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On the history of Malagasy terms for human body parts

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0. Introduction¹

This paper is a preliminary investigation into the origins of Malagasy (henceforth MLG) body-part terms. The questions that I am interested in are, where do these terms come from, and how do their distribution and the phonological developments they exhibit add to our insight into dialect divisions. The vocabulary that I am concerned with includes external and internal parts of the human body as well as terms for name, hair and substances that are excreted. It does not include terms for bodily movements.

MLG is an Austronesian language spoken on Madagascar. Genetically it belongs to the Southeast Barito (henceforth SEB) subgroup of Malayo-Polynesian, which in turn forms a main branch within the Austronesian language family. SEB languages are spoken on the south-eastern shores of the Barito River in the South and Central Kalimantan provinces of southern Borneo (Indonesia). MLG is supposed to hail from southern Borneo and, together with the SEB languages in Borneo (Ma'anyan, Samihim, Dusun Witu, Dusun Malang, Bayan), to have evolved from a hypothetical stock language, Proto Southeast-Barito (henceforth PSEB). Among the SEB languages in Borneo, Ma'anyan has the most speakers and is the best documented language. Therefore, I will often use examples from Ma'anyan to illustrate that a particular MLG body-part term has cognates² in other SEB languages.

Dahl's (1951), in his extensive study of the relationship between MLG and Ma'anyan, included a section (pp 299-304) on the development of body-part terms in these two languages. It clearly shows that many of these terms derive from Proto Malayo-Polynesian (PMP). It also points out Bantu influence as well as the effects of awkward homonymies (*homonymies fâcheuses*) and other irregular developments. However, this work fails to recognise a crucial factor in the historical interpretation of body-part terms. The Malayo-Polynesian vocabulary in MLG not only consists of words that are regularly inherited from

¹ I am very pleased to dedicate this paper to Sasha Ogloblin, a very special friend of mine whom I have always admired for his great erudition and his enormous tolerance, sense of humour and wisdom. I wrote the paper as a Principal Fellow in the Asia Institute, University of Melbourne, and as a guest lecturer in the Institute of Linguistics at the University of Cologne. I collected part of the data between 2015 and 2018 during fieldwork in Madagascar, which was supported by a Discovery Grant (DP120100390) from the Australian Research Council. I would like to thank my language consultants in Majunga (Alain Tsarahasina), Antananarivo (Armil Mena, Germain Jaosany, Andromasy Famantarantsoa), and Fianarantsoa (Sonya Rafanomezantsoa) for their assistance and patience in providing linguistic data from their respective dialects. I would also like to thank Laurie Reid for valuable feedback. Any errors in the current version are my own responsibility.

² A cognate is a word which is related to a word in another language through common inheritance. In contrast, a loanword is related to a word in another language through linguistic borrowing.

PMP but also includes vocabulary borrowed from other Asian languages. The vocabulary in question is mainly from Malay but occasionally also from Javanese and South Sulawesi languages. (It also includes several Sanskrit³ loanwords which were borrowed indirectly via Malay and Javanese). Moreover, many body-part terms that are borrowed from Malay appear to be metaphorically related to their Malay source words rather than deriving from a dedicated Malay body-part term.

The current paper takes these distinctions into consideration. It also makes use of more recent data and a more advanced insight into the linguistic variety in Madagascar and southern Borneo than were available to Dahl before 1951.

The data in this paper are based on fieldwork notes, standard and dialect dictionaries, and vocabulary lists. Apart from my own fieldwork⁴, my insights into the spread of MLG body-part terms are based on Gueunier, Rasoamalalavo and Raharinjanahary (1992) and (more sporadically) Serva and Petroni (2011). The former is a detailed overview of the geographical spread of 36 MLG body-part terms and a discussion of their meanings. It is meant to become part of a linguistic and ethnographic atlas. In contrast to the present study, it is not primarily historically oriented. The latter shows the spread of 200 basic vocabulary items in 22 MLG locations, including some 20 body-part terms.

In the following treatment of body-part terms I sometimes address irregular sound changes that are particular to individual terms. However, I refer to Table 1 for an overview of the regular changes that have taken place between PMP and MLG, and between lending languages and MLG. MLG varieties and dialect areas that I discuss are listed in Table 2 together with their main sources and the abbreviations. Reference works that I have used for other languages in the paper are Guthrie (1970) for Bantu languages, Pigeaud (1938) for Javanese, Gonda (1973) for Sanskrit, and Wilkinson (1959) for Malay.

Tables 1 and 2 to come somewhere here at the beginning of the text

All Austronesian languages under discussion belong to the Malayo-Polynesian branch of the Austronesian language family. Therefore, I mostly use PMP etyma rather than Proto Austronesian ones as historical reference points, as the former are more transparently related to SEB languages (including MLG dialects) and easier to interpret.

³ Tom Hoogervorst points out that many loanwords in Indonesian languages and Malagasy that are usually considered to originate from Sanskrit were actually not borrowed from that language but from Middle-Indian, even if they ultimately derive from Sanskrit (Hoogervorst 2013).

⁴ I made three short fieldwork trips to the cities of Majunga, Antananarivo and Fianarantsoa in Madagascar (between 2015 and 2018), and six short trips to Southeast Barito speaking regions in Central and South Kalimantan (Indonesian Borneo, between 2010 and 2018).

Malagasy has many varieties. Whether they should be considered dialects rather than languages in their own right is a matter of debate. While it is true that there is a large extent of mutual intelligibility between varieties, there are also some (like Tandroy) that differ considerably from the other ones. In what follows I will use the term ‘dialect’ for all MLG varieties. I do so for the sake of easiness, without claiming a particular status for the variety in question. Numbers of MLG dialects mentioned in the literature vary substantially (e.g. 22 in Rasoloson and Rubino [2011]) and 12 in Simons and Fennig [2018]), and an exact number cannot be given because their counting depends on many considerations. Moreover, neither the number of dialects nor their names are linguistically informed. Dialects are often named after their region, so that one variety may have two names if it is spoken on either side of a regional border. Conversely, two separate dialects within one region may go by the same name and not be distinguished at all. Another factor is that dialects in the same area often have important features in common so that it makes sense to distinguish some broad dialect regions. Broadly speaking, the North, Centre, East, South and West of Madagascar are more or less distinct dialect areas. However, further research is needed to establish whether eastern dialects form a single group or should be divided into a north- and south-eastern group. From an overall perspective, at this preliminary stage the evidence seems to favour a genetic classification of western and southern dialects into one primary branch of MLG, and all other dialects into another (Adelaar 2013).

For the sake of this historical study, I classify MLG body-part terms into eight main categories:

1. Terms directly inherited from PMP
2. Terms inherited from PSEB
3. Terms that seem to be uniquely MLG
4. Terms borrowed from Malay and other Asian languages
5. Malay loanwords having undergone metaphorical or other drastic semantic changes
6. Terms due to the avoidance of an awkward homonymy
7. Bantu loanwords
8. Ambiguous forms

I will discuss these categories in sections 1 to 8. In section 9 I treat the polite registers that exist in some of the southern and south-western dialects, and I end with concluding remarks in section 10.

In most of the entries below I first give etyma from earlier language stages (Proto Austronesian, PMP (PWMP), PSEB) and sometimes evidence from Ma’anyan, Malay or another non-MLG language before presenting the actual body-part terms from MLG dialects. These etyma and other language evidence are added for the sake of comparison. In Section 1 they show that the MLG terms are descended from Proto Austronesian, PMP or PWMP and reflect the etyma reconstructed for these protolanguages. In other sections they are used contrastively to show that the body-part terms in question are *not* inherited from a

higher protolanguage but are inherited from PSEB (Section 2), are apparently unique to MLG (Section 3), are borrowed from Malay or another Asian language (Section 4 and 5), or are ambiguous as to origin (Section 8).

In some cases the phonological developments from PMP to SEB and on to the various MLG dialects yield identical results as what might have happened in the case of borrowing from Malay or another Malayo-Polynesian language, and there is no way of telling whether the resulting MLG form is inherited or borrowed. For instance, MLG *fifi* ‘cheek’ could be regularly inherited from PMP **pipi* ‘cheek’, but it could also have been borrowed from Malay (compare Malay *pipi* ‘cheek’). I treat these cases as if they are regularly inherited from PMP unless there is supplementary evidence that can be used to disambiguate their history.

My spelling of Malagasy words and sounds largely follows the official spelling, except for ‘o’ which is written as *u*, final ‘y’ which is written as *i*, and the indication of stress on words of more than one syllable. Moreover, final vowels sometimes obtain a *brève* sign and are written as *ă*, *ĭ*, or *ŭ*. My reasons for this 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 vowels are whispered, and Malagasy stress is contrastive. The Tanosy and Taimoro dialects of Malagasy make a contrast between post-alveolar and dental sibilants, which I write as *s* and *S* respectively. I spell Ma’anyan, Malay and Javanese words according to their official spelling except for the mute ‘e’ (schwa), which I write as *ə*, and the velar nasal, which I write as *ŋ*. However, I write personal names and toponyms in their original spelling.

1. Terms regularly inherited from PMP

Back	PMP *(ta-)likud ‘back’ > PSEB *talutuk ‘back’ (with metathesis of *l and *k and assimilation of *i to *u) > Old MLG (SE coast MLG, Ferrand 1904:91) <i>talùtukŭ</i> ‘back’ (only instance)
Bile	PMP *qapəju gall, gall bladder, bile’ > PMLG *aferu ‘idem’ > MRN, TNL, TKR, TMR, TDR, VEZ <i>afèru</i> ‘idem’
Blood	PMP *daRaq ‘blood; to bleed; menstruate’ PSEB *raa ‘blood’ > Ma’anyan, Dusun Witu, Samihim <i>ira’</i> , Dusun Malang <i>raha’</i> PMLG *raa ‘blood’ > MRN, BTL, BTM, SKL, TMR, TBH <i>ra</i> , Old MLG <i>ra</i> (Adelaar 2019; Ferrand 1904) ‘id.’

