Body, mind, and spirit
What makes up a person in Manambu*

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In many languages, terms denoting the human body and its parts constitute a closed subclass of nouns with special grammatical properties. Many if not all parts of the human body may acquire dimensions of meanings with ethnographic importance. I focus on a tri-partite division of visible and invisible parts of a human and their attributes in Manambu, a Ndu language spoken in the East Sepik province of Papua New Guinea. The trichotomy of ‘body’ (sap), ‘mind’ (mawul) and ‘spirit’ (kayik) in Manambu reflects a culturally embedded conceptualization of what a human is. Each of the three taxonomic units has specific grammatical properties. The physical and mental profile of a human being in Manambu (as in many other languages) cannot be appreciated without understanding the grammar. Conversely, a structural analysis of a language is incomplete unless it makes reference to the system of belief and concepts encoded in it.

Keywords: Manambu, Papuan languages, body parts, ethnosyntax, mental states, physical states, body, mind, spirit, the Sepik area

In many languages, terms denoting the human body and its parts constitute a closed subclass of nouns (Aikhenvald 2014: 88–9). They tend to have special grammatical properties which set them apart from nouns of other semantic groups. Many if not all parts of the human body may acquire dimensions of meanings with ethnographic importance: For instance, beliefs and practices of Lao speakers concerning the ‘lowly’ status of ‘foot’ restrict the use of this term (Enfield 2006). The semantic range of some terms — especially those associated with mental states, understanding, and reasoning — differs across languages. This challenges

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an implicit assumption that body part categories are the same in every culture, since all human bodies are more or less the same.\footnote{See, for instance, Brown (1976), McClure (1975), Wilkins (1996). The cross-linguistic and cross-cultural differences between divisions of the human body are reflected in the concept of ‘ethnoanatomy’ (see Swanson and Wikowski 1977). Tversky, Morrison & Zacks (2002) address some parameters for the categorization of the human body, and de Vignemont, Tsakiris & Haggard (2005) place the ‘body’ in the context of personhood; see the critique in Enfield et al. (2006). Wierzbicka (1989, 2006)’s work on related issues is of restricted interest due to limitations of her methodology (the ‘natural semantic metalanguage’) and of the database employed.}

Grammatical properties, and the taxonomy of visible and non-visible components of a human may correlate with the ways in which they are conceptualized, taking us into the realm of culture, beliefs, and traditions, and aspects of worldview as reflected in language (in the spirit of the principles of ethnosyntax as outlined by Enfield 2004).

The focus of this paper is a tripartite division of visible and invisible parts of a human and their attributes in Manambu, a Ndu language spoken in the East Sepik province of Papua New Guinea. Three general terms in Manambu reflect physical, mental, and spiritual facets of human beings and their taxonomy. Tangible and perceivable (external and internal) parts of the human body are covered by the term *sap* ‘body, skin’. This term also refers to physical states and emotional states which have a visible realization. This is discussed in §2. *Sap* consists of external and internal parts; their meanings are addressed in §3.

Every rational human being is presumed to have a *mawul* ‘mind’ — an invisible ‘inside’ and the locus of internal states, states of mind, and cognitive processes. This is the topic of §4. A grammatical property shared by *mawul* and the tangible human body, *sap*, and its parts is discussed in §5.

Every human is endowed with a *kayik*, an intangible spiritual essence inherited through one’s father. In §6, we examine its properties.

The trichotomy of ‘body’, ‘mind’, and ‘spirit’ reflects culturally embedded conceptualization of what humans and their bodies are. Each of the three taxonomic units has specific grammatical properties. The semantic and grammatical features of *sap, mawul*, and *kayik* are contrasted and summarized in §7.

We start with a brief overview of the Manambu language and some features of its cultural landscape.
1. The Manambu language: Linguistic and cultural background

Manambu\textsuperscript{2} is a member of the Ndu language family, and is spoken by c. 2500 people in five villages along the Sepik River in the East Sepik Province of Papua New Guinea. The language is known, to a varying extent, to people of all generations. All villagers are proficient in Tok Pisin (a creole lingua franca of the area) and many know Papua New Guinea English.

Manambu society is strictly patrilineal, with clan membership inherited through one’s father. Special value is placed on ethnohistoric knowledge and mastery of genealogies, and on the ownership of personal names acquired through one’s father. Like many other groups in the Sepik area, the Manambu traditionally had strong male cults (see Newton 1971, Harrison 1990a, b, 1993 and references there).

The language is highly synthetic, and predominantly suffixing (with just two prefixes). The subject is always cross-referenced on the verb. Another constituent (an object, an addressee, or a location) can be cross-referenced on the verb if it is topical. Manambu is of nominative-accusative profile, and has nine case forms on nouns: nominative, locative-accusative, allative-instrumental, dative-aversive, comitative, terminative, substitutive, and two transportative cases. The locative-accusative case (expressed with \(-Vm\)) marks a fully involved or definite direct object. The nominative case is formally unmarked. The unmarked form of a noun is also used for copula complements and in a number of further functions, as we will see in §5.

A major linguistic feature of Manambu is its gender system. Every noun can be assigned to the masculine or feminine gender. Gender in Manambu is marked covertly. This means that the gender choice is not obvious from the form of the noun itself (the only exceptions are personal names, some of which have a gender-marking formative). Gender is recognizable through the agreement of a noun with modifiers (including demonstratives, adjectives, the numeral ‘one’, relative clauses, and possession markers) and predicates.

\textsuperscript{2} This paper, just like all my work on Manambu, is based on narratives, conversations, and spontaneous interaction recorded over the last 19 years of immersion fieldwork (the corpus consists of about 300,000 words). I avoid elicitation; none of the examples quoted here are elicited. A full grammar of Manambu can be found in Aikhenvald (2008). The orthography and glossing follows the conventions in the full grammar of the language.

The Sepik River Basin is home to c. 200 languages (a dozen language families and numerous isolates). The Ndu family is the largest in terms of numbers of speakers; its other members include Iatmul, Yalaku (or Yelogu), Gala, Ambulas/Wosera dialect continuum, and Boiken: see Aikhenvald (2008, 2009). Harrison (1990a, 1993) contains a comprehensive account of the traditional Manambu culture and society (based on fieldwork conducted in the 1980s).
As in most languages of the Ndu family, gender assignment in Manambu is variable, and meaning-based. It involves sex for humans — males are masculine and females are feminine. When it comes to non-humans and inanimates, gender is chosen based on their shape and size. Animals and objects that are long, slim, or large are assigned to the masculine gender. A pair of trousers, a stick, a big dog, and a large house are ‘masculine’. Animals and objects that are small and round are ‘feminine’. A small round pan, a small dog, and a small house are ‘feminine’. Nouns referring to substances and time spans require feminine gender agreement, unless they refer to unusually large quantities and lengths of time. Masculine gender assignment to them has a similar semantic effect as an augmentative does in other languages.

Gender choice also depends on the relative importance of an object. A traditional story, a traditional performance, and a big important clan are ‘masculine’. A less important story, a casual performance, and a small and less important clan are ‘feminine’. This can be related to the traditional cultural importance of male cults and their attributes, following the principle of expanding the meaning of a gender based on ‘important property’ (see Dixon 1982 on ‘important property’ in gender choice in Dyirbal). Feminine gender is employed for what Zubin & Shimojo (1993:491) called ‘the unspecified referent function’: if the gender of a person or an object is not known, feminine gender will be chosen (see Aikhenvald 2012 for a comprehensive analysis of Manambu gender and markedness relationships).

Manambu has no grammatical distinction between alienably and inalienably possessed nouns (see Aikhenvald 2013a). The most frequent possessive construction available to nouns of all semantic groups has the order Possessor-Possessee, e.g. du-a ta:b (man-linker hand) ‘man’s hand’. A special whole-part construction with a reverse order consists of a term for a part of a body or a plant followed by the ‘whole’ (or the notional ‘possessor’). The ‘whole’ is always inanimate. Typical examples are səp-a-lap (skin-linker-banana) ‘banana skin’, tək-a-mi (seed-linker-tree) ‘seed of a tree, medicine’ and ńid-a-wi (middle-linker-house) ‘middle of the house’.3 Human body parts used in whole-part constructions refer to spatial attributes of objects, e.g. yala-wi (belly+linker-house) ‘the inside of the house’. These properties of body part terms are discussed in §3.2–3.

We now turn to linguistic features of material and the non-material aspects of a human being in Manambu.

