



Body part terms in Lavukaleve, a Papuan language of the Solomon Islands

Angela Terrill

*Max Planck Institute for Psycholinguistics, Postbus 310, 6500 AH Nijmegen, The Netherlands
Radboud University Nijmegen, Erasmusplein 1, 6525 HT Nijmegen, The Netherlands*

Abstract

This paper explores body part terms in Lavukaleve, a Papuan isolate spoken in the Solomon Islands. The full set of body part terms collected so far is presented, and their grammatical properties are explained. It is argued that Lavukaleve body part terms do not enter into partonomic relations with each other, and that a hierarchical structure of body part terms does not apply for Lavukaleve. It is shown too that some universal claims which have been made about the expression of terms relating to limbs are contradicted in Lavukaleve, which has only one general term covering arm, hand, leg and (for some people) foot.

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1. Introduction

The domain of body parts in Lavukaleve has two interesting dimensions to add to our general understanding of parts of the body and terminology used to refer to them in the languages of the world. Firstly, it is generally thought that body part terminology is a revealing area for understanding how partonomies work in particular languages, and across language as a whole. Lavukaleve presents an interesting problem in this area, as

E-mail address: a.terryll@let.ru.nl

it does not allow the expression of partonomy with respect to body part terms. Lavukaleve also contributes to the literature on lexical universals of body part terminology, contradicting a number of universal claims about the expression of terms to do with the limbs, and upper versus lower body parts.

The inventory of body part terms in Lavukaleve was collected over a number of field trips by the author, in connection with grammatical and lexical description of the language, and with the assistance of an elicitation guide developed by Enfield ([this volume](#)). A further task ([van Staden and Majid, this volume](#)) provided additional information on the extensions of a small subset of body part terms. In this task, called the Body Colouring Task, subjects were given a number of outline line drawings of a human body and for each picture they were asked to colour in the area referred to by a body part term written on top of the page. The task was carried out for Lavukaleve with 8 subjects across 17 body part terms. Some of the results of this experiment are discussed in this paper. Example sentences cited in this paper are drawn from the Lavukaleve corpus so far collected and include both spontaneous and elicited material.

This paper is structured as follows. Section 2 is a brief introduction to Lavukaleve and the people who speak it. Section 3 outlines the inventory of body part terms. Section 4 describes complex body part terms. Section 5 describes semantic properties of the terms. Section 5.1 introduces the issue of partonomy, and the difficulties that arise in applying this concept to the Lavukaleve body part domain. Section 5.2 focuses on the upper and lower body parallelism displayed in Lavukaleve body part terms, with particular emphasis on the apparently typologically unusual word for ‘limb’. Section 5.3 is a discussion of body part terms as applied to animals, trees, canoes and the landscape.

2. Lavukaleve and its speakers

Lavukaleve is a Papuan isolate spoken by about 1700 people in the Russell Islands, a small island group in the central Solomon Islands. Lavukaleve speakers typically learn Lavukaleve as their first language, acquiring the lingua franca creole of the Solomon Islands, Solomon Island Pijin, when they attend school. As a rough indicator, proximity to the provincial capital more or less predicts the proportion of Lavukaleve versus Solomon Island Pijin spoken; those closer to town tend to speak more Solomon Island Pijin than Lavukaleve, whereas those further from town speak more Lavukaleve than Solomon Island Pijin ([Terrill, 2002](#)).

Lavukaleve is a predominantly head-marking language, with arguments cross-referenced on the predicate by a complex combination of prefixes and a suffix. The details of participant marking depend not just on tense, aspect, mood and focus, but also on which one of nine predicate types is used, each of which has its own participant marking system. Nouns belong to one of three genders, which are only expressed in the singular and dual numbers, and there is gender concordance throughout the whole sentence. There is an extensive morphologically marked focus system, with the scope of focus shown by the agreement of the focus marker. One feature which Lavukaleve shares with the better-known mainland Papuan languages is clause chaining constructions, involving strings of minimally-inflected medial clauses followed by a fully-inflected final clause. [Terrill \(2003\)](#) is a grammatical description of the language.

3. Inventory of parts

The full list of Lavukaleve body part terms occurring in the corpus is presented in the next sections. Almost certainly more terms exist than are listed here. Each table contains the Lavukaleve term, the English translation equivalent, and a column of grammatical notes. This contains the gender of simplex (monomorphemic) words (some words are inherently plural, and therefore in Lavukaleve do not have gender; these are indicated as such), or the morpheme breakdown of analysable or partially analysable words and phrases. Complex terms follow simplex terms in the tables. Note that analysable phrases (identifiable here as body part terms written as more than one word) take the gender of their head noun rather than having their own separate gender, so for these phrases gender is not indicated in the lists to follow.

3.1. The face and its parts

Table 1 shows a list of terms for parts of the face.

Of note among these terms for facial parts is that the lips are lexicalised separately. *Leumam* ‘upper lip’ could possibly be a complex term derived from *leu* ‘mouth’, but the term is not synchronically analysable and such an analysis is not immediately apparent to speakers. Eyelashes and eyebrows do not have simplex terms; see Section 4.1 for discussion of complex terms. The term *fai* covers the whole jawbone, encompassing English ‘chin’, ‘jaw’, and indeed ‘jawbone’. That is, the term covers both the internal bone and the part which can be seen from the outside. The extent of the term *femi* ‘face’ shows an interesting range of applicability. Among participants of the Body Colouring Task (van Staden and Majid, [this volume](#)), most people showed *femi* as including the whole area from forehead to chin, while some showed it to include all except for the chin, while others again showed it to include all but the forehead (Fig. 1).