N.B. Dahl (1951:302) explained Ma'anyan, Dusun Witu, Samihim *ira'* as the result of a back formation from *mi-ra* 'to bleed' (**mi-ra'* > **mira'* > **m(i)-ira'* > *m-ira'* → *ira'*)

- Body, trunk PMP **batəŋ* 'tree trunk, stem of a plant; body; corpse; self; main course of a river' [...] (abbreviated) > PMLG **wataŋ* 'body'
> MRN *vàtană*, N-SKL *vàtaŋă*, BAR, TDR *vàtaŋě*, TMR *vata-tèŋa* (see below), TNS, VEZ *vàta*, Old MLG (Dez 1981) *vàtaŋ*, (Ferrand 1904:86) *vàtaŋĭ* 'idem', VRM *vàtaŋ* 'body; self'
- Bone PMP **tuqəlaŋ* 'condylous bone; bone of fauna exclusive of fish'
> PMLG *taulaN* 'bone' > MRN, BTL *taùlană*, TDR *taùlaŋě*, S-SKL, TMR *tôlaŋa*, TNS *tôla*, VEZ *taùla* 'id.'
- Bone marrow PMP **hutək* 'brain, marrow'
Betsileo *ùtekă* 'marrow' (Dahl 51:300)
(Note TDR *ùtekě* 'vagina')
- Breast PMP **nunuh* 'female breast'
> PMLG **nunu* 'breast; nipple' > MRN, BAR, TDR, TNS, VEZ, TKR *nùnu*, N-SKL *nônu* 'id.'
N.b.: The relation between PMP **nunuh* and PMLG **nunu* seems to be fortuitous. **nunuh* is listed in Blust (online) but reflexes are rare and almost all found in Formosan languages.
- Cheek PMP **pipi* 'cheeks, temples'
> PMLG **fifi* 'cheek' > BAR, TMR, TKR, TDR, TNS, VEZ *fifi* 'cheek' (MRN *takùlakă*)
- Corpse PMP **patay*, PSEB **patey* 'corpse', cf. Ma'anyan *ka-patei* 'to kill'
> PMLG **fate* 'corpse; death' (**fatey-* when suffixed) > MRN, TMR, BAR, N-SKL, TNS *fàti* 'id.', TDR *fàte*, VEZ *fàte*, *fàti* 'id.'
- Ear PMP **taliŋa1*, **taŋila* 'ear'
> PMLG **taliŋe* 'ear'
> BTM, TBH, ZFS, TMR *tadiŋi*
- Excrement PMP **taqi*, **taqay* 'feces, excrement'
> **tai* '1. excrement; 2. dregs' > MRN, TMR *tài*, *te*, TKR *te*, TNL, BAR, TDR, VEZ *tài* 'id.'
- Finger PMP **t<an>uzuq* 'index finger' > PWMP **pa-nuzuq* 'index finger', PWMP **tu-tuzuq* 'pointer, index finger'

- > PMLG *tundru ‘finger’
 > MRN, BAR, N-SKL *tôndru*, TMR, TNS *fanùndru*, VEZ *tùnju* ‘finger’, TNL, TDR *tùndru*
 ‘index finger’
- Heart PMP *pusuq ‘heart of a person or an animal; purple heart-shaped inflorescence of a banana’
 > PMLG *fuu ‘heart, interior’ > all dialects *fu*, Old MLG (Adelaar 2019; Ferrand 1904:90) *fuu* ‘id.’
- Intestines PMP *t<in>aqi ‘small intestine’
 > PMLG *tinai > MRN, BTL *tsinài*, TDR *tsinài(ňě)*, TMR *sinài*, TNS *Sinài*, VEZ *tsinài*, *tinài* ‘intestines’
- Life, breathing PMLG *aiŋ ‘life, breathing’ > BAR, *ài*, N-SKL *aiŋi*, TDR *ài(ňe)* (Rajaonarimanana and Fee 1996), VEZ *ài*, *àe* ‘id.’, MRN *àinǎ* ‘life, vigor, effort’, BTL *mi-àinǎ*, TNS *mi-ài* ‘to breathe, blow air’
- Little finger PMP *kiŋkiŋ ‘little finger, pinky’
 > *SEB *kiŋkiŋ ‘idem’ (Ma’anyan *kiŋkiŋ* ‘little finger’)
 > MRN *aŋ-ki-bè* ‘thumb’ (aŋ- [bleached locative marker], -ki- [reduced root of *kiŋkiŋ?] *be* ‘big’)*, S-SKL, VEZ *kiŋki* ‘little finger’, TNL *hìŋki*, *hìŋkiŋǎ*, *hìŋkinǎ*, *kiŋki*, *kìŋkiŋǎ*, VEZ *kìŋki* ‘little finger’, TDR *ana-kiki* (*ànakě* ‘child’) ‘id.’
- Liver PMP *qatay ‘liver; seat of the emotions [...]’
 > PMLG *ate > TDR *àte*, VEZ *ati*, *àte*, other dialects *àti* ‘1. liver; 2. interior’
- Molar tooth PMP *baRəqəŋ ‘molar tooth’ (OJV *wəhaŋ* ‘idem’)
 PMLG *wayəŋ ‘molar’ > MRN *vàzanǎ*, BAR, TNS, VEZ *vàza*, TMR, N-SKL *vàzaŋǎ*, TDR *vàza(ňě)* ‘idem’; compare also TNS *vaza/kùhu* (see ‘Nail’)
- Mouth PMP *baqbaq ‘mouth, opening; speak, say’
 > PMLG *wawa ‘mouth’ > all dialects *vàva*
- Nail PMP *kuhkuh ‘claw, talon, fingernail’
 PSEB *kuku[ʔ] ‘fingernail’
 > MRN *hùhu*, Dusun Witu *kuku*’, Dusun Malang, Samihim *kuku* ‘idem’
 PMLG *huhu ‘fingernail’ > MRN, BAR, TDR, VEZ *hùhu*, VRM *vayankùu*, TMR, TNS *vaza/kùhu* ‘nail’ (<*wayəŋ ‘molar’ [see above] + *huhu)
- Name PMP *aŋajan ‘name’

PMLG *aŋaran 'name' > MRN, BTL, TMR *anàrană*, BAR, TNS, VEZ *aŋàra*, TDR *aŋàraně*, N-SKL *aŋàrană*, VRM *aŋarană* 'idem'

Navel: PMP *pusəj 'navel, umbilicus; mid-point or center of something'
> PMLG *fueT 'navel, centre' (cf. Ma'anyan *puhet* 'navel, centre')
> MRN *fùitră*, N-SKL *fùitsĩ*, TNS *fôSi*, 'navel, centre', TDR *fùetsě* 'navel; part of umbilical cord saved after birth', VEZ *fùetsě* 'navel; centre; umbilical cord'

Nerve, muscle, tendon

PMP *uRat blood vessel, blood vein; muscle; nerve; sinew; tendon; fiber; vein of a leaf; grain of wood; strand (of thread, rope); fishing line; root'

> PMLG *(h?)uyaT 'nerve, muscle, tendon' > MRN *hùzatră*, *ùzatră*, TMR *ôzatri*, BAR *hùzatsĩ*, TKR *ôzatră*, TDR *ùzatsě*, TNS *hùzaSĩ*, VEZ *hùzatsě*, *ùzatsě* 'idem' (occurrence of initial *h* in these forms remains unexplained)

Nose PMP *ijuN 'nose'

> PMLG *uruN 'nose' (Ma'anyan *uruŋ* 'id.') > MRN, BTL *ùrună*, *ùruŋă*, TKR *ôruŋŭ*, BAR, TNS, VEZ *ùru*, TDR *ùru(ŋě)* 'id.'

Palm, sole PMP *palaj 'palm of hand, sole of foot'
> PMLG *fala*[T] 'idem' > MRN *fela-tànană* 'palm of hand', TNL *fela-tàŋa(nă)*, *fala-tàŋa(nă)* 'palm of hand', *fala-dìa*, *fela-dìa* 'sole of foot' BAR *fala-dìa* 'sole of foot', VEZ *fela-tàŋa* 'palm of hand'; (TDR *lelantàŋaŋě* 'palm of hand', *lelantùmbukě* 'sole of foot')

Pus PMP *nanaq 'pus'
> PMLG *nana 'pus'
> MRN, BAR, TMR, N-SKL, TDR, TNS, VEZ *nàna* 'idem'

Saliva PMP *ibəR 'saliva in the mouth; drool; desire, crave, lust for'

> PSEB *iwey > PMLG *iwe 'saliva' > MRN *ivi*, TDR *ive*, TNS *ranu/n/ivi*, TMR *ran/n/ivi* (**ranu* 'water' + *-N- (linker) + **iwey*) 'saliva'

Shoulder PMP *qabaRa 'shoulder; carry on the shoulder'
> PMLG *awae 'shoulder'
> MRN *avài* 'shoulder', N-SKL *avei*, TKR *ave* 'shoulder', TNL *avàhi* 'shoulder; shoulder blade' (not in BAR, S-SKL, TDR, or VEZ)