3. The phonology, and the structure of the phonological word in Manambu are addressed in Aikhenvald (2008:50–54). Whether or not a possessive construction with a linker is expressed with one phonological word or with two depends on syllable count. In the Manambu orthography, b stands for [\textsuperscript{mb}], d stands for [\textsuperscript{nd}], g stands for [\textsuperscript{ng}], and j stands for [\textsuperscript{nj}].
2. The human being and the human body

The general term for ‘body’ in Manambu is sap, as discussed in §2.1. The noun du ‘man’ can also refer to the human body — see §2.2. The two terms are contrasted in §2.3.

2.1 Sap ‘body’

The general term for ‘body’, sap, in Manambu covers the human body as a whole, together with the skin, external appearance, looks, but also bark and peel (when applied to flora). It is used as cover term for external and internal tangible parts of the body. A human body chart put together by various speakers (as part of pedagogical materials on Manambu) was given the heading du-ta:kw sap (man-woman body) ‘people’s body’ (Laki & Aikhenvald 2013).

A constellation of meanings similar to those of sap is a feature of numerous neighbouring languages. In Kwoma, a neighbouring (but not demonstrably related) language of the Sepik area, maba means ‘human body, skin, outer surface’ (Bowden 1997: 109). The noun arim in Karawari, from the Lower Sepik family, covers ‘skin, human body, bark (for plants)’ (Telban 2010: 8; ms).

A similar set of meanings has been identified for languages from other regions of Papua New Guinea. For instance, the term sahac in Katê, a Papuan language from the Huon peninsula (Frierl & Strauss 1977: 315–18) refers to ‘the skin, bark, outer covering, the outside, looks, appearance, form, the body, human nature’. The term skin in Tok Pisin, the local Lingua Franca, also refers to ‘body, corpse, skin, hide; bark, husk, shell, rind’ (Mihalic 1971: 176). In all these languages, the term ‘skin/body’ can be considered either to be polysemous or as having a generic meaning (in the same vein as the generic meaning ‘limb’ is assigned to the Lavukaleve term tau which can cover ‘arm’ and ‘leg’; see Terrill 2006). 4

The term sap ‘body’ refers to the body of both humans and non-humans. Its typical gender assignment is feminine; sap can be assigned masculine gender if the body is unusually large (in agreement with the principles of gender assignment outlined in Aikhenvald 2012).

In (1), sap refers to a body as a whole. Here, a snake comes down from the roof onto one side of a man’s body (eventually squeezing him to death):

(1) ata warbuta-n tɔ-ku da-kɔ
then bend.over-SEQ be/have-SS he-OBL+FEM.SG

Having bent over, having descended onto his body (or 'skin') from the side (the snake squeezed him to the point of breaking)…'

A woman insists that the paternal uncle should carry her son on his body, and says (2).

(2) mən-mən-a səp-a:m tə-kwa-d
you.masc.sg-you.masc.sg-LK+fem.sg body-LK+LOC stay-IMPV.3p-masc.sg
'May he stay on your body!' The term səp refers to a female body in the expression səp və- (body see, physically experience) 'have sexual intercourse (with a woman)'. In the expression səp solkə- (body diminish) 'lose weight', it refers to the visible human body as a whole. Səp can refer to bodily feelings — one can say, about a sick person:

(3) səp kagəl yi-na
body/skin pain go/be-ACTION.FOCUS+3fem.sg.NONPAST
'(His) body is painful'

The same expression can be used to refer to a sick animal, for instance, a dog. Example (4) can be understood in two ways — that the whole body is hot, or the skin is hot to touch:

(4) səp bwiyabwi na-na
body/skin hot COPULA-ACTION.FOCUS+3fem.sg.NONPAST
'Skin, or body, is hot'

The term səp can refer to outward appearance or looks. In (5), two little girls have grown up and begun to look like proper women — they are said to have grown big enough to acquire women’s looks, or bodies (səp):

(5) ta:kw səp ata kama:pər
woman body then become/grow-3dual.NONPAST
'The two of them acquired women’s looks’ (literally, ‘acquired women’s bodies’)

A cassowary (a large non-flying bird) turned into a woman; she did this by taking off her cassowary skin (səp). Her future husband hides it but she discovers it later, puts it on (using the same verb as to put on clothes), and turns into a cassowary again. This is described in (6):

(6) la:kə səp yaka-su ata
she-OBL+FEM.SG skin reach-upwards then
She then took down her skin by reaching upwards, as (the skin) was hanging down in the house, having got it, she put it on, having put it on, alright, she turned into a cassowary.'

In another story, a man transforms himself into a snake, entering a snake’s body, referred to as sap (də-ka sapə:m wula-n (he-obl+fem.sg body/skin+lk+loc enter-seq) ‘in his skin having entered’). A snake can shed its skin, referred to as sap.

The term sap also refers to people’s skin colour: white people are referred to as ńiki-sap (red-skin) or wama-sap (white-skin), and dark-skinned people as gla-sap (black-skin). Old people are called rak-a-sap (dry-lk-skin) ‘dry skin, dry body’. A man of the same skin colour as a speaker was referred to as ńan-a-sap-a-du (we-lk-skin-lk-man) ‘man of the same skin as us’.

One way of enquiring about someone’s well-being is by asking if their sap ‘body’ is alright:

(7) də-ka sap yara?
he-obl+fem.sg body/skin alright?
‘Is he alright?’

The term sap can have connotations of physical body strength (somewhat overlapping with ap ‘bone’: see §3.3). In (8), a father comments on the fact that his two small children are too small to live on their own, and that they have no strength, saying:

(8) Wukə-bra bər sap ma: tə
listen-2dual.IMPV 2dual body NEG have:NEG
‘Listen you two, you two have no physical strength’

The root sap can have overtones of thinness in a derived adjective. The adjective sap-ə-ka-sap (body/skin-lk-intensifier-body/skin) means ‘very skinny, very thin’ (of a human or a non-human, such as a dog), or ‘very thin’ or ‘flat’ if used with an inanimate referent.

Physical and emotional states which may acquire a visible perceptible realization are expressed through sap ‘body’. These involve fatigue and being fed up, e.g. sap ji- in (9) and its synonym, sap sakwi-.
This expression is strikingly similar to Tok Pisin skin i les (body/skin PREDICATE. MARKER lazy, slack, tired) 'be fed up, tired'. Whether or not this is a calque from Tok Pisin is an open question. Every first-language learner of Manambu is proficient in Tok Pisin (see Aikhenvald 2008: 605–618 on the interaction of Manambu, Tok Pisin, and English in Manambu-speaking communities). In all likelihood, the Manambu expressions are of indigenous origin, because the verbs ji- and sakwi- are used just in these contexts.

Saying that my body is ‘heavy’ implies that I experience difficult thoughts or emotional troubles, or feel physically tired or unwell:

(10) (wun) səp væt yi-na
(I) body/skin heavy go-ACTION.FOCUS+3FEM.SG.NONPAST
‘(I) am having difficult thoughts or emotional difficulties, feeling physically tired or unwell’ (literally, ‘(I) body/skin goes heavy’)

The opposite — ‘body is light’ — indicates a healthy physical state, or a visible emotional state of being relieved, as if weight had been taken off the speaker:

(11) (wun) səp wiyaw
(I) body/skin light.and.dry
na-na
COPULA.NATURAL.STATE-ACTION.FOCUS+3FEM.SG.NONPAST
‘(I) am rested, or relieved, as if a burden had been taken off me’ (literally, ‘I body/skin is light and dry’)

An expression of fear may involve səp, as shown in (12).

(12) (wun) səp yaga-na
(I) body/skin be.afraid-ACTION.FOCUS+3FEM.SG.NONPAST
‘(I) am scared’ (literally, ‘I body/skin is scared’)

This indicates a serious fright or even terror, accompanied by a visible expression of fear — shivering, goose pimples, and the like. If a person is only slightly scared, they would just use the verb yaga- ‘be afraid’, as in yaga-na-wun (be.afraid-ACTION.FOCUS-1FEM.SG.NONPAST) ‘I am/have been afraid’.

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5. Manambu has a large set of copula verbs whose choice is partly determined by the copula complement. For instance, wiyaw ‘be light and dry’ takes the copula na-, which typically occurs with the expressions of natural phenomena, and væt ‘be heavy’ occurs with yi-, whose other meaning is ‘go’ (see Aikhenvald 2008: 81–6).
Sap can be used to refer to the body of a non-human animate. When used with inanimates, it refers to skin, peel, or bark. Then sap occurs in whole-part constructions, as in sap-a-lap (skin-linker-banana) 'banana skin', mi-a-sap (skin-linker-tree) 'tree bark'.

