

# Body-parts in Dalabon and Barunga Kriol: Matches and mismatches

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**Abstract.** This article describes a number of body-part lexemes in Dalabon, a non-Pama-Nyungan language of the Gunwinyguan family (Australia), and their counterparts in Barunga Kriol, the local creole. The aim of this paper is a comparison between some aspects of the Dalabon body-part lexicon and their counterparts in Barunga Kriol. Throughout the study of Dalabon and Barunga Kriol lexemes denoting the hand (or front paw) and its digits, the foot (or back paw) and its digits, the face, the nose and the nostrils, and finally, the head and the crown of the head, it is found that Barunga Kriol replicates some of the lexical structures of the local Aboriginal languages, but not all of them. In particular, a remarkable specificity of Dalabon, the fact that the head and the face are not labelled as such, and are preferably described as an assemblage of features, is only partially replicated in Barunga Kriol. The paper seeks to identify some of the factors explaining the matches and mismatches between Barunga Kriol and Dalabon.

**Keywords.** body-parts, Dalabon, Barunga Kriol, creole development, substrate influence

## 1. Introduction<sup>1</sup>

This article compares some aspects of the body-part lexicon in Dalabon, a non-Pama-Nyungan language of the Gunwinyguan family,<sup>2</sup> and their counterparts in Barunga Kriol, the local English-based creole variety. The purpose of the article is two-fold. It is concerned with linguistic descriptions of the body in Dalabon on the one hand, and with substrate influence and other influences in creole development on the other hand. The article remains a preliminary study, leaving many questions unanswered. Wherever possible, I indicate directions for future research.

I present and discuss a number of lexemes of the Dalabon body-part lexicon, where some of the lexical distinctions found in English are merged. These lexical descriptions lead to a few conclusions and hypotheses about the way the Dalabon lexicon channels descriptions of the body.<sup>3</sup> I focus particularly on the head and the face, which are described as an assemblage of features rather than wholes. This cross-linguistically unusual feature is partially, but not entirely, replicated in Barunga Kriol, and I will attempt to explain why this is so.

In order to do so, I question the influence of Dalabon and other local languages (Jawoyn, Rembarrnga, Mayali) on Barunga Kriol, the local creole (BK). A number of BK body-part words match Dalabon words in many respects, but not in every respect. I seek to explain resemblances and dissemblances between BK, Dalabon, and other local languages. BK features may result from transfer from local substrate languages (Siegel 2008); influence by Roper Kriol, an adjacent Kriol variety; from English influence; or—without actualising a “bio-program” (Bickerton 1984), some aspects of BK features may reflect some universal trends. It is often impossible to draw a firm conclusion at this stage, but in some cases it

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<sup>2</sup> See Evans, Merlan & Tukumba (2004) for a dictionary of Dalabon.

<sup>3</sup> My interest in body descriptions in Dalabon is related to my research on the description of emotions; in Dalabon, many of the emotion-denoting words involve body-part nouns.

seems that transfer from local languages is the best explanation. I will also try to explain why transfer is applied to some substrate features, but not to others.

The rest of this section sets the linguistic context, presenting Dalabon first, then BK. In 1.3 I present the theoretical framework I rely upon; 1.4 describes the data and my methodology; and 1.5 describes my approach to lexical descriptions. Sections 2, 3, 4 and 5 in turn describe Dalabon and BK lexemes displaying interesting polysemies, e.g. lexemes that refer to hand (*langu-no*, “hand” and “finger”), foot (*dengu-no*, “foot” and “toe”), face (*dje-no*, “nose”, “nostril” and “face”), and head (*kodj-no*, “crown of head”, “head”). Section 5 focuses on the mismatches between Dalabon and BK with respect to descriptions of the face.

### 1.1 Dalabon

Dalabon is a non-Pama-Nyungan language of the Gunwinyguan family (Figure 1). It is severely endangered, and the descendants of Dalabon speakers currently speak a creole called Kriol: more specifically, the variety called Barunga Kriol.



Figure 1. Top End languages. Information gathered and presented by Mark Harvey (Humanities and social sciences, University of Newcastle). Used with permission.

