar.

but the evidence for this is disputed. Jori (op. cit.) gives the *lamboala* and *lambosui* for the two races recognised on the island, but this is not confirmed by the dictionaries.

The Malagasy bushpigs appear to be most closely related to the southern African form *P.l. koiropotamus*, which currently ranges from mid-Tanzania southwards. This suggests that they originally came from somewhere between the central Tanzanian coast and the Cape. If this is correct, then the ancestors of the Austronesian migrants who reached Madagascar must have captured wild pigs on the African mainland, transported them to Madagascar, and made an attempt to domesticate them. Certainly

⁹ Blench (2000) omits all mention of this remarkable population.

¹⁰ Described by Jori at http://pigtrop.cirad.fr/initiatives/wild_hogs_and_peccaries/le_potamochoere_de_madagascar.

the Malagasy pigs must have been translocated from the mainland at some point in the past. Presumably the introduction to the Comores was from western Madagascar, more recently still. Rather than comparing them to pigs, the Malagasy applied to the feral *Potamochoerus* the name for bovines familiar from their home island. Perhaps their large size compared with the island pigs of SE Asia may have inspired this analogy with cattle.

Pigs are a highly typical Austronesian domestic species (e.g. Lynch 1991) and it would seem likely they were carried to Madagascar with their names. But the Austronesian migrants did not transport domestic pigs, nor were there mainland pigs to be adopted into their subsistence systems. Proto-Austronesian is **babuy*, which presumably applied originally to the wild pig, *Sus taivanus*, on Formosa, where Paiwan has *vavuy* ‘wild pig’. At the level of Malayo-Polynesian, the need to distinguish ‘wild’ and ‘domestic’ became evident and PMP has **babuy halas* for ‘wild pig’ and **babuy banua* for the domestic type. Somewhat inconsistently, there is another PAN term for domestic pig, **beRek*, reflected, for example, as Puyuma *verek* (Ferrell 1969). Blust (2002) suggests the following explanation: ‘It now appears likely that the meanings of PAN **babuy* and **beRek* were not complementary, but partially overlapping: **beRek* meant ‘domesticated pig’, while **babuy* meant ‘pig’ in general, with qualification where needed’. In other words, rather than a distinction between wild and domestic, the contrast is between specific and generic. PAN has a term for ‘wild boar’, **waNiS-an*, although this is confined to Formosan languages and seems to have no reflection in Malagasy.

There is no trace of a typical Bantu root for domestic pig, such as is attested in Comorian. Proto-Bantu for pig is **gùdòbè*, which is found widely across the Bantu zone and in all Mozambican languages. The domestic pig may therefore have arrived late in many parts of Madagascar, as it is known by a loanword, *kisoa*, from French *cochon*. Table 5 shows the terms for ‘pig’ and ‘wild boar’ in Malagasy, Coastal Bantu, and Comorian lects.

The Masikoro term, *mous*, is only given in de Flacourt (Ferrand 1905:84) and its origin is obscure. An intriguing etymological problem is the *#puruku* root, which resembles Portuguese *porco* ‘pig’, and is asserted to be the source of the typical Comorian forms. However, the Sakalava also apply it to ‘wild boar’, which would presumably have been familiar to the Sakalava long before the Portuguese incursions. Another candidate might be the rather similar Austronesian root. Blust (2002:93) observes ‘Finally, PAN **beRek* ‘domesticated pig’ became proto-Oceanic **boRok* ‘pig’, a form which would better account for the back vowels in the Malagasy terms.

