Dozing eyes and drunken faces: nominalized psycho-collocations in Daakaka (Vanuatu)
Abstract

Like many languages of the world, the Oceanic language Daakaka (Vanuatu) uses idiomatic combinations of body-part terms and verbs to express emotions, medical conditions and related concepts. However, languages differ in how they express the same concepts nominally. I will contrast the nominalization strategy found in Daakaka with other languages and discuss the differences. I will argue that the nominalization strategy in Daakaka is less transparent than its alternatives but that it allows for the formation of a paradigm that also includes meteorological expressions. This phenomenon highlights the need to look beyond individual lexemes when comparing lexical classes and derivational processes cross-linguistically.

1 Introduction

The only way to express most emotions in Daakaka are psycho-collocations – formulaic phrases such that an obligatorily possessed body-part term serves as the subject to a certain predicate. This phenomenon is illustrated by the following example:

(1) yu-on mwe yaa
inside/feeling-3s REAL hurt
'she/he is angry' (lit. 'his/ her inside/feeling hurts') (ex. (561) in von Prince 2015)

To form a corresponding nominal expression that denotes the notion of ‘anger’, an uninflected body-part noun is taken as the head, with the predicate as its attribute:

(2) yuo yaa-yaa
feeling REDUP-hurt
‘anger’ (lit. ‘the hurting feeling/inside’) (ex. (78) in von Prince 2015)

This is different from languages such as Sino-Tibetan Japhug, where the predicate is nominalized and the body-part is encoded as a possessor:

²List of glosses (inconsistencies are due to the variety of sources): art – article; asr – assertion marker; caus – causal; cl – classifier (possessive); cm – comment marker; comp – complementizer; cplt – completive aspect; cpl – completive aspect; degree; dem – demonstrative; disc – discourse marker; d – determiner; emph – emphatic; erg – ergative; factual; foc – focus particle; genp – generic possessor; gen – genitive; ifr – inferential; inv – inverse; ipfv – imperfective; irr – irrealis; lnk – linker; med – medial distance; neg – negation; nmlz – nominalizer; nm – nominalizer; op – perfect; pl – plural; pot – potential; pst – past; pfv – perfective; real – realis; redup – reduplication; res – resultative; s/a – S/A participle; sens – sensory; subj – subject; trans – transitivizer; unexp – unexpected;
Daakaka is an Oceanic language of Vanuatu, spoken by about 1000 speakers on the island of Ambrym and a small diaspora in the cities of Port Vila and Luganville. Its basic word structure is SVO. Daakaka has fairly rigid boundaries between the major word classes, which are nouns, verbs, adjectives and adverbs. These classes are primarily defined by the following morpho-syntactic properties: 1) the ability to serve as arguments without a nominalization process (only nouns); 2) the ability to serve as predicates without a copula (only verbs and some of the adjectives); 3) the ability to serve as attributes to a noun without relative clauses or reduplication (only adjectives); and 4) the ability to adverbially modify a sentence (only adverbs).

As may be expected of such a language, there are various productive derivational processes to form, for example, noun phrases out of verb roots. An example of the very productive nominalizing clitic ~an is given below:

\[(s-am \ \text{oko=}\text{an} \ en=te] \ ka \ \text{vyan} \ ka \ \text{we} \ \text{sanga} \]
\[\text{CL3-2SG travel=}\text{NM dem=}\text{MED ASR POT go} \ \text{ASR POT bad} \]
\[\text{this journey of yours will go badly} \ (\text{exp02:127}) \]

This nominalization process does however not apply to psycho-collocations (compare example (2)).

In sum, these observations show that there are derivational processes that are specific to phrasal expressions; and that those processes differ across languages in interesting ways. The wider implication is that, for a more comprehensive understanding of cross-linguistic differences in lexical classes and derivational processes, we need to look beyond individual lexemes.

In the following section, I will describe the phenomenon of psycho-collocations in general, and in Daakaka in particular. In section 3, I will describe the processes of deriving nominal expressions from those psycho-collocations in Daakaka as compared to other languages. Section 4 concludes the article.

Daakaka examples come either from the published literature, from elicitations by the author, or from corpus data collected by the author between 2009 and 2012. Each example is referenced accordingly. In longer utterances, the relevant sequences are enclosed by square brackets.
2 Expressing emotions

2.1 Overview

Emotional states such as anger and fear do not correspond neatly to any of the prototypical concepts usually associated with major lexical classes: They are certainly not visible, tangible objects, and they also lack the dynamics associated with prototypical events. The person who experiences a certain emotion (the experiencer) is often neither an agent nor a typical patient of this process. Emotional states are usually only temporary, which in turn differentiates them from prototypical properties of objects. Similar considerations hold not only for emotional states in the narrow sense, but also for other physical and medical states such as fatigue, headaches or ebriety.