Manambu does not have productive noun incorporation. The only instance of noun incorporation involves sap: the form vya-sap- (kill/hit-body) means 'hit someone with force'. This is a special feature of sap not shared with any other noun in the language. Sap does not have any spatial extensions (unlike a number of body parts discussed in the next section). It can be used in ‘body part constructions’. This is addressed in §5.

2.2 Du ‘man, human being, human body’

The noun du (pronounced ["du]) refers to ‘man’ and to ‘human being’ in general. This generic use of ‘man’ for ‘humankind’ is congruent with a cross-linguistically well-attested tendency to employ the term for male human for generic reference.\(^6\) When it refers to a male human being or a human being in general, this noun always triggers masculine gender agreement.\(^7\) We find this usage, for instance, in the expression du kui (man meat) 'human flesh' — which reflects earlier cannibalistic practices.

A human body — rather than a man or a human being in general — as a whole can be referred to as du. It then requires feminine gender agreement. Example (13) comes from a story about an emaciated Gala man rescued by his Manambu clanman who fed him up, so that his body returned to normal:

\[
\begin{align*}
(13) & \text{da-ka} \quad \text{du} \quad \text{ata səbəna-l} \\
& \text{3masc.sg-OBL+fem.sg body/being then return-3fem.sg.PAST} \\
& \text{‘His body then returned (to normal)’}
\end{align*}
\]

\[(14) \text{is from essentially the same story told by a different speaker: the body (du) of the male speaker has got its physical strength back:} \]

\[\]

\(^6\) See Hellinger & Bussmann (2001); Alvanoudi (2014); and a cross-linguistic perspective in Aikhenvald (2012). Note that this is different from ‘unspecified referent’ where feminine gender agreement and feminine gender will be used. The noun ta:kw ‘woman’ is never used with generic reference to ‘person’.

\(^7\) The name Ndu was given to the whole family by earlier researchers (see the history of studies of the Ndu family in Aikhenvald 2008). While the cognate form has the same meaning in all languages, it is not phonologically uniform: compare Manambu, latmul, Ambulas-Wosera du, Gala lu, Yalaku tu, Boiken tuoi (my own fieldwork and references in Aikhenvald 2008). Gala has been erroneously called Ngala and Yalaku was called Yelogu; their exonym used by the neighbouring Kwoma is Kaunga.
The man speaking in (14) had regained a proper body of ‘normal’ size: it was not particularly big, and so feminine agreement was appropriate. In contrast, the term *du* with its meaning ‘human male’ can trigger feminine agreement only if one wishes to insult a man.

The noun *du* can thus be considered polysemous. Its two meanings, ‘human body’ and ‘male human’, are further differentiated by their agreement possibilities. Alternatively, the relationship between the two meanings of *du* can be considered as an instance of heterosemy (as defined by Lichtenberk 1991: 476); its two meanings which are historically related — in the sense of deriving from the same ultimate source — are borne out by lexemes which, synchronically speaking, have somewhat different properties. Using the term for ‘human’ in the meaning of ‘human body’ is by no means unique; for instance, Lewis (1974: 52) describes a similar use of the term for ‘human’ in Gna, a Torricelli language from Sandaun (West Sepik) province of Papua New Guinea. A single lexemes covers ‘body’ and ‘person’ in numerous Australian languages (Evans & Wilkins 2001).

How do the two terms *səp* ‘body, skin’ and *du* ‘man, human being, human body’ compare to each other?

### 2.3 *səp* and *du*: a comparison

The terms *du* ‘human body, human being, man’ and *səp* ‘body, skin’ appear to overlap somewhat in their meanings — compare examples (13)–(14) with those in (1)–(12). The following example (15) shows how the two can be used together, with a similar meaning. The ancestral crocodile spirit who takes the form of a human male covers his whole body with mud and water in sign of mourning for his child, a totemic canoe:

(15) də miyawa *du* *səp* ata kəp yu-ku
    he all.over man/human.body body/skin then mud get-ss
    ata gu kəp-awa ra:d də-ko-də
    then water mud-with sit+3masc.sg.NONPAST he-OBL-3masc.sg
    ŋan-a-k
    child-LK-DATIVE
    ‘He having got mud all over (his) body, sat (in mourning) (in) water with mud for his (male) child’
This sentence contains a rhetorical device of synonymous or quasi-synonymous repetition, employed by traditional story-tellers: the idea is to stress that the ancestral spirit’s human-like body was fully covered with mud and water.

The range of meanings of the two nouns is not identical: *du* means ‘human being’ and ‘man’, while *sap* does not have such meanings. *Sap* subsumes all visible aspects of humans and animates, and can also refer to inanimates and to corpses, while *du* is restricted to living humans. *Du* cannot be used in expressions of physical states or emotions, unlike *sap* (see examples (9)–(12)). In contrast to *sap*, *du* does not have the overtones of ‘strength’ or ‘thin, skinny’ body shape as *sap* does. *Du* cannot be incorporated, or used in body part constructions (§5).

These features are contrasted in Table 1.

<table>
<thead>
<tr>
<th>Properties</th>
<th>Range of meanings</th>
<th>Expression of physical states and emotions</th>
<th>Reference to a non-human</th>
<th>Shape overtones</th>
<th>Use in body part constructions</th>
<th>Gender choice</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>du</em></td>
<td>male human, body</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>feminine, masculine</td>
</tr>
<tr>
<td><em>sap</em></td>
<td>body</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>feminine</td>
</tr>
</tbody>
</table>

When talking about body parts, one uses *sap*, and not *du*, as a high-level term.

3. What a body consists of

3.1 Primary and secondary body part terms

Manambu has an extensive vocabulary of at least a hundred terms referring to parts of the body of humans and non-human animates (the full list is in Laki & Aikhenvald 2013). A small subset of ‘primary’ body parts can express spatial orientation (if used with nonhuman referents in whole-part constructions), as well as emotions, cognition, and physical states. Some of these can also be extended to cover kinship relations. They are discussed in this section.

Other body part terms do not have any spatial or kinship overtones, and do not occur in a whole-part construction. We will call them ‘secondary body part terms’. These include *wuk* ‘tooth’, *kwal* ‘neck, voice’, *maki* ‘nape of the neck’, *kwati* ‘knee, elbow’, *ta:b* ‘hand, arm’, *nab* ‘head hair’, *jupwi* ‘buttocks’, *awurtak* ‘heart’, *ñnawi* ‘kidney’, *kui* ‘flesh, meat, muscle’, *mij* ‘vein’, and many more.8

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8. The reasons for this division of body parts remain a matter for further study. Some secondary body parts may be used in idiomatic expressions. For instance, *wus* ‘penis, urine’ occurs in the
Names for human body parts are also used for parts of animal bodies, e.g. *maen* ‘leg’, *ab* ‘head’, *yuwi* ‘feather, fur, human body hair’. Specifically animal body parts are only used as such, e.g. *pap* ‘wing’, *rak* ‘(fish)scales’. Just one primarily animal part — *goñ* ‘tail’ — can be used with a non-body part meaning (‘last’).

All body part terms take part in the body part construction (§5). This is what justifies analysing them as one subclass of nouns. Gender assignment to body parts is based on their perceived shape. So, ‘head’, ‘belly’ and ‘mouth’ are feminine due to their round shape. They can be referred to with masculine gender if unusually big. ‘Bone’, ‘hand, arm’, and ‘leg, foot’ are masculine based on their extended shape and length. If they are unusually small and short they can be referred to as feminine (see Aikhenvald 2012 for details).

3.2 External primary body parts and their meanings

External primary body parts (such as *ab* ‘head’, *ta:m* ‘nose’, *mutam* ‘face’, *maen* ‘leg, foot’, *bəg* ‘back’, *ba:n* ‘spine’, *ma:l* ‘rib’, and *ma:d* ‘testicles’) can be used to describe spatial relations, as orientation terms. They then can be used in whole-part constructions of the structure PART/POSSESSOR-LINKER-WHOLE/POSSESSED, where the whole (or the ‘possessed’) is an inanimate noun (and the head of the construction: some arguments are given in Aikhenvald 2013a). Spatial relationships expressed through these body parts are listed in (16):

\[(16) \quad \text{muta:m} \ ‘\text{face}’ \ > \ ‘\text{front of}’, \ e.g. \ \text{mutama-wi} \ (\text{face}+\text{linker-house}) \ ‘\text{front of a house}’ \\
\text{bəg} \ ‘\text{back}’ \ > \ ‘\text{back of (internal part)}’, \ e.g. \ \text{baga-wi} \ (\text{internal back part of a house}) \\
\text{ba:n} \ ‘\text{spine}’ \ > \ ‘\text{back of (external part)}’, \ e.g. \ \text{bən-val} \ ‘\text{back (external part) of a canoe}’ \\
\text{ta:m} \ ‘\text{nose}’ \ > \ ‘\text{pointed front part}’, \ e.g. \ \text{tama-val} \ ‘\text{nose part of a canoe}’, \ \text{tama-kabak} \ ‘\text{pointed part of a stone}’\]

expression *wus kui*- (penis give-) ‘be blood father to someone’ (as opposed to an adoptive father). The noun *ta:b* ‘hand’ is used in the compounds *taba-ŋə* (hand+LINKER-sun) ‘wrist-watch, watch’ and *taba-yi* (hand+LINKER-fire) ‘hand-held torch’. The noun *jupwi* ‘buttocks, bum’ is occasionally used as an exclamation of disgust and almost a swearword, similar to English *shit*.