4.4 Goat

The terms **kambij* or **kandij* for goat are common in the Philippines, Borneo, and Malaysia. **kambij* was probably borrowed from Malay, but the source of **kandij* is undetermined (Blust 2002:104). Goats were introduced in the Austronesian region during its expansion, perhaps from South India. The Malagasy and Comorian terms for goat seem

Table 5. Terms for ‘pig’ and ‘wild boar’ in Malagasy, Coastal Bantu, and Comorian lects

| Lect | Attestation | French | English/ Portuguese | Comment |
|--------------|--------------------------|--------------------------|------------------------|---|
| Mikea | | | | |
| Baūsi | kazani | | wild swine | ? |
| Malagasy | | | | |
| SE dialects | lambou | <i>cochon, sanglier</i> | pig | < Austronesian |
| Masikoro | mous | <i>cochon</i> | domestic pig | |
| Merina | kisoa | <i>cochon, porc</i> | domestic pig | < French |
| Merina | lambo resy | <i>cochon, porc</i> | domestic pig | < Austronesian |
| Merina | lambo | <i>sanglier</i> | wild boar | < Austronesian |
| Sakalava | buruku | <i>sanglier</i> | wild boar | < Austronesian or Port. <i>porco</i> ? |
| Sakalava | komankuru | <i>sanglier</i> | wild boar | |
| Sakalava | kamankory | <i>cochon</i> | domestic pig | |
| Sakalava | lambu | <i>porc</i> | domestic pig | < Austronesian |
| Sakalava | lambu dihi | <i>sanglier malgache</i> | wild boar | < Austronesian |
| Antaisaka | kosoa | <i>cochon, porc</i> | domestic pig | < French |
| Tanala | lambo | <i>sanglier</i> | wild boar | < Austronesian |
| Tanala | koso(a), kisoa | <i>cochon, porc</i> | domestic pig | < French |
| Tandroy | lambo | <i>sanglier</i> | wild boar | < Austronesian |
| Tandroy | koso(ñe), kisoa | <i>cochon, porc</i> | domestic pig | < French |
| Tandroy | Kongo ¹¹ lahy | <i>jeune sanglier</i> | young wild boar | |
| Kiboshiy | lambu | <i>cochon, sanglier</i> | pig, boar | < Austronesian |
| Bantu | | | | |
| Shingazidja | purunku | <i>cochon, sanglier</i> | pig | < Malagasy dial. or Port. <i>porco</i> ? |
| Shindzwani | puruku | <i>cochon, sanglier</i> | pig, boar | < Malagasy dial. or Port. <i>porco</i> ? |
| Shindzwani | nguruwe | <i>cochon, sanglier</i> | pig, boar | cf. PB *-gùdòbè |
| Shimaore | puruku | <i>cochon, porc</i> | pig | < Malagasy dial. or Port. <i>porco</i> ? |
| Ekoti | kuluwe | | pig | cf. PB *-gùdòbè |
| Makua | ekuluwe | | <i>porco</i> | cf. PB *-gùdòbè |

¹¹ Martin Walsh links this with *mkonge*, a term for large bushpigs in the SW dialects of Kiunguja (Zanzibar).

all to be drawn from Swahili or other Coastal Bantu. Table 6 lists the terms for ‘goat’ in Malagasy, Coastal Bantu, and Comorian lects.

Table 6. Terms for ‘goat’ in Malagasy, Coastal Bantu, and Comorian lects

| Lect | Attestation | French | English/ Portuguese | Comment |
|-----------------|---------------------|----------------------|------------------------|--|
| Malagasy | | | | |
| NE Dialects | bengy | <i>chèvre, cabri</i> | goat | ? |
| Sakalava | uze | <i>chèvre</i> | goat | < Coastal Bantu |
| Sakalava | bengi | <i>chèvre</i> | goat | ? |
| Merina | usi vavy | <i>chèvre</i> | goat | < Coastal Bantu + ? |
| SE dialects | ossi | <i>chèvre, cabri</i> | goat | < Coastal Bantu |
| Tandroy | masikatolike | <i>chèvre</i> | goat | <i>doany</i> speech, possession vocabulary |
| Tandroy | ose | <i>chèvre</i> | goat | < Coastal Bantu |
| Tanala | osy | <i>chèvre</i> | goat | < Coastal Bantu |
| Tanala | bengy | <i>cabri</i> | kid | ? |
| Kifoshy | bengy | <i>cabri</i> | kid | ? |
| | bengi, benge | <i>chèvre</i> | goat | ? |
| Bantu | | | | |
| Shingazidja | mbuzi | <i>chèvre</i> | goat | < Coastal Bantu |
| Shingazidja | běnge | <i>cabri</i> | kid | ? |
| Shindzwani | mbuzi | <i>chèvre</i> | goat | < Coastal Bantu |
| Shimaore | mubuzi | <i>chèvre</i> | goat | < Coastal Bantu |
| Ekoti | puuzi | | <i>cabra</i> | < CB *bòdì |
| Makua | epuri | | <i>cabra</i> | same root as Ekoti |