It is therefore not surprising that, in many languages, expressions that refer to such concepts do not fall squarely into one specific lexical class. They may not even correspond to one single lexeme: A very widespread strategy for expressing emotions and related notions is to use formulaic combinations of a body-part expression with a certain predicate. It appears that most of the world’s languages have at least a few expressions that follow this pattern (compare Wierzbicka, 1999; Enfield & Wierzbicka, 2002). One example from English is the phrase my heart is heavy to describe a feeling of sadness or regret. In some languages, such structures are by far the most productive way to refer to emotions. As Ameka (2002: 29) puts it, the ‘bodily expressions’ of emotions in these languages (including his subject language, Ewe) are basic and unmarked, they do not contrast with less complex expressions.

Languages in which such formulaic phrases are the main way of expressing emotions can be found in many different families all over the world. They include Dalabon from Australia (Ponsonnet, 2014), Mandinka from Sub-Saharan Africa (Denis Creissels, p.c.), Mezquital Otomi from Central America (Enrique L. Palancar, p.c.), Adyghe from the North-West Caucasus (Peter Arkadiev, p.c.) and Walman, a Torricelli language from Papua New Guinea (Matthew Dryer and Lea Brown, p.c.).

The term psycho-collocations is commonly used in the context of Mainland South-East Asian languages to refer to the exact same phenomenon (see Matisoff 1986, also compare Vittrant 2013 and references therein). Expressions that follow this pattern often do not only denote emotions in the narrow sense, but also comprise medical states such as blindness and pain, as well as human propensities such as stubbornness. For convenience, I will use the term psycho-collocation to encompass all these expressions.
2.2 Psycho-collocations in Oceanic languages

In many of the Oceanic languages of Melanesia, too, psycho-collocations are the main way to express emotions and similar concepts. Many of them involve a specific structure of external possession: a body-part term is incorporated into a predicate, its semantic possessor is then encoded as the subject of the clause. Lichtenberk (2010) has found evidence for such structures in Toqabaqita (Solomon islands), Saliba (Papua New Guinea), Samoan, Tuvaluan and Tawala (Papua New Guinea). I will give a brief summary of those structures below.

In the following example from Saliba (Papua New Guinea), the body-part expression *gado* 'throat' is the subject of the predicate *magu* '(of the tide) be low' to indicate a feeling of thirst. The same meaning can also be expressed by a structure of external possession, where the possessor appears as the subject of the construction. The body-part expression is then incorporated into the predicate.

   throat-1sg.p 3sg-low.tide
   'I’m thirsty’ (lit. ‘My throat is low tide’)

b. *Ya-gado-magu.*
   1sg-throat-low.tide
   'I’m thirsty.' (lit. ‘I’m throat-low tide.’) (Margetts, 1999:233)

For Tawala (Papua New Guinea), Ezard (1997) reports a rich inventory of *human-propensity verbs*, saying:

> Emotions, attitudes and psychological states can hardly be talked about without the use of these verbs. [...] Human-propensity verb stems consist of two roots: a body-part and a verb root.

The structure of Tawala human-propensity verbs is essentially identical to the structures involving external possession that we just saw from Saliba:

(6) a. *nugo-na i-gohola*
   heart-3sg 3sg-jump
   'his heart jumped’

b. *i-nugo.gohola*
   3sg-heart.jump
   'he was surprised’ (Ezard, 1997:278)

More examples from Tawala are given in table 1.
These compound structures can also combine with derivational prefixes to derive more specific meanings, as in *li-nugo.emota-o*, 'unite' (*caus-mind*.one).

A similar picture also emerges for Toqabaqita, as illustrated by the following two examples from Lichtenberk (2010):

(7) a. *Maa-mu e geqo.*
    eye-*2s.pers 3s.nfut* be.'blind'
    'Are you blind?' (lit. 'Are your eyes blind?')

   b. *Qo maa-geqo.*
    2s.nfut eye-be.'blind'
    'Are you blind?' (lit. 'Are you eye-blind?')

In many of those expressions, the meaning of the verb is no longer fully transparent, since they do not occur outside of these structures. Some of the more transparent structures are shown in table 2.