9. A very brief summary of some primary body part terms is in Aikhenvald (2008: 578–80); ‘eye’ and ‘ear’ are discussed at some length in Aikhenvald (2013b) in the context of the expression of perception and cognition. A comprehensive analysis of the division of the human body in Manambu is an interesting topic. Similar to many languages, there is one term for ‘knee’ and ‘elbow’. There are no distinct terms for ‘foot’ and ‘hand’ (in agreement with predictions in Enfield 2006: 149); finger and toe are labelled in a similar way (*jigər-maen* (finger-foot) ‘toe’, *jigər-ta:b* (finger-hand) ‘finger’) (similar instances are discussed in Priestley forthcoming). This discussion is a matter for further study and lies outside the immediate scope of this paper.
ma:l ‘rib’ > ‘side’, e.g. mala-wi ‘side of a house (internal, e.g. secluded area for a girl having her first menstruation, and external), mala-val ‘side of a canoe’, mala-teibel ‘side of a table’
maen ‘leg, foot’ > ‘foothills, location at the bottom of something’, e.g. maen-nobok ‘foot of a mountain’
ma:d ‘testicles’ > ‘underneath’, e.g. mada-wi ‘underneath a house’, mada-nig ‘underneath a mosquito net’
ab ‘head’ > (a) ‘the top part of an object’, e.g. aba-wa:n ‘top part of the ear’
> (b) ‘top-most object’, e.g. aba-wuk ‘upper tooth’
> (c) ‘the edge of an extended object or its end’, aba-war ‘last boundary’, aba-tap ‘end of the village’

Most of these uses of body parts as exponents of spatial orientation are well-attested cross-linguistically, in agreement with what Svorou (1993: 75–6) called ‘the anthropomorphic model’. The use of ‘face’ to refer to the front region or area is attested in numerous languages, and so is that of ‘back’ to refer to back region, and of ‘head’ to refer to top part or a topmost object (similar examples have been discussed by Ameke 1996: 811 for Ewe; de León 1992 for Tzotzil; Heine 2014; and Kraska-Szlenk 2014). That ‘nose’ is used to refer to an extended nose-like part of a canoe or any object is straightforward. So is the use of ‘leg, foot’ to refer to a ‘foothills’ area. The use of ‘rib’ for ‘side’, and somewhat different spatial uses for ‘back’ (to refer to an internal part) and ‘spine’ (to refer to an external part) appear to be unusual. So is the use of ‘head’ for an edge or the end of an extended object.10

That ma:d ‘testicles’ is used in the meaning ‘underneath’ is unusual. The opposite, ‘on top of’, is not expressed with a body part. An inherently locational noun api ‘top’ forms a whole-part construction with any noun, e.g. api-nig ‘top of mosquito net’. It can be also used in the meaning ‘on the surface’. Api-tap ‘surface of a village’ used in the expression api-tap-a:m kwa-na-di du-ta:kw (top-village-LK+LOC stay-ACTION.focus-3pl man-woman) ‘people who are alive’. Here, those who are on the surface of the village are contrasted to dead people buried underneath (that is, ‘inside’) the ground. The concept ‘inside’ is rendered through the internal body part term ya:l ‘belly, stomach’ (see §3.3).

‘Eye’, ‘ear’, and ‘head’ are the loci of perception and cognition. Mal ‘eye’ refers to the organ of vision. When used with the polysemous verb vo- ‘see/look, experi-

10. I observed a similar use of the word ‘head’ in Tariana, an Arawak language from Brazil, where -whida ‘head’ gave rise to a postposition -whidana ‘at the edge/end of’ (Aikhenvald 2003: 226). Body parts in Manambu are used for parts of traditional and modern canoes, but not for parts of machinery including automobiles (in contrast to Kewa: see Franklin 2003; and Western Apache: Basso 1967).
ence, try’, *məl* limits the reference of the verb to just ‘see, look’. Wa:*n* ‘ear’ can be the object of the polysemous verb *wukə*- ‘hear, listen, understand, obey’. The expression *wa:n wukə*- can mean any of ‘hear’, ‘listen’, ‘obey’, or ‘understand’ — that is, it does not help distinguish those meanings of the polysemous *wukə*- which relate to cognition, from those which refer to perception and obeying someone. (17) may refer to a child who is not obeying, or someone who shows no understanding, or someone who is hard of hearing:

(17)  
\[ \text{wa:n ma: wa:k ear NEG hear/listen/obey/understand:NEG} \]
\[ \text{‘(He) is not obeying or does not understand or does not listen or is hard of hearing’} \]

Deaf-born people in the Manambu communities were consistently referred to as *kwa:m tə-na-di* (crazy be/have-\text{ACTION.FOCUS-3PL}) ‘(those who are) crazy’: see §4. The noun *wa:n* ‘ear’ can be used with the auxiliary ‘be, have’ to mean ‘listen, understand, obey’:

(18)  
\[ \text{wa:n tə-na ear have-\text{ACTION.FOCUS+3FEM.SG.NONPAST}} \]
\[ \text{‘(She) is listening (thinking, obeying)’} \]
\[ \text{('literally, she has ear') } \]

The negative counterpart of (18) in (19) can either mean ‘she is not listening’, or ‘she does not obey’, or ‘she has no understanding’.

(19)  
\[ \text{wa:n ma: tə ear NEG have:NEG} \]
\[ \text{‘She is not listening’, ‘she does not obey’, ‘she has no understanding’} \]
\[ \text{('literally, she does not have ear') } \]

That is, *wa:n* ‘ear’ is the locus of auditory perception, obeying and understanding. A similar phenomenon has been described for Australian languages by Evans & Wilkins (2000), and for Korowai and other languages of Papua New Guinea and Africa (see De Vries 2013 and Aikhenvald & Storch 2013).

The noun ‘head’ may be used in the sense of a locus of logical thinking and planning. (20) was used to refer to someone who ‘does not think’ and is stupid:

(21)  
\[ \text{ab ma: tə} \]

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11. See Aikhenvald (2008: 426–45) on some special properties of *məl* ‘eye’ and *wa:n* ‘ear’ as objects of verbs of perception, and Aikhenvald (2013b) for further details on the expression of perception and cognition in Manambu.

12. Person, number, and gender distinctions are neutralized in negative clauses: see Aikhenvald (2008).
head NEG have:NEG
'(He) is stupid, can’t think' (literally, (he) does not have head)

The two primary external body parts — ‘eye’ and ‘ear’ — which express perception and cognition are not used in the whole-part construction. The noun ‘head’ can be part of whole-part construction in its spatial meaning (see (16)), but not in its meaning of ‘understanding, sense, thinking’.

3.3 Internal primary body parts and their meanings

Internal primary body parts include ya:l ‘belly, stomach, womb’, ñiki ‘blood’, ap ‘bone’ and yap ‘breath’. All of them have somewhat different overtones. Yap ‘breath’ can be used to refer to breathing and also to asthma and any heart condition. A collocation of yap (unmarked for case) with the verb rə- ‘sit’ means ‘have a breather, have a rest’. Yap sə- (breath plant) means ‘worry’. (Having ‘breath’ as an internal part of a human body has been attested in some languages, e.g. Majid 2006: 254 on Punjabi.)

Ya:l ‘belly, stomach, womb’ occurs in a whole-part construction with an inanimate whole. It then has a spatial meaning, ‘inside’:

(21) ya:l ‘belly’ > ‘inside of’ (yala-wi ‘inside a house’)

It can also be used to describe visible emotions, e.g. anger, as in (22):

(22) (wun) ya:l gra-na

I belly cry-ACTION.FOCUS+3FEM.SG.NONPAST

‘I am angry, upset’ (literally, ‘I belly cries’)

This expression is widely used, and is strikingly similar to Tok Pisin bel bilong mi i karai, literally, my belly is crying, meaning ‘I am angry, upset’. Tok Pisin employs bel ‘belly, stomach, innards’ to express a wide range of emotions (Mihalic 1971: 67, Franklin & Thomas 2006, McElhanon 1977, 1978). Manambu has no other expressions with ya:l ‘belly’ referring to emotions. It is possible that the use of ya:l in (22) has been influenced by Tok Pisin.