Table 1
The face and its parts

Lavukaleve term	Translation	Notes
Simplex		
<i>femi</i>	‘face’	n
<i>lemi</i>	‘eye’	n
<i>misolo</i>	‘lower lip’	f
<i>leumam</i>	‘upper lip’	m
<i>leu</i>	‘mouth’	n
<i>hai</i>	‘forehead’	n
<i>hou</i>	‘cheek’	n
<i>fai</i>	‘chin and jaw’	m
<i>sisi</i>	‘nose’	n
<i>lomo</i>	‘beard’	n
Complex		
<i>lemi ohal</i>	‘eyelash’	(lit. ‘eye its-leaf’)
<i>lemिताeo</i>	‘eyebrow’	f (lit. ‘eye-?’)
<i>sisi otom</i>	‘nostril’	(lit. ‘nose its-hole’)



Fig. 1. Results for *femi* 'face' in the Body Colouring Task. Responses from individual subjects appear in the same linear order in this and the following figures.

3.2. External parts of the body

Terms referring to external body parts are listed in Table 2.

The major body part terms in Lavukaleve, that is, those covering the larger portions of the body, are *tu'tuk* 'torso plus arms and head', *rai* 'side', *tau* 'limb', *latelili* 'chest' and *vala* 'belly'.

For some speakers, *vatu* 'head' includes the area covered by *femi* 'face', while for others it includes all parts above the neck apart from that covered by *femi* 'face'.

The word *rai* 'side' refers to a region centred on the area between the hip bone and rib bone: participants in the Body Colouring Task varied in the extent of the range of its applicability, as shown in Fig. 2.

The word *vala* 'belly' has a somewhat broad range of extension. For some speakers *vala* is a small area located just below the ribs, while for others it covers the entire middle of the body from just below the chest to the hips (Fig. 3).

Latelili 'chest' is also centred on the area between the armpits but participants in the task varied on the extension which they attributed to it (Fig. 4).

There is also a number of parts referring to the back of a body: *guguru* 'back of body'; *vukel* 'back of head'; *mutuo* 'back/behind', a more general term than *guguru*; and *kot* 'back of knee'. Note that the terms for the back of the body are not symmetrical with those for the front of the body. They make fewer distinctions, and leave some areas without a term, for example there is no term for 'back of belly'.

The word *tau* 'limb' includes within its reference much smaller parts, including terms for various fingers, 'wrist', 'elbow', 'palm', 'knuckles' and 'shoulder', but there is no term for 'hand'. Similarly, there are terms for 'knee', 'back of knee', 'thigh', 'buttocks', 'heel' and 'sole', but no generally agreed term for 'foot'. See below (Section 5.2) for discussion of *fe*; and for discussion of *tau* in general.

The word *kotavanga* 'throat' includes both the external part (i.e. the front of the neck), and the internal part.

There are four terms relating to hair: *nu* is a general term for head hair, and also the hair or fur of an animal; *memelo* refers to body hair; *fufulu* refers to the grey hair of old people; and *lomo* (listed in Table 1) refers to the beard.

3.3. Internal parts of the body

These include internal substances such as 'blood' and 'fat', types of bones, and cartilaginous parts like *homolo* 'Adam's apple', a word which is ambiguous between this meaning and a general term for 'fruit'. There are two ways of referring to the womb; there is a simplex term *sing*, which is ambiguous between this sense and another sense of 'base' or 'foundation'. The second way of referring to this part of the body is by means of the complex

Table 2
External parts of the body

Lavukaleve term	Translation	Notes
Simplex		
<i>tina</i>	'body'	n
<i>vatu</i>	'head'	n
<i>gata</i>	'pate (top of head)'	n
<i>la</i>	'fontanelle'	m
<i>ho'vul</i>	'ear'	m
<i>tu'tuk</i>	'torso plus arms and head, i.e. everything but the legs'	n
<i>vukel</i>	'back of head'	m
<i>guguru</i>	'back of body'	f
<i>mutu</i>	'back/behind'	f
<i>honi</i>	'nape/spine'	n
<i>ge</i>	'lower back'	m
<i>sooso</i>	'neck'	n
<i>kotavanga</i>	'throat, front of neck'	f
<i>rai</i>	'side'	plural
<i>susu</i>	'breast, nipple'	gender unknown
<i>vala</i>	'belly'	n
<i>sovu</i>	'navel/umbilical cord'	f
<i>tau</i>	'limb'	n
<i>soka</i>	'digit (finger/toe)'	f
<i>falio</i>	'nail (finger/toe)'	f
<i>fetu</i>	'thumb/big toe'	f
<i>gusio</i>	'little finger/little toe'	f
<i>banga</i>	'knuckles'	m
<i>feo</i>	'palm'	n
<i>ngengeso</i>	'wrist'	f
<i>runai</i>	'elbow'	m
<i>fakas</i>	'shoulder'	m
<i>ku'kunio</i>	'knee'	f
<i>kot</i>	'back of knee'	m
<i>lausu</i>	'thigh'	f
<i>lovu</i>	'buttocks'	f
<i>fe</i>	'foot or sole'	n
<i>tolo</i>	'penis/tail (of animal)'	n
<i>hani</i>	'vulva'	m
<i>keut</i>	'skin'	n
<i>kua</i>	'wrinkles on palm'	n
<i>nu</i>	'head hair (of a person)/body hair (of dog, cat, pig)'	n
<i>fufulu</i>	'grey hair'	f
<i>memela</i>	'body hair'	f
Complex		
<i>latelili</i>	'chest, place where your breath comes from'	m (lit. 'sternum-?')
<i>fea sing</i>	'heel'	(lit. 'foot base')
<i>fea oval</i>	'sole'	(lit. 'foot its-belly')

phrasal term *vala osing*, literally the 'base of the belly'. The word for 'umbilical cord' also means 'navel' that is, the term *sovu* is semantically general and covers both meanings.