Skin PMP *kulit 'skin; hide; rind; bark'
> PMLG *huliT 'skin; bark; leather' > MRN, BTL *hùditră*, BAR *hùlitsĩ*, TDR, VEZ *hùlitsě*, TNS *hùliSĩ*, *hùdiSĩ* 'idem'

Spittle	PMP *ludaq ‘saliva; to spit’ PMLG *rura ‘saliva’ > MRN <i>rùra</i> ‘id.’, BAR, VEZ <i>rùra</i> ‘saliva; spittle’, TDR, TNS <i>man-drùra</i> ‘to spit’
Sweat	PWMP *liṅət (attested in Philippines in Bontok, Isneg) ‘sweat, perspiration’ PMLG *liṅeT ‘sweat’ > MRN <i>dìnitřă</i> , BAR <i>liṅetsĩ</i> , <i>diṅitsĩ</i> , TMR, N-SKL <i>dìṅitřĩ</i> , VEZ <i>liṅitsě</i> , VRM <i>dìnitřă</i> (MRN influence?) ‘idem’, > N-SKL <i>diṅèr-iṅĩ</i> ‘to sweat, sweating’; N.b. Rajaonarimanana and Fee (1996) list TDR <i>liṅetsě</i> but in Andromasy’s variety (and in TNS) the term for ‘sweat’ is <i>fàna</i> (this word has the meaning ‘heat’ in other dialects)
Thigh:	PMP *paqa ‘thigh’ > PMLG *fee > MRN, N-SKL, BAR, S-SKL, TNS, TDR, VEZ <i>fe</i> ‘thigh’
Tongue:	PMP *dilaq (Proto Austronesian *zəlaq) ‘tongue’ > PMLG *lela ‘tongue’ > all dialects <i>lèla</i> ‘tongue’
Tooth:	PMP *(n,ng,l)ipen ‘tooth’ > PMLG *nife[n?] ‘tooth’ > TDR <i>nife</i> , MRN, BTL, TMR, BAR, TKR, TNS <i>nifi</i> ‘idem’
Vomit	PMP *luaq ‘spit out (food, substances alien to the body), to spew’ PMLG *lua ‘1. vomit; 2. payment’ > MRN, TNL, BAR <i>lùa</i> ‘id.’, TMR, TKR <i>lùa</i> ‘vomit’, VEZ <i>lua-lùa</i> ‘idem’, TDR <i>lùa</i> ‘vomit’; <i>man-dùa</i> ‘1. to vomit; 2. to pay’
Whiskers	PWMP *bauk ‘whiskers’ > PMLG *wauk ‘idem’ > MRN <i>vàukă</i> ‘whiskers’, BAR <i>vàukĩ</i> , TDR <i>vàukě</i> ‘beard’

Inherited from PMP but with change in form or meaning:

Beard	PMP *kumis ‘beard’; PWMP *sumit ‘moustache’ PMLG *sumuT ‘hair on face’ > MRN <i>sùmutřă</i> , TDR <i>sùmutsě</i> (Rajaonarimanana and Fee 1996) ‘goatee’, TNL <i>sùmutřă</i> , TMR <i>sùmutřĩ</i> , BAR <i>sùmutsĩ</i> , VEZ <i>sùmutsě</i> ‘beard’; N.b. the change from *i to u in proximity of another u is very frequent in MLG.
Hair (any)	PMP *buhek ‘head hair’; PMP *bulu body hair; fur; feather; down; floss on plant stems; color; type, kind’

> PMLG *wulu ‘any hair; feather’ > all current dialects *vùlu* ‘idem’, TMR *vulundùha* ‘hair on head’, TKR *vurundôha*, BTL *vurundùha* ‘hair on head’

Leg	PMP *bities ‘lower leg; calf of leg’, PWMP *butiqes ‘calf of leg’ > ? P-North-MLG *witi ‘lower leg’ > N-SKL, TKR <i>viti</i> ‘leg’ N.b.: *witi is related to *wua-witi ‘Calf of leg’ (see below)
Milk	PMP *Rataq ‘milk’; PMP *zuruq ‘juice, sap, gravy, soup’ > PMLG *ruu ‘juice, sap, (meat) sauce, broth’ (Ma’anyan <i>riu</i> ‘id.’) > MRN, BAR, TDR, TNS, VEZ <i>ru</i> ‘id.’, <i>ru-nùnu</i> ‘milk’ (lit. breast liquid)
Penis	PMP *butuq testicles of animals; castrate animals’ > PMLG *vutu ‘penis’ > Manya’an <i>woto</i> ‘penis’ > MRN, TNL, BAR, TNS, TDR <i>vùtu</i> ‘penis’ N.b.: possibly a Malay loanword, compare Malay <i>butuh</i> ‘penis’
Vulva	PMLG *falu ‘vulva’ > TNL <i>fàlu</i> , Old MLG (Ferrand 1904:91) <i>falū</i> ‘idem’, TMR <i>fàlu</i> ‘vagina’; Dempwolff’s (1938) *pali ^c ‘to be forbidden, taboo’ is a false etymon based on Malay <i>p<əm>ali</i> ‘forbidden, taboo’ (<Malay *pali) and MLG <i>fàdi</i> ‘idem’. In fact, <i>fàdi</i> is a Malay loanword. Both MLG <i>fàlu</i> ‘vulva’ and Malay <i>p<əm>ali</i> are inherited from PMP and reflect an earlier PMP *paluy ‘forbidden, taboo’.

2. Terms regularly inherited from Southeast Barito (SEB)

Armpit (No Proto Austronesian or PMP etymon); Ma’anyan <i>kelek</i> ‘armpit’	PMLG *kelek ‘armpit’ > MRN, TMR, TNL <i>hèlikă</i> , TKR <i>sèlikî</i> , N-SKL <i>èliki</i> , BAR <i>hèlikî</i> , VEZ <i>hèlikě</i> , <i>hèlekě</i> , TDR <i>hilekě</i> ‘idem’
Body	PMP *təŋaq ‘middle’ (as *təŋah in Dempwolff 1938) PSEB *teŋa’ ‘body; self’ > PMLG *teŋa ‘idem’ > MRN <i>tèna</i> , TMR <i>tèna</i> ‘body’, <i>vata-tèña</i> ‘full body’, VEZ <i>tèŋa-tèŋa</i> ‘1. body; 2. self’, TNL <i>tèŋa</i> ‘1. body; 2. self; 3. centre, interior’, BAR <i>tèŋa</i> ‘1. body; 2. one, oneself’, TDR <i>tèŋa</i> ‘body’
Human being	PMP *tau ‘person, human being’ PMP *qulu ‘head; upriver’ > ? pre-SEB *ulu-an ‘(residing in) upriver area’ > PSEB *ulun (originally an exonym?) ‘person, human being’ > PMLG *ulun ‘person, human being’ > MRN <i>ùlună</i> , BTL, BAR, TMR, TNS, S-SKL, VEZ <i>ùlu</i> , N-SKL <i>ùluŋŋ</i> , VRM <i>uln</i> , Old MLG <i>ulună</i> , <i>ulun</i> , <i>ulu</i> ‘id.’ (no reflex in TDR)
Kidney area	PSEB *wuni’an ‘kidneys? bladder? groin, lower belly?’ > MNY <i>wan’ian</i> , <i>wuni’an</i> ‘bladder’

> PMLG *wanian ‘lower belly, groin; kidneys’
 > MRN (Webber), N-MLG *vaniana* (Velonandro 1983), TNL *vania* ‘hip, lower belly, groin’, TMR *vania* ‘pelvis’, TDR *vania(ŋě)* ‘kidneys’, VEZ *vania* ‘groin, hip, cut’

Knuckle	Ma’anyan <i>wanei</i> (D1951) ‘limb, articulation’ PMLG *wani ‘part between knuckles or joints’ > MRN, TMR <i>vàni</i> ‘part between knuckles or joints’, <i>vanini</i> ‘id.’ (-ni ‘3rd person singular genitive pronoun’), TNL <i>vàni</i> ‘node (in grasses)’
Neck	Proto Austronesian, PMP *liqəR ‘neck’ Ma’anyan <i>diuŋ</i> (first consonant unexplained), Lawangan (a North East Barito language) <i>biuŋ</i> ‘neck’ PMLG *wuyun ‘neck (Fr. <i>cou</i>)’ > MRN, BTL, <i>vùzună</i> , TMR <i>vùzuŋj</i> , N-SKL <i>vùzuŋj</i> , BAR, TNS, VEZ <i>vùzu</i> , TDR <i>vùzu(ŋě)</i> ‘idem’
Penis	PMP *qutin ‘penis’ Ma’anyan <i>latak</i> ‘testicle’ PMLG *latak ‘?(part of) male sexual organ’; MRN <i>làtakă</i> , BAR <i>làtakĩ</i> , VEZ <i>làtakě</i> ‘penis’, SKL (Dahl 51) <i>làtakě</i> ‘scrotum’, TDR <i>làtakě</i> ‘penis’; (Rajaonarimanana and Fee 1998:) ‘testicles; male organ in general’
Snot	PMP *piŋ(ə)qut; *piŋus; *idus ‘snot’ Ma’anyan <i>leleu</i> ‘id.’ (Kamus Saku [2013] + Adelaar fieldnotes) PMLG *lelu > MRN, TMR, N-SKL, TKR, TDR, TNS, VEZ <i>lèlu</i> ‘snot, mucus in the nose’, TMR <i>ranu-n-dèlu</i> ‘snot’
Throat	PWMP *kaRuŋkuŋ, *tələnan ‘throat’ PSEB *eaw ‘voice; throat’ > Ma’anyan <i>eau</i> ‘voice; to speak’ BAR, TDR, VEZ <i>fèu</i> ‘throat; sound; voice’
Urine	PMP *ihiq, *miqmiq ‘urine; urinate’ Ma’anyan <i>amini</i> ‘urine’ PMLG *amani ‘id.’ > MRN, BAR, TDR, TNS, VEZ <i>amàni</i> ‘id.’.