The mysterious term *bengi*, which appears both in Malagasy dialects and Comorian, has no obvious coastal origin and probably originally meant ‘kid’. It does resemble Malay *kambij*. When it is remembered that Malagasy typically erodes from the front, the Malay word is a possible source for *bengi*. The other Austronesian root for ‘goat’ is **kandiŋ*. Blust (2002:104–105) says:

The introduction of domesticated goats clearly postdates the Austronesian settlement of insular Southeast Asia, but it is difficult to make a more precise statement... reflexes of **kandiŋ*, which are distributed from Itbayaten in the northernmost Philippines (*kadiñ*), through Pangasinan in north-central Luzon and Bikol in southeast Luzon (both *kandiŋ*), to Kayan and Kenyah in central Borneo (*kadiŋ*), but do not occur in Malay or any other language that functioned as a lingua franca over wide areas of insular Southeast Asia.

A strikingly similar form occurs on the East African coast.¹² The forms in the Bantu languages are as follows:

male goat (n.): ***-ndenge** (9/10)

Rabai *ndenge* (9/10) 'he-goat'; *kadenge* (12/13) ~ *kidenge* (7/8) (diminutive)

Kamba *nthenge* (9/10) 'male goat'; *kathenge* (12/13) 'small male goat' [A]

Pare *ndhenge* ~ *nzenge* (9/10) 'he-goat'; *kandhenge* ~ *kanzenge* (12/13) 'young he-goat' [N]

The phonology of this word and its absence from Giriama (and other Northern Mijikenda) suggests that it may be a relatively recent loan into Southern Mijikenda from Daiso or Kamba. Although this cannot be conclusive, the absence of a clear etymology for **kandij* in Austronesian and its occurrence in regions related to the hypothetical origin of Malagasy make it possible that goats (or words for them) were transported across the Indian Ocean. The absence of such a form on Madagascar would then be evidence for a direct East Africa-SE connection.

4.5 Sheep

Sheep are probably quite recent in the Austronesian world and would certainly not have been on outriggers from insular SE Asia. All Malagasy terms for sheep are derived from Swahili lects, for example, kiMvita *ɲonzi*, as presumably Comorian. Mozambican forms hardly resemble one another and certainly neither Malagasy or Swahili suggesting an absence of sheep being traded across the channel (see Table 7).

The reduplicated form in Sakalava seems to have been adopted into Tandroy as *doany* spirit language. The origin of the term *baribari* on the Comores is unknown.

4.6 Dog

As with pigs, dogs would seem to be a typical Austronesian domestic species (Lynch 1991) and yet the evidence for their transport to Madagascar is hard to establish. The names for the domestic dog on Madagascar all seem to be adopted from neighbouring Bantu languages. Curiously, the 'native' dog is all but extinct, crossbred with imported European breeds, particularly the Bichon group. One of the more notable is the *Coton de Tulear*, a descendent of the extinct *Coton de Réunion* that appeared at the pirate and slaving port of Tulear, Madagascar, during the seventeenth century.¹³ Adopted by the ruling Merina, it became known as the 'Royal Dog' of Madagascar. An indigenous dog, the Morondava Hunting Dog, was crossbred with the Coton. The ruling Merina controlled the breed closely and forbade both coastal peoples and non-noblemen to own a Coton. At the turn of this century, conquering French colonists adopted the Coton as well. The Coton is the 'Official Dog of Madagascar' and has been honoured on a postage stamp.