The words *leruw* 'flesh', *sugaev* 'saliva' and *vui* 'breath' are some of the few inherently plural words in Lavukaleve (Terrill, 2003, p. 130). *Leruw* is only used to refer to human

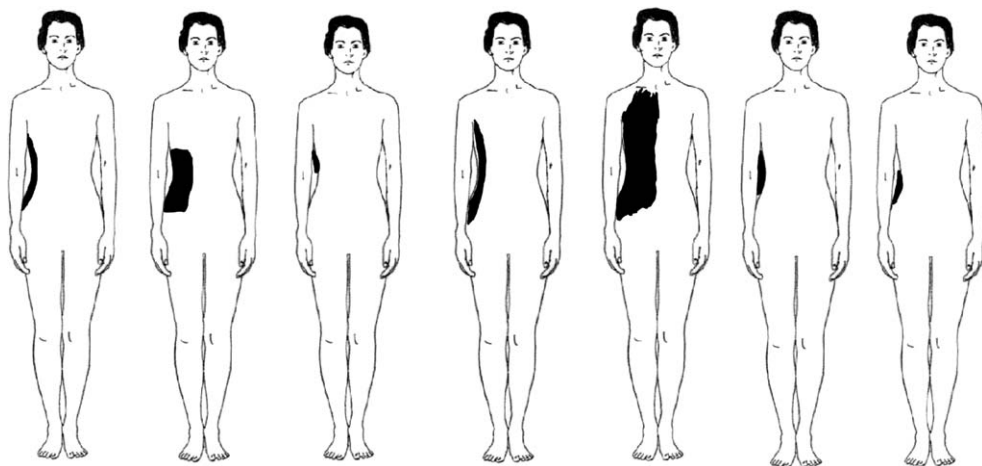


Fig. 2. Results for *rai* 'side' in the Body Colouring Task. Speakers were directed by an arrow to colour in only one side. Note only 7 speakers were asked to colour in this word.

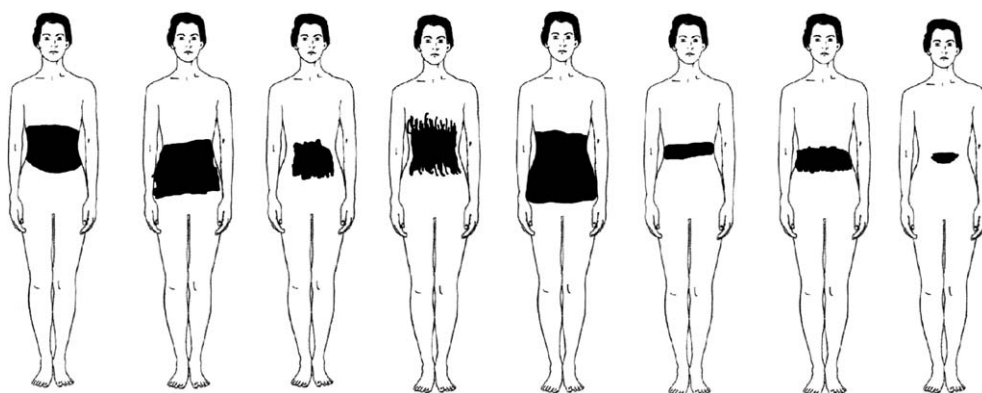


Fig. 3. Results for *vala* 'belly' in the Body Colouring Task.

flesh, whereas the semantically similar word *gan* 'meat' can also be used to refer to the substance of an animal or fruit (see Table 3).

3.4. Other parts of the body

Other parts of the body fall into a few categories: parts specific to animals; body products; the more abstract term *rolo* 'heart/mind' and the single known configurational term in the language, *tutupi* 'fist'. Other configurational concepts like 'lap' are not lexicalised separately; rather, children sit on an adult's *lausu* 'thigh'. Again, this list is not exhaustive; there are doubtless many more body part terms in the language than those represented here (see Table 4).

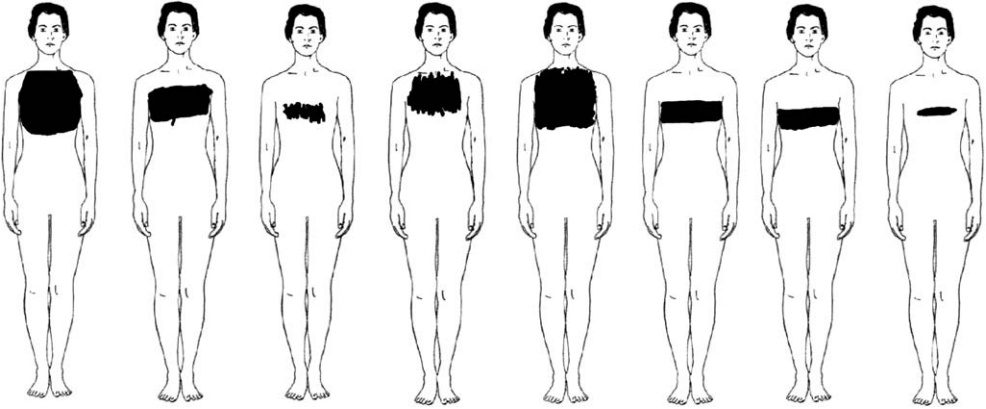


Fig. 4. Results for *latelili* 'chest' in the Body Colouring Task.

Rolo 'mind, heart' refers not to the physical body part (for which *vu'vul* is used) but to a more abstract entity. *Rolo* has a role in thinking and memory. One can say someone 'does in her mind' to imply she is thinking something but keeping it to herself, rather than expressing the thought:¹

- (1) *nga-rolo-n* *mina* *o-e-me-ge* *fi*
 1sgPOSS-mind-LOC thing(f) 3sgfO-SBD-continue-ANT 3sgnFOC
leta *rikai* *ngo-lai-la* *me-re-a* *fongai*.
 but quickly 2sg-tell-NEG HAB-NF-sgf 1sgFOC
 '...I kept the thing in my mind (i.e. kept it to myself), but I didn't tell you quickly'.