In the three languages discussed so far (Saliba, Toqabaqita and Tawala), these compound structures are mostly restricted to body-part terms and overwhelmingly express emotions, medical states, human propensities or similar.

Samoan and Tuvaluan use similar structures to express concepts related to human traits, but here these structures are not restricted to such concepts. For example, in Tuvaluan, we find a number of verbal noun adjective compounds (Besnier, 2000:606) that express human propensities – they are shown in table 3.

Besnier (2000:607) writes that the same construction can be formed productively with any noun expressing the part of a greater whole, as in *manuao tila tolu* ‘three-mast warship’.

The Samoan *isu mamafa* compounds are mostly used to express psychological, physical or medical properties of animate referents. This is illustrated by the following examples, which also reveal the origin of the term *isu mamafa* by Mosel & Hovdhaugen (1992:300):

(8) *'Ua 'ou isu mamafa*
    perf 1sg nose heavy
'I have a cold' (lit. 'I have a heavy nose.')

(9) Na iloa e Maatusi ua loto vaivai lopu
    PST know ERG Maatusi PERF heart weak lopu
    'Maatusi recognised that lopu was scared.' (lit. '...that lopu had a weak heart.') (Mosel & Hovdhaugen, 1992:335)

(10) ...ma ia tatou loto tetele...
    and subj INC.PL heart big(PL)
    '...and let's be brave,...' (Mosel & Hovdhaugen, 1992:335, Moana 86:2)

Like in Tuvaluan, this Samoan pattern is not restricted to body-part nouns and to expressions related to a person’s condition. Nor are these structures the main way to express emotions in the language; there are verbs such as ita 'be angry' that can simply be predicates to a person-denoting subject, just as in English.

Some other Oceanic languages also have psycho-collocations, but do not express them by incorporated nouns with external possessors.

A case in point is Mwotlap (Vanuatu). The inflected noun IV can be translated as 'mind', but is restricted to two meteorological predicates meaning '(be) daylight' and '(be) night' respectively:

(11) a. na-lē-k me-myen ēgēn.
    ART-mind-1SG PRF-daylight now
    'I remember now'

b. na-lo-n may qōn̄.
    ART-mind-3SG CPLT night
    'He has already forgotten (it)'/ 'He's unconscious' / 'He's senile.' (François, 2013:205)

2.3 Expressing emotions in Daakaka

Most emotional, medical and mental states can be expressed only by psycho-collocations in Daakaka. The subject of the following example sentence is ny- 'face of', a noun which is inflected for the person and number of its obligatory possessor; the predicate is the verbal adjective lili 'drunk'. The combination of these two expressions is the only canonical way in Daakaka to encode the information that someone is drunk.

(12) ny-un mwe lili
    face.of-3S REAL drunk
A particularly frequent subject in psycho-collocations is *yu-*, which probably developed diachronically from a noun with the meaning 'inside/ interior' but could today also be translated as 'feeling' (compare von Prince, 2015: 266).

(13) *yu-on*  
*inside/feeling*-3s  
*mwe*  
*real*  
*yaa*  
'hurt' (lit. 'her face is drunk') (ex. (570) in von Prince 2015)

(14) *yu-on*  
*inside/feeling*-3s  
*mwe*  
*real*  
*kyes~kyes* (= *ane*  
*redup*  
*~be.sweet* (= *trans*  
*nge*)  
'she/he is angry' (lit. 'his/ her feeling hurts') (repeated from (1))

(15) *met-an*  
*eye*-3s  
*mwe*  
*real*  
*nyup*  
*doze.off*  
'she/he is dozing off' (lit. 'her/his eyes are dozing') (569) in von Prince 2015)

Other examples include terms referring to the skin, the body, the head and the eyes as subjects. The last case is illustrated by (15).

(16) *myaa*  
*hunger*  
*mwe*  
*kyer* (= *ansi*  
*bite.pl*  
*1pl.in*  
'we are hungry' (lit. 'the hunger bites (us)')

(17) *meas*  
*cold*  
*mwe*  
*kyer* (= *ansi*  
*bite.pl*  
*1pl.in*  
'it is cold' (lit. 'the cold bites (us)')
In some other emotional and medical states, the experiencer is encoded as subject and the condition is encoded as the predicate. This is the case for *mese* 'be sick', *yos* 'love', *ongane mu vu/ ma sanga/…* 'feel good/ bad/ …', *yungpan* 'be thirsty'. Some examples are given below:

(18) ̄p=ane  Anja ma  tiye ansi
      op=TRANS A. REAL hit 1PL.IN
      'We feel fatigued because Anja has recently left/ will leave today.'