Ñiki ‘blood’ can be used to describe reckless behaviour, and ‘itching’ to do something unreasonable, as in kiya-k ñiki yasə-na (die+PURPOSIVE/DATIVE blood have.desire-ACTION.FOCUS+3FEM.SG) ‘(He behaves in such a way as if) his blood is itching (for him) to die’.

Terms ya:l ‘belly, stomach, womb’, ñiki ‘blood’ and ap ‘bone’ are conventionally used to describe kinship relationships. Ya:l ‘belly, stomach, womb’ refers to a person’s matrilineal links, as ‘belonging to one womb’, that is, sharing maternal relatives. Ya:l nak (belly one) ‘one belly’ is the term used to refer to one’s maternal
kin. Saying *ya:l rɔ-diyan* (belly sit-1pl) ‘we sit in a belly’ is a way of stressing ‘uterine’ connections across clans referring to each other as ‘sisters’ children.’ This type of link prohibits sexual relations between people, and imposes certain obligations (such as bride price payment: see details in Harrison 1990a and Aikhenvald 2008).

An alternative way of talking about matrilineal links involves *ñiki* ‘blood’. Blood is believed to derive from mother’s womb blood and to be transmitted through one’s mother (Harrison 1990a: 33; Aikhenvald 2012). When talking about obligations to one’s mother’s relatives, one says:

(23) amæy ñiki lagu-la-dian  
mother blood pull-3FEM.SG.SUBJ-1PLOBJ  
‘Mother’s blood is pulling us (together)’

It is traditionally believed that human bones are formed from father’s semen and transmitted through one’s father (or agnatically: Harrison 1990a: 33; Aikhenvald 2012). That is, *ap* ‘bone’ is connected to patrilineal inheritance. It is used to refer to relatives on the father’s side as a generic term for paternal relatives. Example (24) was a summary sentence at the end of a genealogy recital:

(24) wun-a-di ap adikanadika  
I-LK-pl bone DEM.DIST.REACT.TOPIC.PREDICATE  
‘Those are my paternal relatives’ (literally, my bones)

The term *ap-a-ma:m* (bone-LK-elder.sibling) means ‘elder sibling on one’s father side’. This contrasts with *ma:m*, which could refer to an elder sibling (brother or sister) on either side. The expression *ap kur-* ‘get bone’ can be used in the meaning of ‘establish a strong patrilineal connection’.

The noun *ap* carries the connotations of centrality and importance, another corollary of masculine gender. The first traditional name given to a child by paternal relatives soon after birth is *ap-a-sə* (bone/main-LK-name) ‘main name’. It is also the most important name to have. Thus, speakers trace the name of Avatip, considered the most important of the four Manambu villages, to *ap-a təp* (bone-LK village) ‘the strong, large, central village’ (literally, the bone-village). The head of the village, or chief of an institution is called *ap-a-du* (bone/main-LK-man) ‘chief, head of the place or institution’ (this term is used nowadays for an official of any sort, from the Prime Minister to a member of a local council). This is reminiscent of the overtones of importance the masculine gender choice for inanimates has in Manambu.

*Ap* ‘bone’ is also used in the meaning of ‘strength’ (the meaning shared with its cognate *apa* in Abelam-Wosera: Kundama et al. 2006: 159; and in Yalaku: own fieldnotes). A physically weak person is referred to *ap ma:tə* (bone NEG have:NEG) ‘has no bones’. The same noun, *ap*, can also be used to describe a thin emaciated
person, e.g. ap-a-dɔka (none-lk-only) ‘very thin (person, literally, only bones)’, or the adjective ap-a-ka-ap (bone-lk-intensifier-bone) ‘very thin’. These meanings of ‘strength’ and ‘thinness’ are shared with the Tok Pisin bun ‘bone’ (cf. Mihalic 1971: 78). We cannot rule out some degree of Tok Pisin influence here.

Over the past decade, the use of Tok Pisin in Manambu-speaking villages has expanded. As a consequence, more and more loans from Tok Pisin occur in the speech of members of all generations. Under the influence of Tok Pisin, the internal body part meaning wurəpi ‘liver, heart, lung’ has been acquiring the meaning of a locus of affection.

The Tok Pisin term lewa ‘liver, heart, innards, desire, sweetheart’ is a relatively new loan (see Mihalic 1971: 121, Franklin & Thomas 2006 for its meanings). This word was not used by Manambu speakers in the early 2000s but is in use now. I was affectionately addressed as lewa ‘darling’ by Walinum, one of the oldest living speakers of the language. Damel, a fluent speaker of Manambu in her 50s, speaks Tok Pisin to her children and grandchildren. When she came to say good-bye, she referred to me as wun-a lewa kajal (1-linker+fem.sg liver:tok.pisin husband’s sister) ‘my darling/favourite husband’s sister’. When I expressed surprise at this usage, she commented by saying (25):

(25) wun-a lewa kajal-añin
1sg-lk+fem.sg liver husband’s.sister-2fem.sg.nonpast
wurəpim kwa-na
liver+loc stay-action.focus+3fem.sg.nonpast
‘You are my favourite husband’s sister, beloved one’ (literally, staying in (my) liver)

Damel was not the only person to use the term wurəpi to refer to something one likes, mirroring the use of Tok Pisin lewa. The exact reference of the body part wurəpi has been a matter of some discussion: this term has been translated as ‘liver’, ‘heart’, and also ‘lung’ (as the organ of breathing). The expression ‘stay in liver’ is reminiscent of expressions with mawul ‘inside’, discussed in §4. We saw above that uses of terms ya:l ‘belly’ to refer to visible expressions of anger in (22) and ap ‘bone’ in the meaning of ‘strength’ and ‘thinness’ are reminiscent of the meaning overtones of corresponding terms in Tok Pisin. It is however impossible to decide whether they are calques of Tok Pisin expressions, or whether they emerged in Tok Pisin as a result of the erstwhile substratum of indigenous languages of Papua New Guinea (see Aikhenvald 2008: 605–18 on Manambu; McElhanon 1977 on other Papuan languages). The recent use of wurəpi ‘liver, heart’ as a location of emotion is clearly indicative of increasing Tok Pisin influence, especially strong among those first-language speakers of Manambu who mostly use Tok Pisin in their day-to-day lives.
4. **Mawul ‘mind, mindset, understanding, and the “inside”’**

The part of a human associated with internal emotions, mental states, and understanding is *mawul* ‘insides’, also translated by speakers as ‘understanding, mind, mindset (of a human)’.\(^{13}\) It can be used with inanimates, and then refers to ‘bone marrow, core, pith (of a tree)’. *Mawul* cannot be used in whole-part constructions. We will see in (36) that speakers who code-switch with English employ *mind* where a traditional speaker would use *mawul*.

The term is used to refer to ‘mindset, state of mind’, as in *suguya-mawul* (help-‘inside’) ‘mindset of helping people’ (said about a generous and helpful person), *suku-mawul* (carve-‘inside’) ‘mindset of a carver, patience’. A nice, agreeable person is the one with a good *mawul*; and a bad, nasty one has a bad *mawul*:

\[(26)\] a. \[kuprapə mawul-a taːkw-a vyakat mawul-a taːkw ma:\]\[bad mind-LK woman-3fem.sg good mind-LK woman NEG\]
\[‘She is a bad-minded woman, she is not a good-minded one’\]

If a person is nice and generous, this can be phrased as (26b):

\[(26)\] b. \[wunak vyakat mawul tə-na\]\[I+LK+DATIVE good mind have-ACTION.FOCUS+3fem.sg.NONPAST\]
\[‘She is nice to me’ (literally, ‘(she) has a good mind to me’)\]

A person acquires *mawul* as they acquire more knowledge and ‘sense’. (27) was said by a grown up man talking about himself as a small child when he did not have much sense or knowledge (feminine agreement on the adjective ‘small’ reflects the small size of a child: see Aikhenvald 2012):

\[(27)\]\[tayir wun kwasa ñan tə-ku wun mawul ma: wak\]\[earlier I small+fem.sg child be-SS I mind NEG listen:NEG\]
\[‘Earlier when I was a small child, my mind (*mawul*) was not listening’ (that is, I had no understanding)\]

If a person (e.g. a child) is accused of being stupid or disobedient, their *mawul* is not listening (*ma: wak*). Having a *mawul* is a prerogative of a normal grown-up human being (it is thus comparable to the notion of *het* ‘reason, “head”’ in Taiap: Kulick 1992). Non-human animates and abnormal humans (including the deaf and dumb) are referred to as *kwam* ‘mad, crazy’, and are said to have no *mawul*.