The word *rolo* is not just the seat of thinking, but is also the seat of the spirit of a human. It is always the word used to translate 'heart' in the spiritual sense, in the translations of the Anglican prayer book (Barua, nd):

- (2) *God* *e-roloal* *vo-sisiafo-ri-va*
 God 1pl.exPOSS-hearts(pl) 3plO-clean-CAUS-PCTIMP.sg
 'O God make clean our hearts'

Lavukaleve speakers describe *rolo* as the spiritual core of a human. This sense of the core or deepest part of a person is not accidental; *rolo* is also a noun meaning 'inside':

- (3) *Lea* *na* *a-na* *rolo-n* *ka* *hano*
 cave(m) sgmArt 3sgmO-in inside-LOC LOCEMPH then
huru-m.
 go.inside-sgm
 'Then he went right inside the cave'.

¹ See Appendix for key to abbreviations.

Table 3
Internal parts of the body

Lavukaleve term	Translation	Notes
Simplex		
<i>let</i>	'tongue'	n
<i>tatal</i>	'palate'	m
<i>falis</i>	'gum'	n
<i>sing</i>	'womb'	m
<i>fukio</i>	'kidney'	f
<i>simu</i>	'gallbladder'	f
<i>sovu</i>	'umbilical cord/navel'	f
<i>fifu</i>	'stomach'	m
<i>kanimol</i>	'brain'	m
<i>vu'vul</i>	'heart'	m
<i>leruw</i>	'flesh'	plural
<i>gan</i>	'meat (flesh of animal or fruit)'	n
<i>haa</i>	'liver'	n
<i>soma</i>	'lung'	n
<i>nalo</i>	'intestines'	n
<i>luat</i>	'vein'	n
<i>ravu</i>	'blood'	n
<i>sia</i>	'fat'	n
<i>so'sokio</i>	'bone'	f
<i>fai</i>	'chin/jaw'	m
<i>vasa</i>	'rib'	m
<i>honi</i>	'spine/nape'	n
<i>kala</i>	'collarbone'	n
<i>kolang</i>	'shin'	n
<i>late</i>	'sternum'	n
<i>neo</i>	'teeth'	plural
<i>kakamu</i>	'inside ankle bone'	f
<i>komolu</i>	'outside ankle bone'	f
<i>ngangau</i>	'cartilage'	m
<i>homolo</i>	'Adam's apple'	f
<i>kotavanga</i>	'throat'	f
Complex		
<i>vala osing</i>	'womb'	(lit. 'belly its-base')
<i>lovutom ogan</i>	'rectum'	(lit. 'buttocks its-meat')

4. Grammatical properties

4.1. Complex body part terms

Most Lavukaleve body part terms are simplex (monomorphemic) lexemes. The few that are complex consists of two nouns. The complex (multimorphemic) body part terms to be discussed below fall into three structural classes: possessive constructions; juxtaposed nouns and unanalysable compounds.

4.1.1. Possessive constructions

In Lavukaleve if two nouns appear in a single NP they cannot be of equal syntactic value, but rather one must be the modifier of the other; that is, compounding and

Table 4
Other parts of the body

Lavukaleve term	Translation	Notes
Simplex		
<i>filio</i>	'pig snout'	f
<i>tolo</i>	'tail/penis'	n
<i>kokolou</i>	'meaty part of crustacean'	m
<i>rioko</i>	'abdomen of coconut crab'	f
<i>fulu</i>	'fish tail'	n
<i>nu</i>	'body hair (of dog, cat, pig)/head hair (of a person)'	n
<i>maruiv</i>	'feather/wing'	n
<i>nget</i>	'fin'	n
<i>kunget</i>	'claw'	gender unknown
<i>keruv</i>	'egg'	n
<i>sosomala</i>	'spittle, foam'	f
<i>sugaev</i>	'saliva'	plural
<i>kamu</i>	'shit'	m
<i>mumut</i>	'vomit'	m
<i>nufa</i>	'mucus'	m
<i>fegir</i>	'sweat'	n
<i>kivir</i>	'pus'	n
<i>vui</i>	'breath'	plural
<i>gogomet</i>	'scab'	n
<i>seluka</i>	'sore'	f
<i>murū</i>	'ulcer, sore'	m
<i>rama</i>	'mouth sore/cancer'	m
<i>rolo</i>	'mind/heart, intrinsic part of a human being/seat of humanity in a person/soul'	f
<i>tutupi</i>	'fist'	f

unmarked coordination do not generally occur. This relationship of syntactic dependency must be overtly marked by morphosyntactic means. The possessive construction is used to achieve this (Terrill, 2003, p. 96). Body part terms in the corpus which make use of the possessive construction are as follows:

lovutom ogan 'arse hole' (buttocks its-meat),
vala osing 'lower belly' (belly its-base),
lemi ohal 'eyelash' (eye its-leaf),
sisi otom 'nostril' (nose its-hole),
fea oval 'sole' (foot its-belly).

In each case, the possessor is a general body part term, whereas the possessed is not a body part term but rather a noun describing a characteristic of the referent.

4.1.2. Juxtaposition

The single example of juxtaposition, *fea sing* 'heel' (literally 'foot base'), poses a rare exception to the generalisation stated above that for two nouns to occur in the same NP, they must occur in a marked head-modifier relationship, signalled overtly with a possessive construction. In this example, there are independent nouns forming a single constituent, both of equal syntactic status, neither possessed by the other. This is not a structure seen elsewhere in Lavukaleve, and must simply be taken as a lexical exception.