(19)  mebyuneli ma  ongane ma  sanga
      grandchild REAL feel REAL be.bad
      'Her grandson was upset.' (sto38:030)

(20)  na=m yungpan ne  wye  ten
      1SG=REAL thirsty  TRANS water very
      'I'm very thirsty for water.' (sto15:033)

Summing up this section, we have seen that there is a variety of structures to express emotional, mental and medical states in Daakaka, but psycho-collocations are the most dominant kind of structure, just as in a variety of other Oceanic languages. See also von Prince (2015: chapter 6, section 2.2.3) and the semantic domain of *body* terms in von Prince (to appear).

3 Nominalizing psycho-collocations

3.1 Strategies for nominalizing psycho-collocations

In the published literature, formulaic subject-predicate combinations expressing emotions have been mainly discussed in terms of their implications for cross-cultural comparison of cognitive processes (e.g. Wierzbicka, 1999; Enfield & Wierzbicka, 2002; Sharifian et al., 2008; Idström & Piirainen, 2012; Ponsonnet, 2014). For this article, however, I want to focus on the challenge that these structures pose for grammatical processes: How do you derive a nominal expression for a meaning that can only be encoded by a subject-predicate combination?

There are a number of logical answers to this question. For some languages, the answer may be simply that such structures are not nominalized at all. This appears to be the case for Walman, for example, where many concepts relating to mental and emotional states cannot be expressed nominally (Matthew Dryer, p. c.).
Other languages do have a variety of strategies to nominalize psycho-collocations. Consider the Sino-Tibetan language Japhug. Japhug has a wide range of body-part-denoting subjects that collocate with specific predicates to express a person’s physical and emotional state. The body-part terms are typically relational and must be prefixed by a morpheme that denotes the person and number of its possessor:

(21) \( \text{ɯ-sni} \quad \text{pur-zdəu} \)
    3SG.PRS-thought/heart SENS-painful
    'He feels sad.' (Guillaume Jacques, p.c.)

To express the notion of 'sadness' nominally, the predicate is nominalized, the body-part term is encoded as the possessor of the nominalized verb, and the experiencer is encoded as the possessor of the body part (see Jacques to appear for more on this type of nominalization):

(22) \( \text{tɕhemɤpɯ} \quad \text{nɯ} \quad \text{rca,} \quad [\text{ɯ-sni} \quad \text{ur-tur-zdəu}] \)
    little.girl DEM FOC:UNEXPS 3SG.PRS-thought/heart 3SG.PRS-NMLZ:DEGREE-painful
     \( \text{pjɤ-sɤre} \quad \text{ifr:ipfv} \quad \text{zə} \)
     IFR:IPFV-be.funny/be.extreme EMPH
    'The little girl was extremely sad (lit. the pain of the little girl's heart was extreme).' (from the Cinderella story, in the Japhug Corpus)

It is also possible to leave the experiencer unspecified: Among the possessor prefixes that attach to obligatorily possessed nouns is one morpheme that indicates a generic possessor. This is illustrated in (23):

(23) \( \text{mɤ-kɯ-pe} \quad \text{a-páir-wy-mtʃʰm tce} \quad [\text{tur-sni} \quad \text{ur-tur-zdəu}] \)
    NEG-NMLZ:S/A-be.good IRR-PFV-INV-hear LNK GENR.PRS-hear really
     \( \text{sayau} \quad \text{3SG.PRS-NMLZ:DEGREE-be.painful be.extreme:FACTUAL} \)
    'When one hears bad news, one feels extremely sad' (lit. 'the pain of one's heart is extreme')
    (Guillaume Jacques, p.c.)

A similar strategy is used by the Niger-Congo language Mandinka. In (24), we see the basic sentential structure, where the subject is a body-part term ('liver'), combining with the predicate lāa 'lie down'; the experiencer is expressed as the (inalienable) possessor of the body-part:

\( ^3 \text{Many of these expressions correspond to incorporating verbs with their (unpossessed) objects – see Jacques (2012).} \)
(24)  å jùsò láátá lè.
    3sg liver.d lie.down.cpl foc
    'He/ she is happy.' (lit. 'His/her liver lied down.') (Denis Creissels, p.c.)