Table 8 shows the terms for 'dog' in Malagasy, Coastal Bantu, and Comorian lects. None of these resemble any Austronesian terms, although migrants from SE Asia would surely have been familiar with dogs in their home territory.

¹² Martin Walsh kindly compiled this list for me.

¹³ This information adapted from http://en.wikipedia.org/wiki/Coton_de_Tulear.

Table 7. Terms for ‘sheep’ in Malagasy, Coastal Bantu, and Comorian lects

| Lect | Attestation | French | English/ Portuguese | Comment |
|-----------------|-----------------------|---------------|------------------------|--|
| Malagasy | | | | |
| SE dialects | anhondri | <i>mouton</i> | sheep | < Swahili lects |
| Merina | undri | <i>mouton</i> | sheep | < Swahili lects |
| Sakalava | ondrikondriki | <i>mouton</i> | sheep | < Swahili lects |
| Sakalava | angundri | <i>mouton</i> | sheep | < Swahili lects |
| Tandroy | añondry | <i>mouton</i> | sheep | < Swahili lects |
| Tandroy | bakara | <i>mouton</i> | sheep | ? |
| Tandroy | aondrikondrike | <i>mouton</i> | sheep | <i>doany</i> speech, possession vocabulary |
| Tanala | a(ñ)ondry | <i>mouton</i> | sheep | < Swahili lects |
| Kifoshy | baribari | <i>mouton</i> | sheep | ? |
| Bantu | | | | |
| Swahili | kondoo | | | |
| Shingazidja | gõndzi | <i>mouton</i> | sheep | < Swahili lects From Malagasy |
| Kimaore | baribari | <i>mouton</i> | sheep | ? |
| Ekoti | pwittipwitthi | | sheep | ? |
| Makua | epucipuci | | <i>carneiro</i> | ? |

Blust (2002) points out that terms for dog in Austronesian are highly unstable, and links this with the practice of eating dogs. Even within Austronesian there are languages that borrow English ‘dog’, so perhaps the Malagasy situation is not atypical.

4.7 Cat

The domestic cat seems to be a fairly recent introduction into this region. Most Malagasy lects have a variant of *piso* (Tandroy, Tanala, Antaisaka), which may either be directly from Arabic or perhaps Hindi *pus*. Flacourt recorded *pis*, *pisse* in 1658 and Ferrand (1905:77) compares this to Arabic *biss* (بِس). Shimaore *paha* is from Swahili *paka*, with a weakening of the velar.

4.8 Poultry

Guinea-fowl

It seems unlikely that the domestic guinea-fowl is indigenous to Madagascar and may well have been translocated. A widespread term in almost all lects is *vitro* (Tanala,

Table 8. Terms for ‘dog’ in Malagasy, Coastal Bantu, and Comorian lects

| Lect | Attestation | French | English/ Portuguese | Comment |
|--------------|----------------------------|--------------|------------------------|------------------------------|
| Mikea | | | | |
| Baūsi | bokahoko | | dog | |
| Malagasy | | | | |
| SE dialects | amboa | <i>chien</i> | dog | < Swahili |
| NE dialects | kiva(hy) | <i>chien</i> | dog | ? but widespread |
| Merina | amboa | <i>chien</i> | dog | < Swahili |
| Sakalava | f-androaka | <i>chien</i> | dog | |
| Tanala | amboa | <i>chien</i> | dog | < Swahili |
| Tanala | kiva | <i>chien</i> | dog | ? but widespread |
| Tanala | alika ¹⁴ | <i>chien</i> | dog | much rarer than amboa |
| Tandroy | amboa | <i>chien</i> | dog | < Swahili |
| Bantu | | | | |
| Shingazidja | mbwa | <i>chien</i> | dog | cf. PB *bóà |
| Shindzwani | mbwa | <i>chien</i> | dog | cf. PB *bóà |
| Shimaore | mbwa | <i>chien</i> | dog | < Swahili |
| Ekoti | mwanapwa | | dog | cf. PB *bóà |
| Makua | mwalapwa | | <i>cão</i> | cf. PB *bóà |

Antaisaka), which has no obvious etymology. Also used is *akanga* (Tandroy, Tanala), borrowed from a Bantu language (cf. also Shingazidja, Shimaore *kanga*). Tandroy also has *pinjo* for young guinea-fowl.