4.1.3. Unanalysable compounds

The third type of multimorphemic body part term consists of a word containing an unanalysable morpheme as the second element. In both cases of this type of body part term in the corpus the first element is a meaningful body part term, and the second element is the unanalysable part, a string that has no meaning outside this particular unit.

lemitaeo ‘eyebrow’ (cf. *lemi* ‘eye’; *taeo* has no meaning),
latelili ‘chest’ (cf. *late* ‘sternum’; *lili* has no meaning).

4.1.4. One more grammatical observation

Note that the word for ‘foot’ appears in two forms: *fe* and *fea*. There are other words which act like this in Lavukaleve; for instance the word ‘lower back’ *ge* has an alternate form *gea*. It is not uncommon for nouns in Lavukaleve to have alternative forms, based on additional material at the end of the word which comes and goes under certain morphosyntactic circumstances (Terrill, 2003, pp. 99–130). Usually, additional material in such words appears only when a suffix (i.e. case marking or a number suffix) occurs on the word. This is true for *gea* ‘lower back’, which has another meaning of ‘bottom’ or ‘base’, and thus frequently occurs as a locational adjunct, in which case it appears in its longer form *gea* with the locative suffix: *gean* ‘at the bottom’. However in the case of ‘foot’ the long form appears when the word is in construction with another noun: *fea oval* ‘foot its-sole’ and *fea sing* ‘foot base’. The reason for the alternation in these and similar words presumably lies in the past history of the language.

5. Semantic properties

5.1. Partonomic relations—or lack thereof

Many languages provide rich linguistic evidence for body part term partonomies, e.g. Evans (1996), Harvey (1996), Hosokawa (1996) and others in Chappell and McGregor (1996). Is there a hierarchical structure to Lavukaleve body part terms? In the physical sense, there is a hierarchical structure to Lavukaleve body parts: a *soka* ‘digit’ is part of a *tau* ‘limb’, in that if the super-part is removed, the sub-part will also of necessity be removed; if a super-part is moved, the sub-part moves, and so on. In broad physical (i.e. non-linguistic) terms, the referents of these terms stand in a partonomic relation to each other. But do the terms themselves, within the linguistic system, similarly stand in a partonomic relation to each other? This question proves problematic for Lavukaleve.

Any body part can be spoken of as being part of a person; one can talk of *ngasok* ‘my finger’ or *ovat* ‘his head’, for instance. But speaking of a body part as part of another body part is problematic.

There is clearly a concept of partonomy in Lavukaleve, lexicalised by the word *lafa* ‘part’, which can be used to refer to a part of a whole, e.g. in the following example clearly identifiable areas of a ball are referred to as the ‘bigger white part’ and the ‘smaller white part’:

- (4) *Bol le'laol lafa ro bake-ril kekekele o kekekele*
 ball(f) two.f part(f) one.sgf big.MORE white.one and white.one
lafa tula
 part(f) small.sgf
 'Two balls, one has a bigger white part, and one a small white part.'

Lafa can also be used to refer to a piece or small amount of an object, rather than a separately identifiable part of an object: in this sense, one can say *lafi lafa* 'a small amount of water' or *ko'mua lafa tula* 'a little bit of a story':

- (5) *O-na lafi lafa tula ro o-fou-re*
 3sgfO-in water(n) part(f) small-sgf one.sgf 3sgfO-put.on-NF
 'I put a small amount of water in it.'
- (6) *Foia ngai nga-laketei o-ko'mua lafa tula*
 PN.NTRL.sgf 1sg 1sgPOSS-life(n) 3sgPOSS-story(f) part(f) small.sgf
me-a heo.
 SPEC-sgf 3sgfEFOC
 'That is a little bit of the story of my life.'

Lafa can occur in a possessive construction

- (7) *A-na hano ke umalau o-lafa la hoa.*
 3sgmO-in then EMPH sweet.potato(m) 3sgPOSS-part(f) sgfArt pierce
 'Then he hooked a piece of sweet potato [lit: 'sweet potato its part'] on it'.

However as example (7) shows, when *lafa* is used to refer to a part of a whole, it generally occurs in a possessive construction; *lafa* is usually possessed by the noun which represents its partonomic whole. *Lafa* is also used to express the lack of any parts:

- (8) *Aka sia-re fafa-ril ta a-o-hoi lulu*
 then do-NF across just 3sgmO-3sgS-put.in straight
a-o-fou-ge ta lafa o-na o-fifi-re-a tamu
 3sgmO-3sgS-put.on-ANT but part(f) 3sgfO-in 3sgS-sit-NF-sgf no
 'So doing, he put it in crossways and having put it on straight, but there was no part to sit in' (In talking of trying to land a large fish in a canoe.)

If the word *lafa* 'part' is not used, a possessive construction is always used to signal a part-whole relationship. For example:

- (9) *Lakea la tail ga o-fongasara-n fi o-lei.*
 ladder(f) sgfArt house(n) sgnArt 3sgPOSS-wall-LOC 3sgnFOC 3sgS-exist
 'The ladder is on the wall of the house.'

So partonomic relations in general are frequently expressed in Lavukaleve, either using the noun *lafa* 'part' or using a possessive construction to express a part-whole

relationship. However any attempt to establish partonomic relations within the domain of terms for parts of the body immediately encounters problems. Speakers do not accept that any one body part term is in a *lafa* ‘part’ relationship with any other. It is possible that this could be due to a conflict caused by the inherent semantics of the word *lafa* ‘part’. However, neither do speakers accept possessive constructions in which one body part term is possessed by another body part term. To reiterate, this does not mean to suggest that Lavukaleve speakers do not recognise that the body has parts. It merely says that Lavukaleve speakers do not express partonomic relationships among body part terms, and thus the linguistic evidence which could be used to show that Lavukaleve speakers structure the semantic domain of body parts in a partonomic fashion is lacking.