3. Terms that seem to be uniquely MLG

Anus	TMR, S-SKL <i>vùdi</i> ‘id.’, BAR <i>vùli</i> back part or lower part of an animal or thing’, TDR, VEZ <i>vùli</i> ‘base, ass, posterior’
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Belly	<p>*[...]Duk ‘belly’ > BTL <i>trùkă</i>, TMR, TNS, TSK, ZFS, MSK, BAR <i>trùkĩ</i>, MFL, TDR <i>trùkě</i>, TKR Ambilobe <i>trùkũ</i>, VEZ <i>tsùkě</i> (Pierrot) ‘id.’</p> <p>*kibu ‘belly’ > TBH, MRN, SHN, TMR, BTM Mahanoro, BTM Fenoarivo Est, SKL Majunga, SKL Maintirano, SKL Ambanja, TKR Vohemar (Serva and Petroni 2011) <i>kibu</i> ‘id.’. Both of these terms have a limited regional spread and do not yield an etymon at the PMLG level; formally, *kibu points to a Bantu origin, although its source language remains unidentified. Its initial syllable seems to be the Bantu classifying prefix No 7, which forms nouns.</p>
Blood	<p>MLG dialects have two words for ‘blood’: <i>ra</i> occurs in eastern and central dialects and derives from PMP *daraq (see above); <i>liu</i> is northern, western and southern MLG (including TNS; TKR has <i>liu</i>, <i>li</i>). Speculatively, the use of a different term for blood in particularly the western and southern dialects may have been caused by the fact that they already had a form <i>ra</i> meaning ‘branch’ and is a regular reflex of PMP *daqan. The word *ra referring to ‘blood’ may have been replaced by <i>liu</i> to avoid a homonymic clash with <i>ra</i> ‘branch’. The form <i>liu</i> has a wider distribution in Madagascar but has the meaning of ‘cleanness, purity’ as reflected in MRN <i>dìu</i> ‘id.’, TNL <i>ma-dìu</i> ‘clean, pure’, BAR <i>dìu</i>, <i>liu</i> ‘1. cleanness, purity; 2. blood’, TKR ‘blood’, TMH <i>liu</i> ‘blood’, VEZ <i>liu</i> ‘1. cleanness, purity; 2. blood’. Some dialects combine both meanings: BAR <i>dìu</i>, <i>liu</i> TDR <i>liu</i> ‘blood’, <i>ma-liu</i> ‘clean, pure’. It remains unclear whether this combination is an independent way in which the semantics of this word has developed, or it is the result of influence (for instance, from Standard MLG/MRN).</p>
Brain	<p>PMP *hutək ‘brain, marrow’</p> <p>? post-PMLG *beDu ‘brain’ > TNL, BAR, TMR, TNS, TKR, TDR <i>bètru</i> ‘id.’ (MRN, TNL <i>atidùha</i> (< <i>àti</i> ‘heart’ + -N- + <i>lùha</i> ‘head’) ‘id.’)</p>
Human being	<p>PMP *tau ‘person, human being’</p> <p>PMP *qulu ‘head; upriver’ > ? pre-SEB *qulu-an ‘(residing in) upriver area’ > PSEB *ulun originally an exonym ‘person living upriver’, TDR <i>ndàti</i> ‘human being’ (probably < *ulun- + *lati ‘?’)</p>
Lip	<p>Proto Austronesian *biRbiR ‘lip’, PMP *bibiR ‘lower lip’</p> <p>BAR, N-SKL, TKR <i>sùŋi</i> ‘lip’, S-SKL, VEZ <i>sùŋe</i> ‘lip; beak; edge, beach’, TDR <i>sùŋi</i> ‘lip, edge’</p>
Lung	<p>Proto Austronesian *baraq₁ ‘lung’</p>

? post-PMLG *rabuk ‘lung’ > TNL *ràbukă*, BAR *ràbukĩ*, N-SKL *ràbukũ*, S-SK *ràbukě*, *ràbukĩ*, TDR, VEZ *ràbukě* ‘lungs’, TMR *ràbuki* ‘lungs of an animal’, TNS *ràbu ni* ‘lungs of the zebu’

? also post-PMLG *awuk-awuk > MRN, TNL, TMR *avuk-àvukă*, TKR *avuk-àvukũ*, TNS *avuk-àvukĩ* ‘id.’

Knee	TMR <i>tsupùku</i> ; southern and western MLG <i>ùngutsě</i>
Marrow	TMR <i>sùka</i> ‘id.’
Navel	TMR <i>kùbu</i> ‘id.’
Penis	PMP *utin; Malay <i>butuh</i> TMR <i>bùnga</i> ‘id.’, <i>vô-bùnga</i> ‘testicle’
Thigh	PMP <i>paqa</i> ‘thigh’ TMR <i>Su-bè</i>
Throat	PWMP *karuŋkuŋ ‘throat’ PMLG *tenda ‘throat’ > MRN, TNL, TKR, N-SKL, VEZ <i>tènda</i> ‘throat’
Private part	PMLG *furi ‘private part, orifice’ > MRN, N-SKL, TKR <i>fùri</i> ‘vagina’, BAR, TDR, TNS, VEZ, VRM <i>fùri</i> ‘anus’, bottom’

4. Terms borrowed from Malay and other Asian languages

Arm	Malay <i>sandi</i> , <i>sandi</i> ‘joint, articulation’ < Sanskrit <i>samdhi-</i> ‘idem’ PMLG *sanDi ‘arm; joint’ > MRN, BAR <i>sàndri</i> , TMR <i>sàndri</i> [çãndri], TNL <i>sàndri</i> <i>tàŋa</i> , VEZ <i>sànji</i> ‘arm’, TDR <i>sàndri</i> (Rajaonarimanana and Fee 1996) ‘body’, N-MLG <i>sàndri</i> ‘arm; the body in general’
Back	PMP *likud ‘back’ (see also *balakan, *talikud (Old MLG <i>talutukũ</i>), PMLG <i>lambusiN</i>); P-South Sulawesi *boko(t?) ‘back (the body-part)’ (Mills 1975) PMLG *wuku > ‘the back of something’ > MRN, TNL <i>vùhu</i> ‘idem’, <i>i-vùhu</i> ‘behind’, BAR, VEZ <i>vùhu</i> ‘the back; the reverse or outside of something’, TDR <i>am-bùhu</i> ‘behind, at the back’, (PMLG *wuku is a South Sulawesi loanword (Adelaar 1995); its MLG reflexes are locatives not used as body-part terms)
Calf of the leg	PMP *buaq ni bitiaŋ ‘calf of leg’ > Malay <i>buah batis</i> ‘calf of leg’ > MRN, TNL <i>vuavitsi</i> , BAR <i>vuavitsi</i> , <i>vuaviti</i> , TMR <i>vôvìSi</i> ‘id.’. This set is probably derived from Malay <i>buah batis</i> as it lacks a reflex of the MLG genitive linker *-

ŋi-, and other SEB languages lack compounds with *buaq, see Ma'anyan *wisis*, Samihim *βisih* 'calf of leg').

N.b.: 1. See Section 1 for a connection with PMP *bitiəs (PWMP *butiqəs) and N-SKL, TKR *viti* 'leg'.

2. The semantic history of *viti* and *vuavitsi* is also discussed in Section 9.

- Chest PWMP *dahdah (Proto Austronesian *daSdaS) 'chest'
Malay *dada* 'chest'
> PMLG *tratra 'chest' > MRN, BAR, N-SKL, TDR (Rajaonarimanana and Fee 1996), VRM *tràtra* 'chest (body-part)', VEZ *tsàtsa* 'idem'. This term is borrowed from Malay: word-initially and between vowels, the retroflex *tr* signals borrowing and stands for a *d in the lending language (Adelaar 1989:13).
- Chin Ma'anyan *ra'aŋ*
MLG *sàukă*, TMR *sàukă* [TKR, N-SKL *sôkü* 'chin' [çà^wkă], TNS, BAR, TNS *sùmakĭ*, TDR *sùmatsě* 'id.')
- Forehead PWMP *kəniŋ, *kiniŋ 'eyebrow'
Banjar Malay *kaniŋ* 'eyebrow'
> PMLG *handriŋ 'forehead' > MRN *hàndrină*, BAR, TNS *hàndri*, TDR *hàndri(ŋě)*, N-SKL *hàndriŋĭ*, *àndriŋĭ*, VEZ *hànje*, *hànji*, Old MLG (Ferrand 1904:91) *handriŋ* 'idem'. Note that the MLG forms developed an epenthetic *dr* between nasals in the final syllable. The penultimate *a* in *handriŋ shows that this term was borrowed from Banjar Malay, as the latter has *a*, whereas other Malay dialects have a corresponding schwa. In contrast, compare Ma'anyan *kiniŋ* 'eyebrow' (Stokhof and Almanar 1986).
- Gum; tooth PMP *(n,ng,l)ipen 'tooth' (no reconstruction for 'gum of teeth')
Malay *gigi* 'tooth'
> PMLG *hihi 'tooth; gum of teeth' > TNL *hìhi*, *hi* 'gums', N-MLG *hi* (/ifi, hifi) 'teeth; gums', VEZ *hìhi* 'flake', MSK, SKL (Ambanja) *hi* 'tooth'. *hihi was borrowed from Malay, see Adelaar (1989).
- Hand PMP *qa-lima 'hand'
Malay *taŋan* 'hand'
> PMLG *taŋan 'hand' > MRN, BTL, TNL, TMR *tànană*, TKR *tàŋaŋă*, BAR, TNS, VEZ *tàŋa*, TDR *tàŋa(ŋě)* 'hand', N-SKL *tàŋaŋă* 'arm', Old MLG (Ferrand 1904:89) *futu-taŋa* 'forearm' (< *futut 'source, base etc.' + *taŋan 'hand').