Chicken

The common Malagasy for chicken is *akoho* (Merina, Tanala, Tandroy, Antaisaka, Sakalava, Kiboshy) but curiously the origin of this term cannot be definitely assigned to Bantu or Austronesian. Swahili and many coastal languages have *kuku*, while Comorian has *ŋkuhu*, and Shambala *ŋguku*. Further south, languages such as Ekoti have *mwanakhu*, which are not close to Malagasy. Forms such as *koko* are also scattered through Austronesian (e.g. Amis *koko*², Waropen *koko*) although in the Philippines and adjacent regions, the dominant form is *#manuk*, the original meaning of which was ‘bird’ (Blust 2002:94). The Tandroy language has two *doany* (spirit possession) terms for chicken, *fitsimoke* and *voromasy* of unknown origin. The correspondence between the weakened velar in C₂ position in Malagasy and Comorian is quite striking, and Comorian retains the Bantu nasal prefix. The loss of a nasal and its replacement with a- is also attested for ‘cattle’ (Table 3) so it is likely that the chicken was brought to

¹⁴ This was first observed by Dahle in 1883, according to an unreferenced remark in Johnston & Birkeli (1920).

Madagascar from the Comores. As with pigs and dogs, this is quite surprising, as the chicken is an almost archetypical species spread around the Pacific by Austronesian navigators.

Barbary duck

The Barbary duck is actually of South American origin and was spread around the world by the Portuguese. It seems to be a recent (nineteenth century?) introduction into Madagascar and has a variety of names, often ideophonic. Flacourt's 1658 dictionary (Ferrand 1905) only refers to the *sirire*, which is a wild duck species (*Dendrocygna viduata*). Antaisaka *dokotri*, Tandroy *dokitse*, Tanala *dokotra*, Kiboshy *dokitri*, Shimaore *dukutsi* all appear to be borrowings from English, although the source of the third syllable is unclear. Surprisingly there are no borrowings from French. Merina *ganagana*, Antaisaka *kana* and Tandroy *girigiry* are probably all imitative of the sound of the duck. Shimaore *gana* is apparently a borrowing from Kiboshy. All other Comorian lects all have *bata*, as does Swahili, probably originally Portuguese *pato* or Arabic *batt*.

Turkey

The turkey, like the domestic duck, is not mentioned in de Flacourt and also probably dates from the nineteenth century. The most widespread term is *vorontsilozza* which is *voro* 'bird', plus an unknown qualifier. Other terms recorded are Tandroy *beilamba*, *kolokoloke*, *vorombe*, and Antaisaka *bitsy*. Shimaore has *kulukulu* and kiMvita *kolokolo*, which are reflected in some Malagasy dialects (eg. Tanala *korokoro*).

Goose

The goose is yet another introduction resulting from British contact with Madagascar in the nineteenth century. Tandroy *giso*, Tanala *gisy*, Merina *gisa*, Comorian *gisi* are all adopted from English *geese* [not *goose*].

5. Conclusions

The most striking conclusion to be drawn from this survey of the terminology of domestic animals in Malagasy is the virtually complete absence of Austronesian lexical sources for their names. Even the species that the migrating Barito-Sama could be well expected to transport seem to be absent or only reflected in fossil terms. There has been some discussion as to whether this is gender-related, but the arguments are fairly weak (Adelaar in press), given that domestic animals are usually divided between the sexes. Despite the deep and extensive influence of Malay on Malagasy vocabulary and well-established Malay terms for livestock, these were not adopted into Malagasy.¹⁴ Although there have been speculations about Cushitic livestock keepers on Madagascar (for example, the Bara) there is no evidence for any livestock terms of Cushitic origin (cf. Mous and Kießling 2004). If the migration is as late as the sixth and seventh centuries, there would no longer have been any Cushitic speakers near the coast, hence the lack of lexical interaction.