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\(^{13}\) All these translations are approximate. I use ‘mind’ in glosses because this English word was frequently offered as a translation of *mawul* by native speakers of Manambu who are proficient in English.
If something is taken in and remembered, it 'stays' in the mawul (mawulam kwa-). If someone likes something, they 'put' their mawul to it (mawul taka-). Remembering something is expressed as mawular wula- 'enter into (one’s) mawul'. Secrets, including secret knowledge, 'sit' (ra-) in the mawul. If people agree, they are said to have one mawul (mawul nak ts- one inside have). ‘Opening up’ someone’s mawul (mawul kaja-) refers to educating children and ‘opening them up’ for socialization, making them proper members of the society. If a person is injured or upset, their mawul ‘rots’ (puka-, or pukam na-). Having a ‘clear’ mawul implies having a clear understanding or idea of something (tugwam na-). The expression mawul draku-na ‘mind unglues’ describes the feeling of presentiment (‘prior-perception’, as briefly outlined by Evans & Wilkins 2000). If I am thinking of someone and feel close to them, my mawul stays with them. If I get excited and motivated to do something, I may say ‘(I) mawul goes up’, as in (28):

(28) (wun) mawul war-na
     (1) mind go.up-ACTION.FOCUS+3FEM.SG.NONPAST
     ‘I am excited, motivated’ (literally, ‘I mawul goes up’)

(28) is an example of a body-part construction — see §5. If one decides to do something, they ‘take’ their mawul for it:

(29) mawul kurə-d ñig suku-k
     mind take-3MASC.SG.PAST letter write-PURPOSIVE/DATIVE
     ‘He decided to write a letter’ (literally, he took mawul to write a letter)

Mawul can refer to inner states, such as happiness and contentment, e.g. (30):

(30) mawul rakrak tə-na
     mind happy have/be-ACTION.FOCUS+3FEM.SG.NONPAST
     ‘She is happy’ (literally, she has a happy mawul)

A ‘hot’ mawul, in (31), refers to a high degree of excitement and a potential desire to fight:

(31) mawul kuku na-na
     mind hot COPULA-ACTION.FOCUS+3FEM.SG.NONPAST
     ‘The mind (mawul) is hot’ (the person is excited and ready to fight)

Something one likes is referred to as mawul-a-ja:p (mind-LK thing) ‘thing of mawul’. Talking to oneself in one’s mind can be phrased as saying something in one’s mawul, as in (32):

(32) a-di kabwi adika butay
     DEM.DIST-PL flying.fox DEM.DIST.REACT.TOPIC.PL already
     ata yi-na-di də mawulam
then go-ACTION.FOCUS-3pl.NONPAST he mind+LOC
ata wa:d
then say+3masc.sg.PAST
‘“Those flying foxes have already gone away?”, he said to himself (literally, in mawul)’

Mawul is typically feminine, unless the feeling it expresses is very strong; then masculine agreement can be used.

Having a lot of mawul implies that a person is obstinate and aggressive:

(33) lə mawul samasa:m tə-na
she mind much have/be-ACTION.FOCUS+3fem.sg.NONPAST
‘She is obstinate and difficult’ (literally, she has a lot of mawul)

Mawul can also describe worrying and thinking:

(34) (wun) mawul wuka-na-wun
(I) mind hear/listen-ACTION.FOCUS-1fem.sg.NONPAST
‘I am thinking, worrying’ (literally, I mawul is hearing/listening’)

Here mawul appears to somewhat overlap with wa:n ‘ear’ in its meaning of a locus of understanding and obeying — see examples (17)–(19). There are, however, a number of differences between the meanings of the two nouns. Unlike mawul, wa:n implies being obedient, compliant, and understanding. A person who does not have wa:n (as in (19)) may be misbehaving, or stupid. A person accused of not having a mawul will be mad, and animal-like. Mawul enters in many more expressions, and is the locus of desires, emotions, and thinking.

There is no exact correspondent to mawul in Tok Pisin. We saw in (25) that some speakers use wurpi ‘liver, heart, lung’ where traditionally one would use mawul to express affection (and other emotions). Papua New Guinea English is now used more and more in Manambu-speaking villages (it is the major language taught at school). The noun mawul can be used accompanied by an English modifier, as in (35), a comment on a nasty woman (see (26a)). This is a nonce use of upset (the closest Manambu equivalent would have been mawul puka-na ‘mind (mawul) rots’).

(35) upset mawul tə-kwa-na
upset:ENGLISH mind have-HABITUAL-ACTION.FOCUS+3fem.sg.NONPAST
‘She usually has an upset mind (mawul)’

Some speakers code-switch with English more than others. Those who do may employ mind in lieu of mawul. In (36), the speaker was quoting her own inner speech using the English mind (it is not marked for case, because only established
and assimilated loan words are). Compare this with (32), from a more traditional and older speaker.

(36) \textit{wun-a mind ata wa-lwun}
\[\text{I-LK+fem.sg mind:ENGLISH thus say-1fem.sg.PAST}\]
\textit{I said in my mind’ (to myself)}

An indecisive person was addressed as (37). This was identified by older speakers with knowledge of English as a calque of the English expression ‘being in two minds’:

(37) \textit{ñin mawul viti ta:l}
\[\text{you:fem.sg mind two have/be+3fem.sg.PAST}\]
\textit{‘You, mind (mawul) has become two’}

\textit{Mawul} is the major locus of emotional and mental states for every reasonable human being. This is something people in their right mind have and animals do not. \textit{Mawul} does not reflect any cultural stereotypes, nor does it relate to patrilineal or matrilineal inheritance. \textit{Mawul} is an aspect of an individual personality and ‘self’. It disappears when a person dies.

Many languages of Papua New Guinea employ a term referring to human ‘insides’ in describing mental states and emotions — see, for instance, De Vries (2013) on Korowai; Priestley (2002) on Koromu; Lindström (2002) on Kuot; and McElhanon (1977) on Selepet (along similar lines, \textit{potmo} ‘innards’ refers to ‘soul’ in Mordva, a Finno-Ugric language: van Pareren 2013:95). Tok Pisin utilizes \textit{lewa} ‘liver’ and \textit{bel} ‘stomach’ as seats of emotions and mental processes (see Mihalic 1971, McElhanon 1978, Franklin & Thomas 2006). In contrast to these languages, \textit{mawul} is not considered as part of \textit{sap}, and was never included in body part charts. It is somewhat similar to the notion of \textit{gha} ‘core, inside’ in Yéli Dnye, the only Papuan language of Rossel Island (Levinson 2006:238). In terms of its semantic range, \textit{mawul} is comparable to what we find in its cognate \textit{mawulé} ‘mind, thought, thinking, willingness, wish, liking’ in Abelam-Wosera (Kundama et al. 2006:50).

The closest semantic analogy comes from Karawari, from the Lower Sepik family (unrelated to Manambu; see Telban 1998:59, 1993, ms). The concept of \textit{wambung} (roughly translated as ‘heart’) covers the notions of understanding, imagination, memory, caring, and ‘mind’ in general. Just like \textit{mawul}, if applied to

\footnote{Cf. the use of ‘heart’ in the expression of mental processes in South American languages, e.g. Witoto (Petersen de Piñeros 1998:38) and Tariana (Aikhenvald 2003). Other internal body organs can be used in a similar way. According to Laycock (1986), the heart is ‘the seat of emotions’ in Momoona (Central and South New Guinea) and Foe (Kutubuan), and the ‘lungs’ in Buin (Bougainville). Yéli Dnye utilizes the term for ‘neck’ (Levinson 2006).}
inanimates, it refers to the soft pith, and the middle of a plant. A good person has a good *wambung*. A stupid or nasty one has no *wambung*. Telban (1998: 59) explicitly equates *wambung* with Manambu *mawul* (based on Harrison 1990a). This rather striking similarity between the two, unrelated Sepik groups, the Manambu and the Karawari, may be indicative of Sepik-wide diffusional features which require further investigation.15

5. ‘Body part construction’: grammatical relations in clauses involving body parts

Grammatical relations in clauses involving *səp* ‘body’, its parts, and *mawul* ‘mind, “inside”’ are far from straightforward. This is typical for the Papuan languages of New Guinea.16 In (3), (4), (9)–(12), (22), (28), and (31) the predicate of the clause agrees with the body part or *mawul* ‘mind’. In (34) and (38), it agrees with the person whose body part is being talked about — ‘I’. In all the instances the free personal pronoun is optional. Innovative speakers who tend to code-switch between Tok Pisin and English and mostly use Tok Pisin in their daily lives use the free personal pronoun more often than traditional speakers.