Also for Lavukaleve speakers no system of hierarchical relationships between body part terms can be constructed. According to Andersen (1978, p. 335), the lexical domain of body part terms “tends to be organised into a hierarchical structure with five (or occasionally six) levels”. However, Lavukaleve speakers do not talk about the body as if it were composed of a small number of large parts, which can then be decomposed into a number of smaller parts, and then further into smaller parts again. Such an analysis fails to emerge from the data, and indeed it is one which Lavukaleve speakers resist. To take a specific claim relating to partonomy, Andersen says “Every language includes a term for HEAD in its lexical field of body parts, and the term is always immediately possessed by BODY” (Andersen, 1978, p. 352). In Lavukaleve however, *vatu* ‘head’ cannot be expressed as being possessed by *tina* ‘body’: this is a relationship which speakers explicitly reject. Neither can it be expressed as being part of the body, using *lafa* ‘part’.

In addition, if one were to try to construct a partonomy along the lines suggested by Brown (1976), dividing the body into five or six levels, one would simply not know how to proceed. Membership of the levels is determined as follows: “Parta immediately possessed by the Whole are found on the second hierarchical level (Level 1) of a partonomy; parta immediately possessed by the latter parts are found on the third level (Level 2), and so on” (Brown, 1976, p. 401). For Lavukaleve one could perhaps assume that the starting point, Brown’s Level 0, is *tina* ‘body’, but there is no principled way from the point of view of Lavukaleve to determine which terms should exist on Level 1, and which terms on lower levels. In Lavukaleve, speakers do not allow immediate possession of body parts: thus, there is no principled way in Lavukaleve to construct such a hierarchy. This is not to say that at some conceptual level Lavukaleve speakers do not make a hierarchically structured partonomy of parts of the body; but in terms of lexical semantics, there is no evidence on which to base a claim for a hierarchical partonomic structure of Lavukaleve body part terms.

5.2. Upper and lower body parts

Lavukaleve collapses upper body versus lower body categories in interesting ways. Most terms relating to upper limbs (arms) and lower limbs (legs) are identical, although there are some terms belonging only to the upper limb, and some only to the lower limb. There appears not to be parallelism; that is, the presence of a term for an upper part of the body does not imply the presence of a corresponding lower body part term. Terms unique to the upper limb include *feo* ‘palm’, *kua* ‘wrinkles on palm’, *ngengeso* ‘wrist’, *runai* ‘elbow’, and *fakas* ‘shoulder’. Terms unique to the lower limb include *ku’kunio* ‘knee’,

kot ‘back of knee’, *lausu* ‘thigh’, *fe* ‘foot’ (for most) or ‘sole’ (for some), *fea sing* ‘heel’, and *fea oval* ‘sole’.

Other terms to do with the limbs refer both to the upper and lower limbs. *Fe* ‘foot’ is a special case, discussed below. There are two areas to be discussed in the next sections: firstly digits, hands and feet; and secondly limbs.

5.2.1. Digits, hands and feet

In Lavukaleve, there is one general term for a digit (*soka*), and also a term for ‘big toe/thumb’ (*fetu*), and a term for ‘little finger/little toe’ (*gusio*). There are no separate terms for ‘finger’ or ‘toe’. There is also a term *falio* which refers to nails, both finger and toenails. There is no separate term to refer to the hand, although of course there are ways of speaking about hands (see below). For the corresponding lower-body parts, there is a term *fe* which for some speakers only refers to the sole of the foot, and for others refers to the whole foot. The Body Colouring Task (van Staden and Majid, this volume) was carried out to ascertain the extension of the term *fe*. Seven out of eight subjects when asked to colour in the area corresponding to *fe* coloured in the whole foot. One subject did not colour in anything, and when asked later, she said that for her, *fe* meant the sole of the foot, and could not refer to the upper part or the entirety of the foot. The variation might be due to idiolectal differences, or minor geographical variation: this particular subject comes from a different, although nearby, village from the other subjects.

For those speakers for whom *fe* means ‘foot’, a phrase *fea oval* ‘foot its-belly’ means sole. Note that Andersen’s (1978, p. 352) generalisation that “A label for FOOT implies a separate term for HAND” does not hold for those Lavukaleve speakers, who form the majority, for whom *fe* means ‘foot’. There is no equivalent term, in fact no term at all, that will unambiguously refer to the hand. Nevertheless, the next part of Andersen’s observation on the foot/hand distinction, “The categories HAND and FOOT, which are often but not always labelled . . . never share the same label, in contrast to other ‘symmetrical’ parts of the upper and lower body” (Andersen, 1978, p. 352), does indeed hold true for Lavukaleve.

5.2.2. Limbs

There is no distinct term for ‘arm’ or ‘leg’, rather there is a single word *tau* ‘limb’ which can refer to an arm, leg, hand, foot, or all of these. This is in contradiction to Andersen’s (1978, p. 352) generalisation that the arm, with or without the hand, is always given a distinct term. It also contradicts Brown’s (1976, p. 405) claim that “The parton/leg (and foot)/if labelled, is always labelled by an unanalysable primary lexeme. A labelled/leg (and foot)/is never named by the same lexeme labelling/arm (and hand)”.

Spontaneous data from all genres in the Lavukaleve corpus clearly shows that *tau* is equally suitable as a way of referring to the arm or leg, or indeed the hand or foot. Which-ever one of these is intended, the word *tau* is generally used, whether or not the specific part intended is clear from the context. For example, if one asks in the contact language, Solomon Island Pijin, how to say ‘I cut my hand’:

- (10) *Nga-tau* *a-koroi*.
 1sgPOSS-limb(n) 1sgS-chop.sgn
 ‘I cut my limb.’

And if one specifically elicits ‘leg’:

- (11) *O-tau* *bol* *o-kuru-re* *se.*
 3sgPOSS-limb(n) ball(f) 3sgfO-hit-NF be.full
 ‘His limb is swollen from kicking the ball.’