The second point is that the older borrowings seem to have sources in Swahili and precursors of Swahili and not in a scatter of coastal Bantu languages as might be expected. In particular, there seems to be no particular link with Mozambican languages. This is confirmed by other lexical items of Bantu origin in Malagasy, collected in the Appendix Table. These seem to be borrowed with and without prefixes, but all from the Sabaki group rather than other coastal Bantu languages. Apart from domestic animals, food, cooking, and spiritual entities seem to dominate. The explanation must be historical and presumably relates to the nature of the migrants and their previous experience. If the Barito travelled in Malay ships, they may well have carried seeds and seedlings but not animals. Adelaar (in press) discusses words for food and its preparation, but these are very mixed, as some, like the word for cassava, must date from a much more recent era. Intensive interaction with a highly structured trading society on the coast would have supplied the domestic animals the Austronesians were unable to transport. Only further intensive archaeology will suggest a more satisfying interpretation of the data.

Another surprising finding is the late introduction of many domestic species, such as horses, donkeys, domestic pigs, cats, turkeys, ducks, and geese and the prevalence of loanwords from either English or French. Neither Arabic nor Hindi seem to have played any significant role in the evolution of livestock terminology. Although Flashman visited Madagascar in 1845, we can assume he was not responsible for the introduction of domestic animals and it is likely that English missionaries based on the island during the nineteenth century were the main source.

On the linguistic front, a very typical procedure in adapting Bantu lexemes is the deletion of homorganic nasal prefixes and their associated consonant. *Mbuzi* becomes *usi*, *ŋombe* becomes *ombe*, etc. Donkey, *ampondra*, has so far escaped this process, perhaps because it is more recent. Sometimes the prefix survives optionally between an innovated *a-* prefix and the stem, thus Tandroy *a(n)ombe*. Simon (1988:230) suggests that the deletion was motivated by an interpretation of the velar or palatal nasal as the Malagasy article *ny-*. However, this fails to explain the persistence of forms such as *a(n)ombe* and it is just as likely that the *a-* prefix was first added, the intervocalic nasal would then be deleted in some dialects and the resulting *ao-* diphthong become unstable, leading to deletion of the *a-*. Another change typical of Malagasy is the conversion of final *-di/-dzi* to *-dri*,¹⁵ attested in ‘donkey’ and ‘sheep’, and in the case of Comorian, loaned back into a Bantu language to create a highly atypical form. Loans into Malagasy often seem to reflect an older stage of Swahili. For example, in modern Swahili, intervocalic *-l-* is often deleted in final syllables. Thus modern Swahili for ‘snail’ is *koa*, but proto-Sabaki **nkola*. This is borrowed into Tanala as *akora*, prior to *-l-* deletion, but subsequent to the conversion of the nasal prefix into an aspirated initial consonant (aspiration is lost in Malagasy). Similarly, ‘onion’ is *kitunguu* in current Swahili, but presumably **kitungulu* in proto-Sabaki (see discussion in Nurse and Hinnebusch 1993:668). The Tanala form *tongolo* has lost the typical Bantu prefix, but retained intervocalic *-l-*. Some Malagasy forms retain nasal prefixes that have been converted into aspiration or lost in modern Swahili dialects, thus *a(n)koma* ‘snake’, *angundri* ‘sheep’, *ampaha* ‘cat’, pointing to borrowing at the earliest stages of interaction. Malagasy also converts all doubled vowels into single vowels.

¹⁵ And their unvoiced or palatal counterparts, thus Swahili *t/c* become *tri-* (see Appendix Table).

Although the sources of much of the vocabulary are transparent, a number of words without sources are given, both within the main lexicon and from spirit languages. It may well be that some of these can be identified through closer inspection of the Austronesian and Bantu roots of Malagasy. With a larger corpus, it will be possible to stratify the loanwords, and assign dates and sources with greater specificity.