In the corresponding nominal expression, the body-part term is incorporated by the verb. Predicates can be used as event-nominals without interfering morphology in Mandinka, so the resulting term jùsù-láa can be used as a nominal expression denoting 'happiness'. The experiencer of the emotion can optionally be expressed by an alienable possessor of this noun phrase. See Creissels & Sambou (2013) for incorporation in Mandinka, Creissels (2012a) for more on event nominals in Mandinka, and Creissels (2012b) for the entry on jùsù-láa and related lexemes.

(25)  (à là) jùsù-láa
    3sg gen liver-lying.d
    '(his/ her) happiness' (Denis Creissels, p.c.)

3.2 Nominalizing psycho-collocations in Daakaka

3.2.1 Overview

In Daakaka, however, the canonical way to express an emotion nominally is very different. Whereas in Japhug and Mandinka, the head of the noun phrase is the nominalized predicate, Daakaka emotion nominals are headed by the relevant body-part term. The corresponding predicate is used as an attribute to the body-part expression. Thus, the notion of 'love/ infatuation' literally translates as 'sweet feeling, sweet inside', not as 'emotional/ interior sweetness'. In (26), we see how the verb kyes 'be sweet' is reduplicated to form an attribute to the noun yuo 'feeling/ inside'.

(26)  bwe kolir usili [yuo kyes-kyes]
    real.cont sing follow inside/feeling redup-sweet
    'he was singing about love' (lit. 'he was singing about the sweet feeling') (sto25:080)

The nominal terms corresponding to the other phrases introduced in section 2 are as follows:

(27)  a.  nena lili
    face drunk
    'drunkenness' (translation-based elicitation, OT)

*Many stative predicates are adjectives and thus do not have to be reduplicated to serve as attributes. Only verbs have to be reduplicated.
Table 4 shows a sample of structures following the same pattern.

To summarize briefly. We have so far seen two cross-linguistically attested strategies for nominalizing psycho-collocations:

1. In Japhug and Mandinka, the property word is nominalized and serves as the head of the construction, while the body-part term is expressed as a possessor (’my heart’s pain’).

2. In Daakaka, the property word is used as an attribute to the body-part term, which serves as the head noun of the structure (’my painful heart’).

These Daakaka expressions are quite curious in a number of ways. I will discuss here specifically two relevant properties: exocentricity and the morphological structure of the head noun.

3.2.2 Exocentricity

First of all, nominalized psych-collocations are arguably exocentric, in the sense that the entire term is not a hyponym of its head element – which is the definition of exocentricity in the context of compounds (Bauer, 2001): When I talk about ’drowsy eyes’ in Daakaka, I hardly talk about a particular kind of eyes. The attribute ’drowsy’ does not serve to disambiguate the head noun (the drowsy eyes, in contrast to the alert ones); nor does it further describe a given set of eyes (the eyes, which are drowsy). the term *kus lip~lip* literally translates as ’dripping nose’, but really denotes the bleeding of the nose, or the blood running from the nose. This is illustrated in (28):

(28) *temeli en-te mu mur te [kus lip~lip] mu puo yen kus-un*  
child DEM=MED fall DISC nose REDUP=drip REAL be.plenty in nose.of 3SG.POSS  
’this child fell and then he had a big nosebleed’ (lit. ’the dripping nose was plentiful in his nose’) (ex. (166) in von Prince 2015)
Exocentricity may not necessarily be a property of all these structures. Enfield (2002) rightly warns against drawing inferences about the conceptualization of corresponding emotion-related expressions based on the ‘literal’ body-part meanings. Especially nominals with the rather abstract noun yuo, which may be translated as ‘feeling’ or ‘inside’, may in fact be understood quite literally. Maybe the ‘sweet feeling’ of infatuation is in fact a particular kind of feeling, rather than a particular kind of sweetness. And in some cases (such as the ‘drowsy eyes’ and the ‘dripping nose’), it is possible, as suggested by Enfield (2002) that we are really dealing with polysemous lexemes whose actual reference is simply not as concrete as the homophonous body-part term. I should note, however, that the term kus ‘nose’ does not otherwise and by itself denote any kind of secretion of the nose. The general term for secretions of the nose is dep.