(38) (wun) samasam: yə:l gra-lwun
    I    much    belly cry-1FEM.SG.PAST
‘I was very angry’ (literally, I belly I-cried a lot)

The difference between (22) and (38) is subtle. (22) is a conventional way of saying ‘I am angry’. Then, *yə:l* ‘belly’ (and not ‘I’) is the subject cross-referenced on the

15. There is no direct evidence that Manambu and Karawari have ever been in contact. However, one of the three exogamous clan groups in Manambu traces its origins to the area where Karawari is currently spoken. Karawari bears traces of contact with Iatmul, a Ndu language closely related to Manambu. A number of lexemes shared by Karawari, Manambu, and Iatmul belong to the sphere of myth and ritual, e.g. Karawari *saki* ‘spirit of the bush or creek’, Iatmul *saki* ‘funeral service, dirge’, Manambu *saki* ‘name debate; myth, mythological object’ (cf. Yalaku *saki* ‘myth’); Karawari *wundumbunar* ‘spirit of a dead person’, Iatmul *wundumbu* ‘ghost’, Manambu *wudob* ’ghost, dead person’. The cognate of Manambu word *mawul* is Iatmul *maawut* (Staalens & Staalens 1973) which requires a further in-depth analysis. The term *maur* in Yalaku, also a cognate of *mawul*, is narrower in its meaning and refers to ‘state of mind, person’s mood’. Yalaku has another term, *wuñaka* ‘understanding, mindset, attitude’, which is in all likelihood a loan from Kwoma, an unrelated language. The Kwoma form is *iñaka* ‘the body’s vital organs, seat of thought and emotions’ (Bowden 1997: 75–6). *Wuñaka* is said to be a property just of humans (Aikhenvald forthcoming).

16. See, for instance, Pawley, Gi, Majnep & Kias (2000), Roberts (2001) and Priestley (2002); a discussion of these in Manambu is in Aikhenvald (2008: 521–2, 531–3).
verb. If I wish to focus on myself, and make sure that my audience understands how strong my anger is, I am likely to use (38). Then, ‘I’ and not my body part, is the subject.

The choice of a cross-referencing pattern has consequences for the marking of clause-linking. Similarly to many Papuan languages, Manambu has an intricate system of switch-reference in clause chains. Every non-final clause has to be marked as to whether its subject is the same as that of the main final clause or different from it. Switch reference is a strong criterion for subjecthood in many languages of Papua New Guinea.17

In a multyclausal sentence, a body part may trigger the same subject marking or different subject marking if the ‘possessor’ of the body part is the same as, or different from, the subject of a main clause. Following a cross-linguistically well-attested tendency, same subject marking does not occur together with subject person marking (as shown in (40) below; see Roberts 1997). In contrast, the person of the subject is marked when subjects are different, as can be seen in (39).

In (39) ya:l ‘belly’ is cross-referenced on the predicate of the non-final clause which is marked as having a different subject than the main clause. The ‘possessor’ of the ‘belly’ is the same person in both clauses:

(39) ya:l gra-lə-k ə ata wa:-lwun
belly cry-3fem.sg-DIFFERENT.SUBJECT then say-1fem.sg.PAST
‘I having become angry (literally, after belly cried), I said…’

The use of ‘different subject’ marker indicates that ‘I’ am not the subject of ‘cry’. If ‘I’ (the ‘possessor’) is the topic of the story, or stretch of discourse, the two clauses are marked for ‘same subject’:

(40) ya:l gra-ku ata wa:-lwun
belly cry-SAME.SUBJECT then say-1fem.sg.PAST
‘I having become angry (literally, after belly cried), I said…’

Then, we can safely say that ‘I’ is the subject of the first clause.

A body part in a construction like the one in (38) has a special grammatical role. It is neither a subject, nor an object, nor an oblique. The body part ya:l in (38) is not the subject, since it is not cross-referenced on the verb gra- (which is strictly intransitive). It cannot be considered a direct object, because it cannot take the accusative case under any circumstances. Nor can it be questioned as an object could, with an interrogative ‘what?’. Unlike topical non-subjects, ya:l cannot be cross-referenced on the verb. (These properties are reminiscent of copula

complements which are just used with copula verbs.) The sequence ya:l gra- cannot be treated as a compound. It tends to be contiguous; but can be interrupted by ata ‘then’ and by presentational demonstratives.

The function of the human ‘possessor’ of a body part in examples like (22) is also problematic. A personal pronoun is optional both in (22) and in (38). In (41), the human ‘possessor’ is expressed with a full noun:

(41) lə-kə-da du ya:l ata gra:l
 3FEM.SG-OBL-masc.SG man belly then cry+3FEM.SG.PAST
‘Her man then got angry’ (literally, her man belly then cried)

There can be a brief intonation break between ‘her man’ and ‘belly’. The linker ata or a presentational demonstrative can intervene between these two. Clauses like (41) can be considered instances of topicalization of the ‘possessor’.18

Being able to occur in body part constructions is a syntactic feature that sets sap ‘body’ — and all terms for body parts, including mawul — apart from other nouns in the language. Du ‘human being, human body’ cannot be used this way: same subject marking is used if the subjects are the same, as in (42).

(42) də-ka du ata səbən-ku ap ata kuro-l
  he-OBL+fem.sg body then return-SS strength then get-3FEM.SG.PAST
‘As his body returned (to normal), it (the body) got strength’

Different subject marking implies that the two clauses have different subjects, as in (43).

(43) də-ka du ata səbən-la-k yara ata
  he-OBL+fem.sg body then return-3FEM.SG-DS well then
  ta:d have/be+3masc.SG.PAST
‘As his body returned (to normal), he (the man) became okay’

We now turn to a further facet of a human being — their ‘spirit’.

6. Kayik ‘spirit’

Every human being has a kayik roughly translatable as ‘spirit’. The term kayik has a number of additional meanings — it refers to image, picture, reflection (in water), shadow (but not shade which is termed la:gw), and nowadays also photographs,

18. They are superficially similar to the so-called ‘double subject’ constructions in Mandarin Chinese: see Luo (2013) for an up-to-date analysis and references.
pictures and films. Painted designs and carvings are referred to as *kayik* or *məy-a-kayik* (real-linker-spirit/image). The pattern of polysemy of *kayik* is remarkably similar to that of *mayi* in Kwoma, defined by Bowden (1997:124) as including: ‘soul (of a person), entity seen in a dream, spiritual or supernatural power that vivifies a ceremonial sculpture depicting a clan spirit’, and also ‘shadow’, ‘reflection (in a stream or mirror)’, and ‘picture’ or ‘portrait’. Whether or not this polysemy is indicative of a long-term contact remains an open question. Kwoma belongs to the Kwoma-Nukuma language; intensive contact between the Kwoma and the Manambu has a long history (Aikhenvald 2009).19

When a person dies, the *kayik* leaves the body. An alternative name for a *kayik* of a dead person is *wudəb*, and the term for their residence is *wudəb*-*a*-*təp* ‘dead peoples’ village.’20 A *kayik* may threaten living people as a ghost does, and may appear as the person’s ‘double’. Children and adults are often scared of *kayik* as ‘ghost’. A wife said to her husband:

(44) kayik yaga-ðəmən a kayik və-kəna-ðəmən
ghost be.afraid-2masc.sg then/thus ghost see-IRREALIS-2masc.sg
‘You are scared of a ghost, that (is, that) you might see a ghost’

A traditional blessing used to be accompanied by asking the blesser’s spirit to ensure the addressee is cured if they are sick, saying:

(45) wun-a-da kayik bar kusa-kwa
I-LK-masc.sg spirit/image illness end-IMPV.3p+fem.sg
yara kwa-kwa-d
well stay-IMPV.3p-masc.sg
‘My spirit, may the illness end, may he (the patient) be well’

When giving my consultants money or presents for telling stories or helping me transcribe them, I was instructed to say *nən-a kaykak* (2fem.sg-LK spirit+for) to women, and *mən-a kaykak* (2masc.sg-LK spirit+for) to men, literally ‘for yourself, for your soul, for your personal enjoyment’. This was one way of making sure that

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20. *Wudəb* are described as being ‘white people’. In all the stories I recorded, their villages are described as rich ‘white peoples’ villages’. Lindsey Kamimbau told me about the location of one of these villages in the present-day Avatip, describing in detail how the *wudəb* gorge themselves on white peoples’ tinned food; but no tins are ever to be found. According to her, the *wudəb* have slaves: those men and women for whom no funeral payment was given work for the *wudəb* (*wudəb*-a-*təp*:*a*-*di* *kakatop kui-mar-*na-di* du ta:kw *yawi kur-kwa-na-di* ‘ghost-LK village+LK+LOC DEM.DIST-pl funeral.payment give-NEG.SUBORDINATE-ACTION.FOCUS-pl man woman work do-HABITUAL-ACTION.FOCUS-3pl NONPAST).
this was understood as a gesture of particular friendship, and not really as a payment. A reply would be either *agwa kayakak* (what spirit+for) ‘for what self/soul?’, or *wun kayik ma: to* (I spirit not have+not) ‘I do not have a *kayik*’ — as if mockingly refusing a present, and pretending not to be themselves. Since every human being has a *kayik*, one only says ‘I have no *kayik*’ in a joking situation, to avoid embarrassment. (The present was then accepted with obvious gratitude.)