Appendix

The Appendix table gathers together proposals by various authors (Simon 1988, Dahl 1991, Beaujard 1998, Adelaar in press) for Malagasy words of Swahili origin. I have attempted to focus on words of cultural interest and eliminate those from Arabic and Hindi that are in general use in the Indian Ocean, as well as ideophones and verb stems with doubtful semantic connections. I have passed over silently etymologies with which I disagree. French definitions are given in the original and in italics. Thus Tanala *chair* is 'flesh'. The Swahili is standard Swahili unless marked otherwise, but it is not transcribed using the standard orthography, which disguises a number of significant features such as the sequence -ɲg-, written -ng- orthographically. Orthographic 'ch' is written 'c' here. Aspirated consonants are written with a following apostrophe orthographically, but here with a superscript ^h.

Appendix Table: Malagasy words of probable Swahili origin not shared with Arabic

| Malagasy | Dialect | Gloss | Swahili | Gloss | Comments |
|-----------------|------------------|--------------------------------|----------------|------------------------------|--|
| <i>a(n)koma</i> | Tanala | large snake | <i>k'oma</i> | <i>esprit de mort, mânes</i> | these snakes are the reincarnation of ancestors among the Tanala |
| <i>akora</i> | Tanala | <i>gros escargot</i> | <i>koa</i> | snail | proto-Sabaki *nkola |
| <i>ambora</i> | Tanala | <i>arbre, Tambourissa spp.</i> | <i>mbura</i> | tree, <i>Parinari</i> sp. | both are large trees but this could be coincidence |
| <i>ampaha</i> | Sakalava, Tanala | <i>chat sauvage</i> | <i>p'aka</i> | cat | cf. *PB *-pàkà |
| <i>ampumbu</i> | Merina | husk, bran | <i>pumba</i> | husk | unexplained change of final vowel |
| <i>foñy</i> | Tanala | <i>genre de poisson</i> | <i>fune</i> | sea-fish sp. | could be coincidence |
| <i>hufa</i> | Merina | to shake, sift, winnow | | | Adelaar (in press) compares to PEB *-kup- 'to shake off' but this is mostly to do with baling water |
| <i>kaiamba</i> | Tanala | rattle | <i>kayamba</i> | raft-rattle | ka- is not a Swahili prefix, so this has probably been borrowed into Swahili from a neighbouring language. However, due to its use in school music it has spread widely on the mainland in recent times. |
| <i>kianza</i> | Tanala | <i>place du village</i> | <i>kiwanja</i> | courtyard, plot, open space | |
| <i>kilema</i> | Tanala | <i>infirmité, défaut, tare</i> | <i>kilema</i> | deformity | |
| <i>kirinzo</i> | Tanala | <i>plate-forme sur pilotis</i> | <i>kilingo</i> | platform on stilts | |
| <i>kiso</i> | Tanala | <i>petit couteau</i> | <i>kisu</i> | knife | |
| <i>kisoso</i> | Tanala | <i>rougeole</i> | <i>kicoco</i> | sickness | |

Appendix Table (cont.)