And ‘foot’:

- (12) *Buti* *ga* *tau* *ga* *e-na* *fi* *o-lei.*
 shoe(n) sgnArt limb(n) sgnArt 3sgnO-in 3sgnFOC 3sgS-exist
 ‘The shoe is on the limb.’

Naturally occurring data is in agreement. The examples below also show cases in which *tau* is used to refer to even a contextually-specific area of a limb. The following sentence occurred during a narrative about a flood, when victims were forced to swim for their lives. Clearly, the participants were holding hands, not legs or arms or feet, expressed by *tau*:

- (13) *Aka* *ma-fan* *e* *e-tau* *vo-foi-re*
 then 3plPOSS-some 1pl.ex 1pl.exPOSS-limb(pl) 3plO-hold-NF
fi *laen* *o-fou-re* *fi* *songi* *le-me.*
 3sgnFOC line(f) 3sgfO-put.on-NF 3sgnFOC swim 1pl.ex-HAB
 ‘Then some of us held our limbs and made a line and we were swimming.’

Note that the word *foi* ‘hold’ does not covertly encode the notion of ‘hand’, as it can also be used to refer to other forms of holding. For example *foi* is the verb used to express the action of a hunting dog catching a pig in its jaws.

Similar to the previous example, the following example tells of a fight between the participants in a canoe, during which the canoe was broken by a foot (expressed only as *tau* ‘limb’) stamping through the bottom of the canoe:

- (14) *ta* *hano* *o-tau* *ga* *foa.*
 just then 3sgPOSS-limb(n) sgnArt go.down
 ‘...then his limb went down [i.e. through the bottom of the canoe]’

The following example was given in response to a photo in a newspaper; the story was about some Bougainville Revolutionary Army soldiers who had been fighting in Gizo, a town in Western Province. One of them got shot, and in the photo appears with a bandaged leg:

- (15) *O-tau* *e-ma-ki-ge.*
 3sgPOSS-limb(n) 3sgnO-3plS-shoot-ANT
 ‘They shot his limb’.

In the following example, baby Melanie was trying to grab Marion’s foot. Marion said:

- (16) *Nga-tau* *o-ne-foi-n!*
 1sgPOSS-limb(n) 3sgfO-2sgS-hold-ADMON
 ‘Don’t grab my limb!’

And in the following, the speaker is calling out a warning that baby Melanie’s arm was stuck in her shirt sleeve when Marion was trying to dress Melanie:

- (17) *O-tau!*
 3sgPOSS-limb(n)
 ‘Her limb!’

In a story about three magical men, Big Eye, Long Limb and Big Belly, Long Limb is referred to as Tau Sosona (lit: ‘limb long’). A good way into the story the audience realises that it is his arm, not his leg that is unusually long, when Long Limb uses his magically long arm to pick up a dropped ring from the sea floor:

- (18) *Tau* *Sosona* *a-o-lai* “*Ngo-tau*
 limb(n) be.long 3sgmO-3sgS-tell 2sg-limb(n)
e-fou-va *e-foa.*”
 3sgnO-put.on-PCTIMP.sg 3sgnO-take.down
 ‘He told Long Limb “Put your limb down [into the sea].”’ (in order to grab the
 dropped ring)

The above examples have shown that ‘hand’, ‘arm’, ‘foot’, and ‘leg’ are all expressed by the single word *tau*. The data shows *tau* used felicitously to refer to only the part of the body of English *hand*, and also to refer only to the part of the body of English *foot*, as well as only an arm, or only a leg.

Given the clear evidence from spontaneous data, a surprising result emerged from the Body Colouring Task (van Staden and Majid, this volume), when speakers were asked to colour in the region referred to by *tau*. One would predict that in this task there would be variation between speakers colouring in legs or arms, or both, for the word *tau*. Indeed, from the natural data one could expect that just the hand or foot could be felicitously coloured in as a referent for *tau*. However, all eight subjects coloured in just the arm. It is hard to know what to make of this, as natural-language data gives no indication of ‘arm’ being a better reading of *tau* than ‘leg’. It is understandable that speakers may have been reluctant to colour in both parts of a non-contiguous body part, preferring to choose just one of the relevant areas, but it is difficult to understand, from the point of view of spontaneous data and natural language use, why some speakers did not colour the leg rather than the arm. It could be just chance: with a larger sample size it is probable that some speakers would colour in the leg.

So far the discussion has centred on the applicability of the bare term *tau* to either the arm/hand or the leg/foot. However *tau* does not always appear monomorphemically. Even though there is no monomorphemic lexical distinction between ‘arm/hand’ and ‘leg/foot’, there is a phrasal distinction available in the language, if necessary, between ‘leg/foot’ and ‘arm/hand’. If speakers do want to be more specific about what area of a *tau* they are referring to, the phrasal expressions: *tau furi me* (literally ‘lower/west limb’) and *tau vego me* (literally ‘upper/east limb’) can be used to distinguish arms from legs, as the following examples show. (In Lavukaleve, as in many languages of the Solomon Islands, ‘east’ and ‘up’ are equated, as are ‘west’ and ‘down’.)

In example (19) the speaker does specify that the leg, not the arm, is meant, using the phrase *tau furi mev*:

- (19) *Lo-tau* *furi* *me-v* *hova* *vo-lilihoiri-re*
 3duPOSS-limb(n) west/lower SPEC-pl MOD.PROX.pl 3plO-make.a.cross-NF
fi *aka* *vau* *e'rau* *saala* *la* *o-lolu.*
 3sgnFOC then go.seawards fall dive(f) sgfArt 3sgfO.3duS-dive
 ‘Crossing their legs [lit: lower limbs], they go seawards and dive down.’

Specifying that it was the legs that were crossed is necessary to the story. It is a mythic story which ends with the two main protagonists becoming whales and returning to the sea to join their whale mother. This sentence provides the only direct allusion to their transformation: as the boys dive into the sea with crossed legs, the audience realises that they have become whales: the crossed legs resemble the tail of a whale.