In other, quite clear cases of exocentricity, the property denoted by a body-part term and its attribute is taken metonymically to refer to the person characterized by this property. For example, myar bwii (eye blind) may refer to a blind person, kor yas-yas (head redup~strong) may denote a pigheaded person. This is also illustrated in (29):

(29) [myar sang-sanga] sa ma oko vyan tu-kuwu tebol
    eye REDUP-bad CM REAL walk go hit-RES.out table
    ‘someone with bad eyes has walked into the table, overturning it’ (elicited, JM)

In sum, while not all nominalized psycho-collocations in Daakaka are necessarily exocentric, they appear to have a tendency to be interpreted this way. At the very least, between the two cross-linguistically attested alternatives, the structure used in Japhug and Mandinka (‘my heart’s pain’) appears to be more semantically transparent than the option used by Daakaka (‘my painful heart’).

3.2.3 Uninflected body-part terms

The second interesting property of nominal psycho-collocations concerns the morphology of their head nouns. Nouns denoting external human body-parts are generally inflected for the person and number features of their possessor in Daakaka. In contrast to Japhug, there is no inflection in Daakaka that would indicate an indefinite or generic possessor. There is therefore no form of an inflected noun without a definite or specific possessor.

An inflected noun cannot be the head of a psycho-collocation. The nouns that are used as heads
for nominalized psycho-collocations instead are suppletive, uninflected lexemes. The forms of these lexemes often resemble their inflected counterparts, but are never identical to any of their forms. An overview is given in table 5.

[Table 5 about here.]

The following examples show that the relevant pattern is available only for uninflected body-part nouns, not for inflected ones. Since finite sentences have a very similar distribution to noun phrases, the corresponding meaning can usually be expressed by a clausal argument, as shown in (30-c). The first of those examples was given by language consultant JM as a response to my request for a sentence containing the expression kor pwengpwenges 'headache'. I then inquired about the acceptability of the two variations of the sentence.

\[(30)\]

a. gyes=an en-te mwe gene [kor pweng–pwenges]  
work=NMLZ DEM=MED Real make head REDUP–hurt  
‘this work causes headaches’

b. *gyes=an en-te mwe gene [bet–uk pweng–pwenges]  
work=NMLZ DEM=MED Real make head.of-1SG.POSS REDUP–hurt  
intended ‘this work causes me a headache’

c. gyes=an en-te mwe gene [bet–uk ma pwenges]  
work=NMLZ DEM=MED Real make head.of-1SG.POSS Real hurt  
‘this work makes my head hurt’

Why is (30-b) not acceptable? There is no general restriction against attributes to inflected nouns, as long as these attributes can be understood to either restrict the reference of the noun, or to further describe its referent. This is illustrated in the following two examples. In (31-a), the relative clause is a descriptive or restrictive attribute of the inflected term nat-en ‘her child’; in (31-b), the attribute kekei ‘little’ adds a description to the inflected noun meby-un ‘her grandson’.

\[(31)\]

a. bwe kolir usili [nat-en [na mwe seaa vyan pwer etes]]  
REAL.CONT sing follow child-3SG.POSS COMP REAL get.lost go stay at.sea  
‘she was singing about her child that/ who was lost at sea’ (sto23:015)

b. ka ra=p tiye vyap myatô en-te myane [meby-un kekei]  
ASR 1PL.IN=POT kill woman old DEM=MED with grandson.of-3SG small  
‘we will kill this woman and her little grandson’ (sto34:054)

Moreover, it is not the case that nominalized psycho-collocations generally disallow the realization
of the experiencer or subject. It is possible to talk about the anger or love felt by someone specific, not just as abstract concepts: An experiencer can be encoded as the possessor of the phrase by a possessive linker pronoun or a linker genitive – structures that are typically associated with alienable possession (compare von Prince, 2015). For the following example, I asked JM if he could form a sentence starting with san kor yasyas sa mwe gene... 'his obstinacy resulted in...', which he did:

(32) [s-an [kor yas-yas]] sa mwe gene vy-an mwe setyup
cl3-3sg.poss head redup-strong cm real make hand.3sg.poss real break

'his obstinacy was the reason he broke his hand'

Apparently, in cases such as (32), the scope of the possessive relation is not restricted to the body-part term, but extends over the entire psycho-collocation.

A possible reason for the unacceptability of (30-b), then, is that the exocentric reading is not available when the possessor is encoded by inflection on the head noun. Thus, the only way to interpret (30-b) would be to say 'this kind of work makes my head, which/that is hurting.'

In contrast, uninflected nouns such as kor in (32) allow for generic possessors and for possessors that scope over the entire phrase, rather than just the body-part term, thus allowing for an exocentric reading of the noun phrase. The same is not possible with inflected nouns, which is probably why they cannot serve as heads for a nominal psycho-collocation. If this is on the right track, this would be an additional piece of evidence that we are in fact dealing with exocentricity in the case of Daakaka nominalized psycho-collocations.