| Malagasy | Dialect | Gloss | Swahili | Gloss | Comments |
|-----------------------|----------------|---------------------------------|-------------------|----------------------------|--|
| <i>kitamby</i> | Tanala | cloth worn by men | <i>kitambi</i> | piece of cloth for wearing | |
| <i>kúnggana</i> | Merina | <i>punaise</i> | <i>kunguni</i> | bedbug | < PB *-kúngúni |
| <i>lulu</i> | Merina | butterfly | <i>m-lulu</i> | insect | Sacleux gives <i>croquemitaine</i> (imaginary being) as a secondary definition. This word also has the sense of 'water-spirit' (Beaujard 1998:474) |
| <i>mikaranga</i> | Tanala | <i>griller</i> | <i>-kaanga</i> | fry | |
| <i>mosavy, vosavy</i> | Tanala | <i>sorcellerie</i> | <i>mcawi</i> | sorcerer, witch | |
| <i>mukuku</i> | Merina, Tanala | crust in pot | <i>u-koko</i> | crust in pot | PB *-koko |
| <i>mulali</i> | Merina | soot | <i>m-lale</i> | soot | |
| <i>mutru</i> | Sakalava | fire | <i>m-oto</i> | fire | cf. PB *-yoto |
| <i>nofo</i> | Tanala | <i>chair, flesh</i> | <i>mnofu</i> | flesh | |
| <i>nunggu</i> | Merina | earthen pot | <i>nyungu</i> | pot | cf. PB *-yungu 'clay pot' |
| <i>papanggu</i> | Merina | kite sp. | <i>[kil]pungu</i> | raptor sps. | cf. PB *-pungu 'bird of prey' |
| <i>pili</i> | Merina | <i>gros serpent</i> | <i>pili</i> | adder | Beaujard (1998) connects this to a Malay root meaning 'twisted' |
| <i>ringa</i> | Tanala | <i>lutte</i> | <i>ringa</i> | to swagger | ? |
| <i>sahafa</i> | Merina, Tanala | winnowing tray, <i>van</i> | | | Looks like a borrowing but source unknown unless PB *-kapa 'to spill moving to and fro' |
| <i>talatala</i> | Tanala | <i>lit élevé pour le malade</i> | <i>utaa</i> | platform | Modern Swahili has lost intervocalic -l- |
| <i>tongo, trongo</i> | Tanala | <i>bosse, tas</i> | <i>cungu</i> | heap, mass | Beaujard (1998:740) notes possible Austronesian cognates |
| <i>tongolo</i> | Tanala | <i>oignon</i> | <i>kitunguu</i> | onion | Modern Swahili has lost intervocalic -l- |

| Malagasy | Dialect | Gloss | Swahili | Gloss | Comments |
|----------------------|-----------------------|---|--------------|------------------------------|--|
| <i>trafo</i> | Tanala | <i>bosse de zébu</i> | <i>cafu</i> | fat on arm, leg | see Sacleux (1939:126) |
| <i>tranga</i> | Tanala | <i>commence à pousser (plantes)</i> ¹⁶ | <i>canga</i> | start poking through (plant) | see Sacleux (1939:132) |
| <i>trimo</i> | Tanala | <i>ogre dans les contes</i> | <i>mzimu</i> | spirit of the dead | ? |
| <i>tromba</i> | Tanala and widespread | possession cult | | | Looks like a borrowing but source unknown |
| <i>tsipandy</i> | Tanala | <i>pichenette, chiquenaude</i> ¹⁷ | <i>pindi</i> | bend, elbow | ? see Sacleux (1939:750) |
| <i>vahiny</i> | Tanala | <i>visiteur, étranger</i> | <i>mgeni</i> | stranger | The morphology strongly suggests a loanword, but the sound changes are very unusual |
| <i>Vazimba</i> | throughout | aboriginal people of Madagascar | ? | | The morphology strongly suggests a loanword but the usual application of Wazimba in Swahili is applied to marauders who emerged from Mozambique in the 16th century. Atsimba is the name of a Digo subgroup. |
| <i>voanzo (bory)</i> | throughout | Bambara groundnut | <i>njugu</i> | Bambara groundnut | The <i>voa-</i> is a prefix in Malagasy meaning 'fruit, seed'. The <i>-nzu</i> element would derive from a lect of Swahili that has lost intervocalic <i>-g-</i> such as Comorian. |
| <i>voña</i> | Tanala | knot | <i>vunga</i> | bunch | |
| <i>zaly</i> | Tanala | <i>souffrance</i> | <i>njaa</i> | hunger, famine | cf. proto-Sabaki * <i>njala</i> |
| <i>zezo</i> | throughout | stick-zither | <i>zeze</i> | stick-zither | An Austronesian instrument, but a non-Austronesian name, suggesting a borrowing from a coastal language |

¹⁶ In compounds (Beaujard 1998:751).

¹⁷ These two words mean something like 'a flick of the fingers'.

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