Forms corresponding to Malay *taŋan* are limited to languages that have long been in contact with Malay.

Heel	PWMP *tumid ‘heel’ Malay <i>tumit</i> ‘heel’ > PMLG *tumiT ‘heel’ > TDR <i>tùmitsě</i> , MRN, TNL <i>tùmutră</i> , BAR <i>tùmutsĭ</i> , <i>tùmbutĭ</i> ‘idem’, VEZ <i>tùmitsě</i> ‘clitoris’. According to Blust (online) PWMP *tumid ‘heel’ may be a Greater North Borneo innovation; in that case, PMLG *tumiT would be borrowed (presumably from Malay), as Barito languages do not belong to Blust’s Greater North Borneo subgroup (Blust 2010).
Lip	PAN *biRbiR, PMP *bibiR ‘lip’ Malay <i>mulut</i> ‘mouth’ (a Malayic term, [Adelaar 1989:12]). > PMLG *mulut ‘lip’ > MRN <i>mùlutră</i> ‘lip’, TKR <i>mùlutrŭ</i> , TNS <i>mùluĬi</i> , TNL <i>mùlutră</i> ‘lip, beak’
Penis	Malay <i>butuh</i> ‘penis’; also Ma’anyan <i>wutu</i> ‘id.’ MRN, TNL, BAR, TDR, VEZ <i>vùtu</i> , N-SKL <i>vôtu</i> ‘id.’
Private parts	Banjar Malay <i>palir</i> (Malay <i>pəlir</i>) ‘testicle’ > TNL <i>fàditra</i> ‘underbelly, sexual organ’, BAR <i>fàlitsi</i> ‘curse, imprecation’
Shoulder	Malay <i>bahu</i> ‘shoulder’ (< Sanskrit) > PMLG *wau-taŋan ‘shoulder’ > MLG (Webber 1853) <i>vau/tànanana</i> ‘shoulder’, TKR <i>bô-tàŋană</i> ‘arm’
Skeleton	Malay <i>karaŋka</i> ‘skeleton’ < Sanskrit > MRN <i>haràŋka</i> , BAR <i>haràka</i> ‘skeleton’

5. Malay loanwords having undergone a metaphorical or other semantic change

Back	PMLG *lambusiN ‘back (body-part)’ > MRN, BTL <i>lamùsină</i> , TNL <i>lamùsi</i> , <i>lamùsina</i> , TMR <i>lamùsiŋĭ</i> , BAR, S-SKL, VEZ <i>lambùsi</i> , TDR <i>lambùsi(ŋě)</i> ‘back’, N-SKL <i>lamùsiŋĭ</i> , <i>lambùsiŋĭ</i> , TNS <i>lamùsi</i> ‘id.’ PMLG *lambusiN must have been borrowed from Sumatran Malay (cf. Minangkabau Malay <i>lambusi</i> ⁹ ‘shoulder of a cow’, or from Old Javanese (cf. <i>lamuŋsir</i> ‘back, piece of meat from the back’; compare also Sundanese (West Java) <i>lam(b)usir</i> ‘shoulder, rib of a slaughtering animal’). These reflexes probably derive from a compound consisting of Malay or Javanese <i>lambuŋ</i> ‘side, flank’ and a (syncopated) form of Malay (or Old Javanese) <i>sisir</i> ‘side, edge’. Incidentally, <i>lambuŋ</i> could be analysed further as *lambu ‘bovine’ + ŋ
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(a linker connecting parts of a noun phrase). None of the Barito languages have a related form (Adelaar 1989:12).

- Ear PMP *taliŋa¹, taŋila ‘ear’ > PMLG *taliŋe ‘id.’
MRN, BTL *tsùfină*, TNL *tsùfiŋă*, *tsùfi*, BAR, TNS, VEZ *sùfi*, N-SKL *sùfiŋĩ*, TDR *sùfi(ŋě)* ‘ear’: in Adelaar (1989:12) I trace *tsùfină* back to Malay *cupiŋ* ‘torn piece of something’, also occurring in the compound *cupiŋ hiduŋ* ‘nostril’ and *cupiŋ taliŋa* ‘earlobe’. Other forms corresponding to *tsùfină* and *cupiŋ* are found in Sumatran languages only. They all seem to be borrowed from Malay.
Other SEB languages have *silu* (Ma’anyan) and *kiliŋe* (Dusun Malang), which are unrelated to *tsùfină*.
- Finger PMP *buaq ni lima ‘finger’, *taŋan ‘finger, toe’
MRN *rantsan-tànană*, TNS *raSa-tàŋa* ‘finger’ (*tànană*, *tàŋa* ‘hand’), MRN *rantsan-tùŋguŋă*, TNS *raSa-tùmbukĩ* ‘toe’ (*tùŋguŋă*, *tùmbukĩ* ‘leg, foot’); *ràntsana* (*/ràSa*) derives from Malay *ràncaŋ* ‘pole, pointed stick, vertical stake’; compare also TDR *rambutàŋaŋě* ‘id.’ (*rambu* ‘tail’).
- Foot Proto Austronesian *waqay, *qaqay ‘leg, foot’
Blust (online) has no PMP reconstruction for leg or foot in general (only for parts of the leg) Ma’anyan *pe’e* ‘leg, foot’. *tumbuk ‘foot’ predominantly has reflexes in South MLG dialects: TNS, TSK, ZFS, MSK, S-SKL *tùmbukĩ*, TDR, VEZ, MHF *tùmbukě*; however compare also BTL which is Central MLG and has *tùmbukă* ‘foot’. In Merina, which is Central MLG, *tùmbukă* has the meanings of ‘stamping’ and ‘beginning’. *tumbuk is ultimately derived from Malay *tumbuk* ‘to pound (e.g. rice), thumb’.
Nb. A cognate set with a more general spread is MRN, TBH, SHN, BTM Mahanoro, SKL Majunga *tùŋguŋă*, SKL Maintirano *tùŋgutsĩ*, BAR *tùŋgutsĩ*, TKR, N-SKL *tùŋguŋă*, TMR *ùŋguŋă*, TMH, BTM Fenoarivo East *hùŋguŋă*. Some of its members miss initial *t or have *h* instead, which makes them phonemically identical with S-SKL *hùŋgutsě*, BAR, TDR, VEZ *hùŋgutsě* ‘knee’. It is not clear whether all the members of this set are inherited or have spread through borrowing between dialects; in any case, the fact that the southern and western dialects generally do not have a cognate indicates that no convincing reconstruction at the PMLG level can be proposed for it. The cluster *-ŋg-* suggests borrowing (historically, *-ŋg- clusters were reduced to *k* in MLG), although there is no obvious source language with a form matching in form and meaning.
- Head hair PMP *buhək ‘id.’

Most MLG dialects use *vùlu* (see above) or a compound based on this word such as BTL *vuru-n-dùha*, TKR *vuru-n-dôha*, both literally meaning ‘hair of head’. However, the Betsimisaraka dialect of Mahanoro and the Tambahoaka dialect of Mananjari both have *ràndranjã* ‘head hair’. Forms corresponding to *ràndranjã* do exist in other dialects but their meaning is ‘plait, plaited hair’. This word derives from Malay *dandanj* ‘rope of more than one strand’.

- Leg (for PMP and Ma’anyan, see ‘Foot’ (above). MRN, N-SKL, TBH, BTL, SIH, TDR, MHF, S-SKL *rànju*, BAR, SKL (Maintirano), ZFS, TNS *ràndru* ‘leg’, VEZ *rànju* ‘leg, calf of leg’. Reflexes of *rànju/ràndru* are found all over Madagascar except in the Northern dialects. The source of this term seems to be Malay *ranjaw* ‘caltrop’.
- Loins MRN *valàhanã* ‘loins’.
Dempwolff (1938) reconstructed a PMP etymon **balakanj* ‘back’. Blust (online) has PWMP **balakanj* ‘hip’ and Wolff (2010) has **balakəqaŋ* / **balakehaŋ* ‘pelvic region’, all at a Post-PMP level. Blust (online) has misgivings about the originality of this etymon. Adelaar (1989:12) rejects **balakanj* as a false etymon based on loanwords and argues that the source of *valàhanã* is Malay *bəlakəŋ* ‘(lower part of the) back’.
- Nape of neck PMP **təŋuq*, PWMP **batuk*, **təŋkuk*, **pəkuq₂* ‘nape of neck’
**hatuk* ‘back of the neck’ > MRN *hàtukã*, TMR, BAR, TNS *hàtukĩ*, N-SKL *hàtukũ*, TDR, VEZ *hàtukě*, Old MLG (Ferrand 1904:89) *hàtukũ* ‘id.’
**hatuk* may be metaphorically connected to Malay *kato* ‘a cord allowing the hilt of a weapon to be fastened to the sheath so as to prevent the weapon falling out of the sheath’: both **hatuk* and *kato* refer to something thin joining two much larger entities.
- Vulva MRN has *tsìŋgi* ‘mountain peak’. Other dialects have this word with different meanings, e.g N-SKL, TKR, TMH, Comorian MLG *tìŋgi* ‘vagina’, North MLG (Velonandro) *tìŋgi*, *təŋgi* ‘vulva’, TNL *tsìŋgi* ‘top’; *tìŋgi* ‘vagina’, TDR *mi-tìŋgi* ‘to choose the best’, VEZ *mi-tìŋge* ‘to choose, prefer’. The *tsìŋgi* and *tìŋgi* variants are cognates but differ in historical status. *Tsìŋgi* is originally Central (and East?) MLG: in dialects outside the Central MLG region it is a loanword and probably borrowed from MRN. In contrast, *tìŋgi* only occurs southern, western and northern dialects, where it is more inherited and has acquired divergent meanings. Discounting the meaning ‘vagina’ which is probably an imprecise designation of ‘vulva’, the semantic notion these cognates have in common is that of ‘elevation’: choosing the best is choosing

the highest standard. The vulva is the high part of the female sexual organ (compare the Latin terms *mons veneris* and *mons pubis*, compounds based on *mons* ‘mountain’). However, whatever the status of these cognate terms is within the Malagasy context, at the PMLG level their ancestral form *tingi must have been borrowed, as -ŋg- clusters in MLG are not inherited; *tingi reflects an original Malay *tingi* ‘high’ (Adelaar 1989).