3.2.4 Paradigm consistency

The question remains why the strategy of nominalization that is utilized by languages like Japhug and Mandinka is not available in Daakaka. After all, one may expect that an endocentric, more transparent expression such as ‘my heart’s pain’ should be preferred over an exocentric, less transparent expression such as ‘my painful heart’. The reason for this choice of nominalization strategy is not immediately apparent, as Daakaka has a very productive procedure of nominalizing predicates: The clitic -an nominalizes verbs and predicative adjectives. The resulting expression denotes an event or a kind of events:

(33) [s-am oko-an en-te] ka we vyan ka we sanga
cl3-2sg travel=nm dem=med asr pot go asr pot bad
'this journey of yours will go badly' (exp02:127)

The nominalized predicate phrase can consist of more than one lexeme. The following example shows how a semitransitive verb and its generic object are nominalized to express a generic or habitual behavior.

(34) [$s$-am $yas$ $barar$-$an$] to $vu$
    cl3-2sg steal pig=nm neg.real good
    'your (habit of) stealing pigs is not good' (a response by my consultant JM to the question whether he could use the phrase $yas$ $barar$-$an$ in a sentence)

It is however possible that this derivational process excludes the kinds of predicates that feature in psycho-collocations. My data suggest that this may in fact be one relevant factor. Some of the verbs we find in psycho-collocations can be nominalized by the morpheme $=an$ described above, but not all of them. Thus, I have tried to elicit a nominalized version of $kyes$ 'sweet', which we have seen in examples (14) and (26), but suggestions such as the following were firmly rejected by JM:

(35) *$kyes$-$kyes$-$an$ (ne $mees$)
    redup=$=nmlz$ trans food
    intended: 'sweetness (of the food)'

I can not explain the unacceptability of (35) in terms of aktionsart or reduplication, since otherwise all types and shapes of predicates find their way into nominalizations with $=an$. Whatever the reason, the nominalization strategy that takes the body-part term as a head is available to all expressions in the paradigm, while the strategy that takes the nominalized predicate as its head is not. Thus, it may be that in Daakaka, a consistent paradigm featuring exocentring nominalizations wins against an inconsistent paradigm featuring endocentric ones.

Before concluding this article, I would like to point out an interesting parallel between the psycho-collocations and the following expressions for meteorological events:

(36) a. $or$ $mwe$ $myaek$
    place real be.night
    'it is night'

b. $or$ $mwe$ $yuop$
    place real be.dawn
'it is dawn’ (ex. (553-a/b) in von Prince 2015)

The corresponding nominal expressions follow the same pattern as the psycho-collocations, and their exocentricity is illustrated by the following example:

(37)  
or bwe towane [or yuop-yuop]
place REAL;CONT throw place REDUP-dawn

‘it was getting dawn’ (lit. ‘the place was throwing the dawning place’) (ex. (95-c) in von Prince 2015)

Like emotions, meteorological events do not match any of the prototypical notions associated with one particular lexical class and show considerable variation in their assignment to lexical classes cross-linguistically. In Daakaka, they could be described as forming one class with psycho-collocations: In both cases, the relevant meaning can only be expressed by a specific subject-predicate collocation at the sentence-level; and in both cases, these collocations form noun phrases by taking the subject expression as a head noun and the predicate as its attribute.

4 Conclusion

For this paper, I have discussed the nominalization of psycho-collocations in Daakaka. I have contrasted this process with different strategies from other languages and proposed that, given the logical alternatives, the nominalization strategy used in Daakaka is slightly puzzling. I have presented original data from fieldwork and corpus work to explore some of the possible reasons behind the development of this process. I have concluded that one relevant factor may be the consistency of a paradigm that may not only include psycho-collocations, but also meteorological collocations. But only a more systematic comparison between languages will allow us to get a thorough understanding of the factors that determine the choice of nominalization strategy and the range of variation considering this phenomenon.

This research highlights the fact that cross-linguistic comparisons between derivational processes should not be restricted to the level of individual lexemes, but should also take more complex phrases into consideration.
References


Lichtenberk, Frantisek. 2010. Subject incorporation in Toqabaqita and other Oceanic languages. In
John Bowden, Nikolaus Himmelmann & Malcolm Ross (eds.), *A journey through Austronesian and Papuan linguistic and cultural space. papers in honour of Andrew Pawley*, Pacific Linguistics.