Not only is there no basic distinction between ‘leg’ and ‘arm’ in Lavukaleve, there is also no lexical division between ‘hand’ and ‘arm’; *tau* encompasses both. In the Body Colouring Task (van Staden and Majid, this volume) all subjects coloured the hand as well as the arm for *tau*. There was no clear cut-off point in the region of the wrist in any of the subjects’ colouring. Both ‘hand’ and ‘arm’ were together considered *tau* for this task.

The word *tau* is semantically general rather than ambiguous. That is, *tau* has a general meaning, which can be made more specific by further lexical elaboration (*tau vegome*, *tau furime*), rather than having two distinct meanings (Cruse, 1986, p. 51). According to a standard test for ambiguity, speakers were able to attribute an imagined scene of a severed arm and leg on a table with the description ‘I saw two *tau* on the table’. Speakers found this weird not because of the juxtaposition of the two terms, but rather because of the strange image. This suggests that the word *tau* is semantically general between the leg and the arm reading, rather than ambiguous.

5.3. *Animals, trees, canoes and the landscape*

In general, terms for animal parts of the body are the same as terms for human ones. For instance, dogs share with humans the fact that they have a *tina* ‘body’; *sisi* ‘nose’; *ho’vul* ‘ear’; *tu’tuk* ‘torso plus arms and head’; *tau* ‘limb’ and *vatu* ‘head’ for instance. In fact even fish have *vatur* ‘heads’. Crocodiles and lizards have *soka* ‘finger’; chickens have *sooso* ‘neck’. However where animals have particularly saliently different parts of the body, these are named. For instance, fish have special words for their tail (*fulu*) and there is a general word *nget* for ‘fin’. Pigs have a special word *filio* ‘snout’, rather than having noses; apart from this, they share human terms. Even their feet and legs use *tau* ‘limb’ as do those of humans. Birds have *kunget* ‘claw’, which can be used to refer to human nails, but as a slightly derogatory term, implying that the person has particularly long or crooked or dirty nails. Birds also have *maruiv* which can refer to either feathers or wings. Crabs and other crustaceans have *kokolou*, the part of the crab which contains the most meat, for which there is no obvious corresponding human term, and coconut crabs have *rioko*, the abdomen of the coconut crab.

Trees, like humans, have torsos: the term *tu’tuk* ‘torso plus arms and head’ applies to trees. The word *ge* ‘lower back’ applies also to trees, meaning the base of a tree trunk. The word also has a non-body part meaning, referring to the bottom or base of anything. Trees also have a notable part of the body which humans do not share: *sot* ‘crown’. The word

keut refers both to the bark of a coconut tree and human skin. Coconuts also have three *lemi* ‘eyes’; the place where the stalk hangs from. The word *vu’vul* refers ambiguously both to the human heart, and to the tiny young coconut which is just starting to grow. Note also that *vatu* ‘head’ is used for skulls as well as living heads.

Backs and fronts can be attributed to many different kinds of objects. For instance, pandanus leaves have a back (*guguru*). Houses have faces (*femi*) and mountains have tops of heads (*gata*). A peninsula is referred to by the term *tau* ‘limb’:

- (20) *Fean e-o-kelago-ri-ge, laketa koi tau*
 Fean 1pl.ex-3sgS-go.over-CAUS-ANT on.foot also limb(n)
e-soi-re kini Fean e-iru.
 3sgnO-follow-NF ACT Fean 1pl.ex-sleep
 ‘They sent us to Fean by foot, we followed the limb (i.e. peninsula) to Fean, and we slept.’

Also, rivers, lakes and reefs have mouths. A reef mouth is the passage through a reef which a canoe uses to get between land and sea. Note that such extensions are quite limited; there is no extensive or systematic mapping of body part terminology onto the landscape.

Canoes are to some extent mapped onto the human body. Human body part terms used to refer to canoe parts include the following:

- hou* ‘cheek’ cheeks of a canoe (the curved parts near the front and back,
 where the sides swell before they narrow)
vala ‘belly’ the inside part of a canoe

There are also many other terms unique to canoes; the metaphor is not all-inclusive. That is, canoes have their own terms for prow, stern, ribs and so on.

6. Conclusion

This paper has explored body part terms in Lavukaleve. The inventory of body part terms so far collected was presented, and it was shown that whereas almost all body part terms are monomorphemic, the few that are not fall into three structural classes: the majority, which are formed using possessive constructions; those that are formed by juxtaposition, and those that are formed with unanalysable elements in compounds. It was argued that Lavukaleve body part terms do not lend themselves to a hierarchical structure; nor do they occur in expressions involving partonomic relations. While all body part terms can be expressed as possessed by a person, none can be expressed as possessed by another body part. It was also shown that some terms for the upper and lower limbs are identical, with the exception of the word for ‘foot’, to which there is no corresponding word for ‘hand’. Finally, the limited use of body part terms to refer to non-human referents was discussed.

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Appendix

Abbreviations

ADMON	admonitive
ANT	anterior
Art	definite article
CAUS	causative
du	dual
EFOC	focus marker from <i>heo</i> paradigm
EMPH	emphatic
ex	exclusive
f	feminine
FOC	focus
HAB	habitual
in	inclusive
LOC	locative
LOCEMPH	locative emphatic
m	masculine
MOD	demonstrative modifier
MORE	more
n	neuter
NF	non-finite
NEG	negation
NTRL	distance-neutral demonstrative
O	object
PCTIMP	punctual imperative
pl	plural
PN	demonstrative pronoun
POSS	possessive
PROX	proximal
S	subject (both transitive and intransitive)
sg	singular
SPEC	specific modifier
SBD	subordinate

Orthographic note: a quote mark indicates stress on the following syllable. Unmarked stress occurs on the first syllable of a word.

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