Shoulder

PMP *qabaya ‘shoulder’

MRN *sùrukă*, TMR *sùrukĭ*, S-SKL *sùrukĕ*, *sùrukĭ*, BAR, TNS *surukĭ* ‘shoulder’, TDR, VEZ *sùrukĕ* ‘shoulder’, TNL *sùrukă* ‘shoulder; spoon, ladle made of a *longoza* or banana leaf’. Note that TNL *sùrukă* and VEZ *sùrukĕ* also occur in verbal derivations denoting the use of a spade. The semantic connection between ‘shoulder’ and ‘spade’ is also known from other languages, compare Latin *spatula* ‘spade’ and French *épaule*, Italian *spalla* ‘shoulder’. *sùrukă* and its cognates must be borrowed as MLG *s* is originally a loan phoneme. A Malay source is possible although not straightforward because of the *d* in Malay *sodok*, *codok* ‘spade’. (A possible scenario is that *sodok*, *codok* was borrowed into MLG before the SEB change from *d to r had run its course, implying that the borrowing happened at a very early stage.

Waist

Malay *taŋkay* ‘stalk, haulm, stem’

PMLG *taheyaŋ ‘side, waist’ > MRN *tehèzană*, BAR and VEZ *tahèza*, TNS *tehèza*, Old MLG (Ferrand 1904:91) *tahezaŋ* ‘id.’; TKR, N-SKL *tahèzaŋă* ‘back’. This word derives from a root *takay and a (locative) suffix *-an. (*tahèzaŋă* with the meaning ‘back’ together with *viti* ‘lower leg’ are evidence supporting a northern MLG dialect group consisting of TMH, TKR, N-SKL and some BTM northern subdialects).

[[Table 3 about body-part terms from Malay that have undergone a metaphorical shift: please put somewhere here]]

6. Forms due to the avoidance of unfortunate homonymy (“Homonymie fâcheuse”)

Eye

All dialects have *màsu* ‘eye’, a word which Dahl (1988) traced to a Bantu origin (compare, for instance, the Swahili plural form *ma-cho* ‘eyes’). He argued that regular sound changes would have caused PMP *mata ‘eye’ to evolve into *mati, which would be identical with an already existing MLG word of that shape meaning ‘dead’, which is an ominous concept. In order to avoid an awkward homonymic clash with *màti* ‘dead’, *mati ‘eye’ was replaced with a Bantu term.

Head

Apart from Masikoro⁵, all MLG dialects have *lùha* ‘head’, the history of which remains a mystery. A possible although speculative explanation is that it developed through reduction and subsequent re-analysis of an original compound *ulu *kapala borrowed from Malay. The re-analysis may have been motivated by the typically West Indonesian tendency towards a disyllabic root structure in the early history of MLG, as follows:

PMLG *ulu ‘head’ + (Old) Malay *kapala ‘skull; head’

> *ulukapala > * əluhafalɛ

> *(ə)luha [+ *falɛ ‘taboo; offense; not allowed’]

> modern MLG *lùha* ‘head’.

The re-analysed second half *falɛ would eventually become *falɛ or *fali (depending on dialect) as a result of (1) the tendency to reduce antepenultimate vowels (which as a rule precede the stressed syllable), and (2) the heightening of word-final *a to ε. These are both regular sound changes in MLG phonological history. Note that in *lùha*, final *a was not raised to ε, indicating that it was originally not final. The resulting form *falɛ /*fali would have become similar in form to MLG *fàdi* (‘taboo’, which developed from an earlier *fali) and identical to its dialectal variants *fàli*, *fàlɛ* (same meaning). Conceivably, this would have led to a homonymic clash with the southern, western dialects which have *fàli* or *fàlɛ*, and possibly also with the central, eastern and northern ones which had *fali at an earlier point in history.

A similar line of developments is seen in *luhàlikă* ‘knee’ (with a variant for *luhalitră* in the old “Sorabe” texts written in Arabic script [Ferrand 1904]). This word derives from *lùha* ‘head’ and PMLG *aleP ‘knee’ (Dahl 1951). The latter is a reflex of PMP *qaleb ‘knee’, and *luhàlikă* is created analogous to PMP *qulu ni qaləb (-> *qulu ‘head’ + *ni (possessive marker) + *qaləb ‘knee’).

Its development must have been as follows:

PMLG *luha + *aleP > * əlu-hali(C) ‘knee cap’ > MRN *luhàlikă*, TKR, N-SKL *luhàlikĭ*, Sorabe literature *luhàlitră* ‘knee’

N.b.: PMP *ulu has been reconstructed as a general term for ‘head’ (with the associated meanings ‘top part; leader, chief; headwaters; handle of a bladed element; prow of a boat; first, first-born’, Blust [online]). Reflexes in MLG only occur in derivations; they have acquired a locative meaning and no longer

⁵ Masikoro has *kabèsò*, supposedly a Portuguese loanword (Gueunier, Rasoamalalavo, Raharinjanahary 1992).

refer to the body-part, compare *a-ulu* (Ferrand 1904) ‘first’, MRN *n-ta-ùlu* ‘the ancestors’, MRN *ulù-ană*, BAR *ulù-a* ‘in front, facing’.

7. Bantu loanwords

The Bantu origin of *màsu* ‘eye’ and (possibly) *kìbu* ‘belly’ were already treated above. The term for ‘flesh’ is ultimately borrowed from Bantu:

Flesh Common Bantu **nòkù* ‘flesh’; compare Comorian, Swahili *m-nofu* ‘idem’
PMLG **nufu*(Ø,T) > MRN, TMR, TNL, VEZ *nùfu*, BAR *nùfu*, *nùfutsĩ*, TDR
nùfutsě, also (Rajaonarimanana and Fee 1996) *nùfu*, *nùfutsě*, VEZ *nùfu*,
nùfutsě, N-SKL *nôfutrě*, Comorian MLG (Kiantalaotse dialect) *nôfutsĩ* ‘flesh’,
TNS *nùfuSi* ‘muscle’.

There are more Bantu body-part terms but they are limited to local dialects (see also **Ambiguous forms** (8) below).

8. Ambiguous forms

Elbow PMP **siku* ‘elbow’ > Ma’anyan *hiku* ‘idem’
MRN, TNL, VEZ, TDR *kìhu*, BAR *kìhu-kìhu*, TMR, N-SKL *kìu* ‘idem’. These forms
are irregular in showing initial *k*, as **s* became Ø in MLG. (i.e. their expected
form should be **ihu*). Speculatively, *kìhu* may derive from PMP **siku* through
metathesis of **s* and **k* and furthermore have obtained its current initial *k*
through association with the Bantu nominal prefix *ki-* (which also seems to
occur in *kibu* [see above], *kìtsuke*, *kiràndra*, [below]).

Other possible Bantu forms are the word for ‘nail’ and ‘lower leg’ in some dialects, although I was not able to trace their source language:

Skin SHN *angùzu*, SKL (Ambanja) *angùzi*

Nail Common Bantu **-kùp-* ‘scrape’
> TKR *angôfi* ‘nail’, Comorian MLG *angòfu* ‘nail’

Lower leg TDR *kìtsukě* ‘id.’ (Rajaonarimanana and Fee 1996) ‘calf of leg’

Lung
variant TKR *tsikàfuni* ‘lung of the zebu’ (*tsi-* may be deriving from the palatalised
variant
**chi-* of the Bantu *ki-* prefix (?))

9. Polite register

Alongside their usual body-part terms, the S-SKL, BAR and TDR dialects in the South and Southwest of Madagascar also have a series of body-part terms that are marked for respect. Both series are included in Gueunier (unpublished), Rajaomanana and Fee (1996) and Elli (1988). (However, Serva and Petroni (2011) only list the respectful terms for body-parts in their TDR wordlist).