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<td>be promiscuous</td>
<td>(eyes.many)</td>
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<td>upu.dodola</td>
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<td>gamo.bagibagi</td>
<td>be talkative</td>
<td>(mouth.work)</td>
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<td>kamna.apapoe</td>
<td>be poorly</td>
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<td>(ear.block)</td>
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<td>nugo.apapoe</td>
<td>be angry</td>
<td>(heart.bad)</td>
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<td>be resolute</td>
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<td>Compound</td>
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<td>seqe-daadaola</td>
<td>‘be/feel lazy’</td>
<td>(body-stiff)</td>
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<td>lio-dila</td>
<td>‘feel very sad, dejected, heartbroken’</td>
<td>(mind-slip)</td>
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<td>lio-dora</td>
<td>‘forget’</td>
<td>(mind-not.know)</td>
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<td>manata-akele</td>
<td>‘repent, regret’</td>
<td>(mind-turn.around)</td>
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<tr>
<td>rake-boko</td>
<td>‘be constipated’</td>
<td>(belly-be.blocked)</td>
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<tr>
<td>gwau-boko</td>
<td>‘be dumb’</td>
<td>(head-be.blocked)</td>
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<tr>
<td>maa-boko</td>
<td>‘be blind, be unable to see’</td>
<td>(eye-be.blocked)</td>
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Table 3: Compounds expressing human propensities in Tuvaluan (Besnier, 2000: 606f.)

<table>
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<tr>
<th>Compound</th>
<th>Meaning</th>
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<tr>
<td>leo saauaa</td>
<td>verbally brutal</td>
<td>(voice brutal)</td>
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<tr>
<td>mata faanoanoa</td>
<td>sad looking</td>
<td>(eyes sad)</td>
</tr>
<tr>
<td>loto alofa</td>
<td>empathetic</td>
<td>(heart feel.empathy)</td>
</tr>
<tr>
<td>lima puke-puke</td>
<td>thievish</td>
<td>(hand REDUP-grab)</td>
</tr>
<tr>
<td>gutu ppelo</td>
<td>prone to lying</td>
<td>(mouth lie)</td>
</tr>
<tr>
<td>gutu saasaa</td>
<td>loud and cheerful</td>
<td>(mouth cheerful⁴)</td>
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Table 4: Examples for complex terms denoting bodily or emotional states in Daakaka

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<th>Term</th>
<th>Gloss</th>
<th>Meaning</th>
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<tr>
<td>bip mer-mer</td>
<td>body REDUP-dead</td>
<td>‘exhaustion’</td>
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<tr>
<td>bip erér</td>
<td>body hot</td>
<td>‘fever’</td>
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<tr>
<td>kor yas-yas</td>
<td>head REDUP-strong</td>
<td>‘obstinacy’</td>
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<tr>
<td>kus lip-lip</td>
<td>nose REDUP-drip</td>
<td>‘nosebleed’</td>
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<tr>
<td>myar nyup-nyup</td>
<td>eye REDUP-doze</td>
<td>‘drowsiness’</td>
</tr>
<tr>
<td>myar bwii</td>
<td>eye blind</td>
<td>‘blindness’</td>
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<tr>
<td>nena lili</td>
<td>face drunk</td>
<td>‘ebriety, drunkenness’</td>
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<tr>
<td>yuo kyeskyes</td>
<td>feeling sweet</td>
<td>‘infatuation’</td>
</tr>
<tr>
<td>yuo yaa-yaa</td>
<td>feeling REDUP-hurt</td>
<td>‘anger’</td>
</tr>
<tr>
<td>yuo maru</td>
<td>feeling glad</td>
<td>‘gladness’</td>
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<tr>
<td>vyaa boo</td>
<td>arm deformed. by elephantiasis</td>
<td>‘elephantiasis affecting the arms’</td>
</tr>
<tr>
<td>Inflected</td>
<td>Uninflected</td>
<td>Translation</td>
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<td>-----------</td>
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<tr>
<td>bet-</td>
<td>kor</td>
<td>'head'</td>
</tr>
<tr>
<td>bye-</td>
<td>bip</td>
<td>'body'</td>
</tr>
<tr>
<td>lu-</td>
<td>ép</td>
<td>tooth</td>
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<tr>
<td>ly-</td>
<td>lye</td>
<td>'leg'</td>
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<td>met-</td>
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<tr>
<td>yuo-</td>
<td>yuo</td>
<td>'feeling/inside'</td>
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Table 5: Inflected and uninflected counterparts of body-part-terms in Daakaka