A disembodied *kayik* has no kinship ties and is, in a sense, ‘above morality’ (Harrison 1993:109). *Kayik* is conceptualized as the life-force, or ‘the animating energy’ of a living person (Harrison 1990a: 89, 1990b; 1993: 106), and sometimes as their ‘self’ (invoking which may be embarrassing). Harrison (1990b:354) equates it with ‘soul’. The *kayik* of a living person becomes more potent as the person ages and becomes more experienced.

The *kayik* of initiated men used to be especially powerful for blessings and curses, when initiation was still performed (until the 1960s). The *kayik* is believed to be the source of an admirable quality of *ka:w* in a man. *Ka:w*, literally ‘sharpness’ (as of a knife), refers to physical courage and a self-assertive style of behaviour.

*Kayik* behaves as a common noun. It cannot be used in whole-part constructions or in the body part constructions described in §5. When used in complex clauses, it requires same subject marking when the subjects of two clauses are the same, as in (46):

(46) \[ \text{du ka:yik ras-ku} \quad \text{wa:d} \]
\[ \text{man’s spirit get.up-SAME.SUBJECT say+3masc.sg.PAST} \]
\[ \text{‘The man’s spirit having appeared, it (the spirit) said’} \]

Different subject marking implies that the two clauses have different subjects, as in (47):

(47) \[ \text{ka:yik ras-da-k} \quad \text{wa:d} \]
\[ \text{spirit get.up-3masc.sg-DS say+3masc.sg.PAST} \]
\[ \text{‘The spirit having appeared, he (someone else) said’} \]

A *kayik* is the person’s own. A disembodied *kayik* — which lives on after a person dies — is potentially dangerous to people. It can be just a nuisance — in Harrison’s (1990b:354) words, playing ‘irresponsible and sometimes frightening pranks’, or it can inflict lasting damage (as I was told). *Kayik* is typically masculine (even when it belongs to a woman): I was told that this is due to its ‘importance’.

I hypothesize that the differences in grammatical behaviour of terms for *sap* ‘body’, its parts and *mawul* ‘mind, inside’ on the one hand, and for *kayik* ‘spirit’ iconically reflect the spirit’s independence of the human ‘possessor’. In other words, a spirit lives after a body and its ‘inside’ (*mawul*, or ‘mind’) die.
7. Three facets of a person: Body, mind, and spirit

We now compare the three components of a human being in Manambu: the physical body *sap* and its parts, the internal part *mawul* ‘mind, understanding, insides,’ and *kayik* ‘spirit, soul’.

Primary external parts of *sap* ‘body’ express spatial relations. So does one internal body part, *yal* ‘belly’. Three primary internal body parts — ‘belly’, ‘blood’ and ‘bone’ — reflect kinship links and principles of inheritance: ‘belly’ and ‘blood’ are inherited through one’s matrilineal line. ‘Bone’ is linked to patrilineal inheritance, and is associated with centrality and importance in general. The noun *ap* ‘bone’ can denote physical, or bodily, strength.

Every human being and every animal has *sap* ‘body’. Most human beings — other than crazy and deficient people — have *mawul*. Both *sap* and *mawul* die when the person passes away. The two nouns differ in their meanings. *Sap* can express externally visible emotions and physical states. *Mawul* is the locus of reasoning, understanding, emotions, and mental states, which are mostly internal. *Mawul* is not a part of the human body in its tangible form. *Sap*, its parts and *mawul* stand apart from other nouns in the language in that they can take part in the body-part construction described in §5.

Every human has a *kayik* ‘spirit’. The *kayik* is responsible for spiritual strength and strength of character; *ka:w* literally means ‘sharpness’. *Kayik* together with *mawul* constitute the ‘inner self’ of a human. *Kayik* does not die when a human dies. A disembodied *kayik* — that is, one deprived of a *mawul* and a *sap* — is dangerous.

The three categories are contrasted in terms of their meanings, cultural grounding and inheritance, special grammatical properties, and mortality, in Table 2.

The division of a Manambu human into physical and perceptible ‘body’, internal ‘mind’ and immortal ‘spirit’, each with their own features, is reflected in their idiomatic usage, and in their grammar.

Table 2. ‘Mind,’ ‘body’ and ‘spirit’ in Manambu language and culture

<table>
<thead>
<tr>
<th>Terms and meanings</th>
<th>Additional meanings</th>
<th>Associations with kinship and inheritance</th>
<th>Body part construction</th>
<th>Mortality</th>
</tr>
</thead>
</table>

### Table 1: Spatial Meanings and Whole-Part Constructions

<table>
<thead>
<tr>
<th>Language</th>
<th>Type of Body Part</th>
<th>Internal Meanings</th>
<th>External Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Sap</em> ‘body and its parts’</td>
<td>external body parts</td>
<td>spatial meanings in whole-part constructions</td>
<td>no</td>
</tr>
<tr>
<td></td>
<td>internal body parts</td>
<td>some emotional states; spatial meanings; strength</td>
<td>yes; ‘bone’ reflects patrilineal relations; ‘belly’ and ‘blood’ are associated with matrilineal relations</td>
</tr>
<tr>
<td><em>Mawul</em> ‘mind; inside’</td>
<td>understanding, internal and mental states</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td><em>Kayik</em> ‘spirit’</td>
<td>no</td>
<td>lives on and may be dangerous if detached from <em>sap</em> and <em>mawul</em></td>
<td></td>
</tr>
</tbody>
</table>

The opposition of *mawul* ‘mind, mindset, understanding, inside’ and *kayik* ‘spirit’ as intangible facets of a person, or ‘self’ in Manambu is paralleled by the opposition of *wambung* ‘inside’ and *anggindarkwanar* or *kwanma* ‘spirit’ in Kawarari. We can recall, from §2.1, that Karawari *arim* ‘body, skin’ shares striking similarities with *sap* in its meanings; we saw in §4 that *wambung* and *mawul* are rather similar semantically. In both cultures and languages (which are not related) ‘spirit’ and ‘inside’ are two dimensions of one’s personality. The ‘inside’ dies when a person dies. ‘Spirit’ merely leaves the body.

As Enfield et al. (2006) put it, ‘the domain of the human body is an ideal focus for semantic typology, since the body is a physical universal and all languages have terms referring to its parts’. In this paper I have attempted to show how the subdivisions of a human body, their grammatical behaviour and use, can only be fully understood within the context of their conceptualization and beliefs. Three facets of the human being in Manambu — their *sap* (with its parts), its mortal correlate *mawul* and the immortal *kayik* — reflect what Sapir (1912) called ‘the social environment’.

The facts described here suggest that additional parameters for the categorization of the human body and humans in general, and the grammatical behaviour of body part terms lie in their conceptual features deeply rooted in the non-material culture. The mental and physical profile of a human being in Manambu cannot be understood without understanding the grammar. And conversely, the structural analysis of a language is incomplete unless it makes reference to the system of beliefs and concepts encoded in it.
Abbreviations

1, 2, 3 — first, second, third person; DEM.DIST — distal demonstrative; DEM.DIST.REACT:TOPIC — distal demonstrative referring to reactivated topic; DS — different subject; FEM.SG — feminine singular; IMPV.3p — third person imperative; LK — linker; LOC — locative; MASC.SG — masculine singular; NEG — negation; OBJ — object; OBL — oblique marker; PL, PL — plural; SEQ — sequential; SG — singular; SS — same subject; SUBJ — subject.

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References


Hellinger, Marlis & Hadumod Bussmann. 2001. *Gender across languages*, volumes 1–3. Amsterdam: John Benjamins. DOI: 10.1075/impact.9.05hel


Telban, Borut. Ms. A dictionary of Karawari.


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