[[Please put Table 4 somewhere here]]

Table 4 gives an overview of polite body-part terms and their neutral counterparts in TDR. Many polite terms are morphologically and semantically fairly transparent. They are often derived with the nominal prefixes *faN-* and *fi-* and denote an instrumental noun, e.g. *fan-dia* 'thing to set foot with' (i.e. 'foot'), *fi-tà* 'the holder, thing to hold with' ('hand'). Some others are derived with the circumfixes *faN-(root)-añě* or *fi-(root)-añě* which normally denote nouns with a locative meaning, e.g. *fi-ambesar-añě* 'place to sit on' ('anus, buttocks'), *fi-antsùn-añě* 'sniffer(?) object where the sniffing or smelling takes place(?)' (= 'nose'). Other cases again are less straightforward in their derivation but still semantically transparent, e.g. *marù* 'hair', which one would immediately associate with *màru* 'many' even in the ending *-i* cannot be explained (there is no suffix **-i* in MLG). Finally, some polite terms represent transparent metaphors, e.g. *ravembia* (*ràve(ñě)* + *-N-* + *via*) 'leaf of *via* plant' refers to 'ear', and *ambune* 'top-of-it' refers to 'head'. *Ari rànu* 'urine' literally means 'throwing away water', a metaphor rather similar to Malay / Indonesian *mam-buan air* literally 'to throw away water' but with the implication of relieving oneself.

Polite body-part terms generally concern visible part of the body: the only exception in my data is *arùfu* 'heart'⁶. Note that *fihaïnu* 'eye' is derived from *haïnu*, a root basically carrying the meaning of 'listening' (*mi-haïnu* 'to listen'), and not 'seeing'⁷.

The polite registers are not limited to body-part terms: in TDR they also include some verbs (watch, bathe, sleep, sit down, go) and even stative verbs (angry/sad) and nouns (house, spouse).

There is much overlap between the TDR, S-SKL and BAR polite terms. The data listed in the BAR dictionary are more limited and include *fizi*, *fizà* 'ear' (neutral: *sùfi*), *fañěti*, *fizèri*, *fizàha* 'eye' (neutral: *màsu*), *fandia* 'foot' (n. *tùmbukì*), *fandràmbi* 'hand', (n. *tàña*), *ambùni*, *atètì*

⁶ Rajaonarimanana and Fee (1996) label this as an Arabic loanword: if so, it is possibly related to Arabic (*ar-*)*rūḥ* '(the) spirit' (?).

⁷ The same meaning is given in Serva and Petroni (2011). However, Gueunier has *fihaïno* 'ear', which he labels as a polite term from Masikoro, a dialect closely related to VEZ.

'head' (n. *lùha*), *marùì* 'head hair' (n. *vùlu*), *famèlikĩ* 'tongue' (n. *lèla*), *fanjìtsikĩ* 'tooth' (n. *nìfi, hi*), and *fanàtsu, sambài* 'nose' (n. *ùru*).

It remains to be investigated if - and to what extent - the TDR, S-SKL and BAR polite terms have a common origin, and how they are used in their respective societies. Another fascinating aspect involving the TDR, S-SKL and BAR polite registers that needs to be investigated is their possible connection to similar polite registers in Javanese and other languages in western Indonesia. While the structure of Javanese polite registers is more complex and based on different kinds of source vocabulary (using altered roots and loanwords), the basic principle underlying these polite terms is the same, namely paying respect to people who are older or higher in rank. This in conjunction with the fact that the Javanese language and culture had an important influence on the Asian ancestors of the Malagasy (prior to and even after their migrations to East Africa) would justify an investigation into the relation between Malagasy and Javanese polite registers.

9. Discussion of the data

How does the MLG data fit into a more general typology of body-part terms?

Part of the morphological complexity reflected in the MLG dialects are due to processes that took place before PMLG came into being, as in terms like *tsinàì* 'intestine' (< PMP t<in>aqi, derived from *taqi 'faeces' through infixation of <in>), Sorabe MLG *talùtukũ* 'back' (< PMP *(ta-)likud) and MLG *tadìnji* 'ear' (< *taliŋa). Terms like these should be analysed at the Proto Austronesian and PMP levels: they were inherited in the current MLG dialects but they did not take place in them. The same applies to MLG *ùlunã* 'human being', which must derive from a pre-SEB form *ulu-an '(residing in) upriver area' (< SEB *ulu 'head' + locative suffix *-an). It also applies to originally Malay compounds like *lamùsinã* and *vuavitsi*. Other morphologically complex forms must have come about in the early history of MLG itself and tell something about the way Malagasy people used to conceptualise the human body. They include *vuru-n-dùha/vulu-n-dùha* 'hair of head', *atidùha* 'brains', *rantsan-tànanã* or *rambutàŋa* 'finger', *luha-likã* and *luha-litrã* 'knee' (a calque based on *qulu *qaleb constructions in Borneo), *fala-tànanã* 'palm of hand', *fala-dia* 'sole of foot', *vau-tànanã* 'shoulder', *vazan-kùhu* 'fingernail' (< *vàzanã* 'molar' + *hùhu* 'nail'), and *ru-nùnu* 'milk'. (The polite terms discussed in Section 9 are also contribute to a better understanding of this conceptualisation).

Wilkins (1996) is concerned with directionality in semantic change. On the basis of evidence from native Australian languages, he argues that in the realm of visible body parts, semantic shifts from part to whole happen relatively frequently whereas shifts from the whole to a part are exceptional. This tendency needs further testing on a large sample of genetically

different languages throughout the world before Wilkins' observation can claim linguistic universality. However, in the current data it would find support in the change from Proto Austronesian *beties and PWMP *butiqes (and also PSEB *witih 'calf of leg') to N-SKL and TKR *viti* 'leg', provided the former had the meaning 'calf of leg', which is one of the meanings reconstructed by Blust

However, while Blust (online) reconstructs Proto Austronesian *beties 'calf of leg', PMP *bities 'lower leg; calf of leg' and PWMP *butiqəs 'calf of leg', in a note to the PMP *bities entry he also speculates that its original meaning may have been 'lower leg' which then shifted to 'calf of leg' in part of the daughter languages because the calf is "perceptually the most salient part of the lower leg". If his speculation is correct it would mean that N-SKL, TKR *viti* 'leg' essentially kept its meaning. It would also mean that the part to whole shift proposed by Wilkins does not apply to PMP *bities. Here we are confronted with two contrastive principles of semantic change: the part to whole principle versus a semantic specialisation principle favouring the change from a whole to its most salient part.

Do the distribution and phonological developments of body-part terms add to our insight into dialect divisions? They do, but the matter is not as straightforward as the question might suggest. A history of at least 1,300 years of population expansion, internal migrations, wars, slave raids, foreign influences and an at times strong centrifugal control from local centres on surrounding regions in different parts of the country and at different periods has created a dialect situation which is rather difficult to handle from a classificatory viewpoint. Another problem is of a more methodological linguistic nature. While there are dialects that at first sight look different from dialects elsewhere on the island and seem to form a subgroup, the evidence to prove this point is not always critical because it consists of retentions rather than innovations. Retentions are features that are inherited from a common ancestral language such as PMP or PSEB and are not unique to the group to be defined as a subgroup, whereas innovations are features that are common and unique to the members of that group. This is typical for dialects in the South and West of Madagascar: while seeming unique in various ways, many of the features they have in common also turn up in other dialects or even in SEB languages in Borneo (Adelaar 2013). Ultimately, retentions cannot be used to make a subgrouping argument. Nevertheless, bearing these caveats in mind, and in conjunction with insights obtained from earlier work on dialect classification, it is sometimes possible to find a red thread in the seemingly chaotic distribution of the various terms. Body-part terms like *tùmbukĩ* 'foot' and *(h)ùngutsě* are very helpful evidence. *tùmbuki* is semantically innovative as its meaning contrasts with that of 'beginning' or 'stamping' in other MLG dialects. As a term for 'knee' *(h)ùngutsě* is innovative in that it replaced a previous compound based on *qulu [later, *luha] 'head' + *qaləb 'knee'). Moreover, both terms fit into a specific taxonomic sub-system: in BAR, S-SKL, TDR and VEZ the lower limb is divided into four parts: *fee 'thigh', *ungut 'knee', *ranju 'lower leg' and *tumbuk 'foot'. Other dialects do not share this specific terminology. Also useful for classificatory purposes are *viti* 'lower leg' and *tahèzaŋă* 'back': the combination of

their form and meaning is not shared in terms for lower leg and knee elsewhere in Madagascar, which makes them diagnostic of a northern MLG subgroup including TKR, TMH, N-SKLV and various northern BTM subdialects.

On the other hand, a term like *liu is problematic and typical of the often evasive nature of subgrouping evidence. The *li sequence in this word is a retention, as southern and western MLG dialects reflect PMP *li sequences as *li* (Adelaar 2013) whereas MRN and other Central and Eastern dialects have a corresponding *di*. This means that phonologically it provides no evidence. However, semantically the word is innovative, as it shifted its meaning from ‘cleanness’ and ‘purity’ to ‘blood’, replacing an earlier *raa which goes back to PMP *daRaq ‘blood’. Then again, it cannot be used as critical evidence for specifically southern and western MLG dialect subgroup because it also occurs in north MLG dialects, compare TKR *liù* or *li*, N-SKL, TMH *liu* ‘blood’⁸.

10. Concluding remarks

1. The history of MLG body-parts clearly does not support the (still upheld) idea that body-part terms are particularly resistant to replacement.⁹ However, by the same token it is also noticeable that many body-part terms do reflect PMP and PSEB.
2. Equally noticeable is the paucity of body-part terms of Bantu provenance. They do occur but they are mostly spread over individual dialects, and the only one well-represented across MLG dialects is the ubiquitous *màsu* ‘eye’.
3. Various body-part terms seem to be based on Malay words that are used metaphorically, sometimes with a negative connotation. How should this category be explained? Does it provide a clue for the social relations that existed between the early Malagasy and Malays? This requires further investigation.
4. Body-part terms in the taboo sphere are stable members within that sphere but tend to be semantically imprecise, which is conceivably a consequence of the lack of information usually surrounding taboo issues. This is also the case cross-linguistically: shifts between

⁸ *Serva and Petroni (2011) even list liu ‘blood’ for Sihanaka (Central MLG).*

⁹ *Counterexamples are of course not hard to find. For instance, Indonesian has *kepala* ‘head’, *bahu* ‘shoulder’, *sandi* ‘joint’ (from Sanskrit), and *badan* ‘body’ (from Arabic). There are also many languages that have relexified their body-part terminology through other means than borrowing (as in the case of French *tête* and Italian *testa* ‘head’, or Russian *glaz* ‘eye’). Hill (unpublished) demonstrates how Ket, a Yeniseian language from Siberia, has systematically replaced inherited body-part terms with compounds consisting of a suffix *-at* (which is derived from the word *a’t* ‘bone’) and another term metaphorically related to the resulting body-part, e.g. *la’ng* ‘brush’ gives *lángat*, and *tol* ‘fence (consisting of vertically layered logs, like fingers)’ gives *tólat*, both meaning ‘hand’; *kə’l* ‘bent, crooked’ gives *kəlat* ‘throat’. Jug, a related language, still has the inherited term *bi’ng* ‘hand’. There are also other formative suffixes, e.g. *de:s* ‘eye’ + *qa:t* ‘wool’ yields *désqat* ‘eyelash’.*

'buttocks' and 'genitals' are also observed across Malay dialects and even in European languages (compare Indonesian *pantat* 'buttocks' with Minangkabau *pantε?*, or Dutch *kont* 'buttocks' with its cognates in English and Afrikaans). There are also various pars pro toto shifts within the sphere of female and male private body parts. These shifts are also observed in MLG.

5. The source of *lùha* 'head' remains unclear. A possible but speculative explanation is that it developed from a compound *ulu 'head' + (Old-Malay) *kapala 'head; skull') through lexical re-analysis and subsequent syllable reduction.

6. Terms belonging to the polite registers in TDR, BAR (and S-SKL) are semantically or morphologically often transparent. They partly overlap in the dialects in which they occur.

7. Although the picture provided by MLG body-part terms is not exactly clear-cut, reflexes of terms such as *(h)ungut 'knee' and *tumbuk 'foot' support a primary subgroup of South and Southwest MLG dialects. In the same way, reflexes of *witi 'lower leg' and *taheyən 'back' are diagnostic of a primary subgroup of northern MLG dialects.

8. This paper is a preliminary study of body-part terms in MLG. I collected the data as part of an investigation into the lexical history of MLG, and my aims were primarily historical. While I occasionally deal with the semantic structure of body-part terms, this was not my primary aim and remains an underdeveloped aspect of the investigation. A proper semantic study of MLG body-part taxonomy and MLG conceptualisations of the body would have required a different approach to data elicitation (cf. Wilkins 1996, Enfield et al. 2006). It would no doubt have yielded many valuable additional results. I hope to conduct such a study in the future.

Reference list

- Abinal, Antoine; Victorin Malzac. 1988. *Dictionnaire malgache-français*. Paris: Éditions maritimes et d'Outre-mer (reprinted in 1970).
- Adelaar, Alexander. To appear. Proto Malagasy. A phonological, lexical and morphological reconstruction.
- Adelaar, Alexander. In press. Seventeenth century texts as a key to Malagasy linguistic and ethno-history, in a festschrift for XX, Delphine Burguet, Sarah Fee and Samuel Sanchez (eds).
- Adelaar, Alexander; Kikusawa, Ritsuko. 2013. Malagasy dialect divisions: genetic versus emblematic criteria. *Oceanic Linguistics* 52/2:457-480.
- Adelaar, Alexander. 1995. Asian roots of the Malagasy: a linguistic perspective, *Bijdragen tot de Taal-, Land- en Volkenkunde* 151/3:325-357.
- Adelaar, Alexander. 1992. *Proto-Malayic: the reconstruction of its phonology and parts of its morphology and lexicon*. Pacific Linguistics C-119, Canberra: Pacific Linguistics
- Adelaar, Alexander. 1989. Malay influence on Malagasy: linguistic and culture historical inferences, *Oceanic Linguistics* 28/1:1-46.
- Beaujard, Philippe. 1998. *Dictionnaire malgache-français: dialecte Tañala, sud-est de Madagascar avec recherches étymologiques*. Paris: L'Harmattan.
- Blust, Robert A. (Online). Austronesian Comparative Dictionary. [<http://trussel2.com/ACD/>].
- Blust, Robert A. 2010. 'The Greater North Borneo hypothesis', *Oceanic Linguistics* 49:44-118.
- Dahl, Otto Christian. 1977. La subdivision de la famille barito et la place du malgache, *Acta Orientalia* (Copenhagen) 38:77-134.
- Dahl, Otto Christian. 1951. *Malgache et Maanyan. Une comparaison linguistique*. Avhandling utgitt av Instituttet 3, Oslo: Egede Instituttet.
- Elli, Luigi. 1988. Dizionario Bara-Italiano. Fianarantsona: Ambozontany.
- Ferrand, Gabriel. 1904. *Un texte arabe-malgache du XVI^e siècle. Transcrit, traduit et annoté d'après les mss 7 et 8 de la Bibliothèque Nationale*. Paris: Imprimerie Nationale.
- Gonda, Jan. 1973. *Sanskrit in Indonesia*. New Delhi: International Academy of Indian Culture (2nd edition).
- Gueunier, Noël J. ed. (Unpublished ms). Dictionnaire des dialectes malgaches du sud ouest (fondé sur le Dictionnaire sakalava-merina-français de victor Denis Mahavere [19251926], revu et complété par Noël J. Gueunier)
- Gueunier, Noël J. 1986. *Lexique du dialecte malgache de Mayotte (Comores)*. Études Océan Indien 7 (numéro spécial Dico-Langues'O). Paris: Institut national des Langues et Civilisations Orientales.
- Gueunier, Noël J.; Claire Rasoamalalavo; Solo Raharinjanahary. 1992. Une enquête sur les noms des parties du corps. *Travaux préliminaires I: Atlas linguistique et ethnographique de Madagascar*. Documents de Recherche de l'Institut d'Ethnologie de Strasbourg. Strasbourg: Université des Sciences Humaines.
- Guthrie, Malcolm. 1970. *Comparative Bantu. An introduction to the comparative linguistics and prehistory of the Bantu languages*. Farnborough, Hants (England): Gregg International Publishers Ltd.
- Hill, Eugen. (unpublished). Sprachkontakt und die Struktur des Lexikons. Vom Simplex zum Kompositum in deutsch-litauischer Lexikographie des 17. Jh.
- Hoogervorst, Tom G., 2013. *Southeast Asia in the ancient Indian Ocean world*. Oxford: Archaeopress.
- Hudson, Alfred B. 1967. *The Barito isolects of Borneo*. Southeast Asia Program (Department of Asian Studies), Data Paper no. 68, Ithaca (NY): Cornell U.P.
- Pigeaud, Th. 1938. *Javaans-Nederlands woordenboek*. Groningen-Batavia: J.B. Wolters.
- Poirot, Gérard. 2011. *Dictionnaire vezo-français suivi d'un index français-vezo*. (private publication: ShopMyBook; www.unibook.com).
- Rajaonarimanana, Narivelo; Sarah Fee. 1996. *Dictionnaire malgache dialectal – français. Dialecte tandroy*. Paris: Langues & Mondes, L'Asiathèque.
- Rasoloson, Janie; Carl Rubino. 2005. 'Malagasy', in Alexander Adelaar and Nikolaus P. Himmelmann eds: *The Austronesian languages of Asia and Madagascar*. 456-488. Routledge Series of the World's Languages; London: Routledge.

- Ruud, Joergen, Étude. 1955. grammaticale du dialecte betsimisaraka du sud, *Bulletin de l'Académie Malgache* 33:33-55.
- Serva, Maurizio; Filippo Petroni. 2011. Dialects of Malagasy (a comparative wordlist of Malagasy dialects). (<http://univaq.it/~serva/languages/zlist.pdf>).
- Simons, Gary F. and Charles D. Fennig. eds. 2018. *Ethnologue: Languages of the World, Twenty-first edition*. Dallas, Texas: SIL International. Online version: <http://www.ethnologue.com>.
- Stokhof, W.A.L.; Alma E. ALMANAR. 1986. *Holle lists: Vocabularies in languages of Indonesia Vol.8. Kalimantan (Borneo)*. Pacific Linguistics D69. Canberra: Pacific Linguistics, Australian National University.
- Velonandro (ed.). 1983. *Lexique des dialects du Nord de Madagascar, par des missionnaires et séminaristes catholiques*. Tuléar (Madagascar): Centre de Documentation et de Recherche sur l'Art et les Traditions Orales à Madagascar, Centre Universitaire Régional; Valbonne (France): Centre de Documentation et de Recherche sur l'Asie du Sud-Est et le Monde Insulindien, CNRS-EHESS.
- Webber, J. 1853. *Dictionnaire malgache-français* [Malagasy-French dictionary]. Île Bourbon: Établissement Malgache de Notre-Dame de la Ressource.
- Wilkins, David P. 1981. Towards a theory of semantic change. Honours thesis. Canberra: Australian National University.
- , 1996. Natural tendencies of semantic change and the search for cognates, in Mark Durie and Malcolm Ross eds: *The comparative method reviewed. Regularity and irregularity in language change*. 264-304. New York: Oxford University Press.
- Wilkinson, R.J. 1959. *A Malay - English dictionary*. London: Macmillan.
- Wolff, John U. 2010. *Proto-Austronesian phonology with glossary, vols I and II*. Cornell Southeast Asia Program Publications. Ithaca NY: Cornell University Press.