## 1.2 *Barunga Kriol*

Barunga Kriol is a creole spoken in and around the communities of Weemol, Wugularr/Beswick, and Barunga/Bamyili. It is one of the varieties of English-based creoles that developed throughout the Top End of the Northern Territory (coastal areas excepted) across to the Kimberleys. Kriol is a generic name for these varieties of creole, spoken by up to 30,000 Indigenous people (Lee & Obata 2010), across a vast portion of Central Northern Australia (Figure 2). Although it has not always been the case (Rhydwen 1995, 1996), in the Barunga region Kriol is now identified by its own speakers as a proper language and as an identity marker (Ponsonnet 2011).



Figure 2. Kriol area.

Kriol resulted from the creolisation of a pidgin commonly referred to as the Northern Territory Pidgin, which came to be used in the Northern Territory in the second half of the 19th century (Koch 2000). Roper Kriol, the best documented variety of Kriol, emerged at and around the Roper River Mission in the first decades of the 20th century. Harris (1986) (influenced by Bickerton, e.g. 1984) presents this emergence as a relatively abrupt process concentrating at the Roper River Mission. Munro (2000, 2004) depicts a more progressive and spread out development. It is not yet entirely clear how Kriol spread over such a broad area of Northern Australia. Contra Sandefur's suggestion that varieties of Kriol emerged separately in various places (Sandefur 1986:21), Munro (2000) argues against independent geneses, suggesting that Kriol spread from its original Roper River birthplace.

BK emerged at the settlement of Barunga towards the end of the first half of the 20th century (Sandefur 1986:21). Speakers' accounts confirm that the four languages spoken around Barunga (Figure 1) were in use at the time when Kriol developed. These are all Gunwinyguan languages, namely Jawoyn, Mayali (a Bininj Gun-wok dialect, Evans (2003)), Rembarrnga and Dalabon. Historical research is

needed before I can assess the exact status of each of these languages in the local language ecology at the time, in terms of demographics and social status (Mufwene 2001). For the purpose of the current preliminary study, I rely on oral accounts (corroborated by (Cowlshaw 1999)) which indicate that a significant proportion of the inland Dalabon population had been deported to the Barunga region. As a result, Dalabon numbers at the settlement would have been significant. On the other hand, Dalabon speakers' narratives emphasize that they had to live on Jawoyn land, coping with the distressing presence of other groups. It seems clear from these contemporary accounts that Dalabon speakers were not in a dominant position. But since they formed a demographically significant group, influence of Dalabon on BK is plausible.<sup>4</sup> When assessing various influences upon BK, the lexicon of the three other substrates will also be considered, based on published material (Garde 2010, Merlan & Jacq 2005a, 2005b, Saulwick 2003), as well as personal communications.

One of my informants reported on the presence of members of the Marra group at Barunga in the 1960s, when BK was developing as the first language of the emerging generation. Marra is spoken around Ngukurr/Roper River, and it is likely that these people spoke Roper Kriol as well. This supports Munro's diffusion hypothesis, indicating possible influences from Roper Kriol on BK. On the other hand, the lexical study shows that this influence would have been limited, at least with respect to lexical structures (see section 5.3 about BK *hed*).<sup>5</sup>

### ***1.3 Explaining Barunga Kriol lexical structures***

In the following sections, I will investigate the lexical distinctions found in Dalabon for a number of body-parts. I will compare them to those found in BK, and in English, the lexifier. In each case I will consider which lexical distinctions are shared by Dalabon and BK, and which are not. Overall, the semantic structure

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<sup>4</sup> Especially with respect to the particular variant used by BK speakers of Dalabon descent.

<sup>5</sup> Ideally, the influence of the Northern Territory Pidgin should be taken into account, but there is little or no data on its lexical structures, let alone for local varieties around Barunga. In addition, one may wonder whether this pidgin could have contributed lexical structures different from the ones already found in English, Roper Kriol or substrate languages. However, the pidgin did contribute forms (see section 5.2). For data on Northern Territory Pidgin see Baker and Mühlhäusler (1996), Foster, Monaghan and Mühlhäusler (2003), Troy (1990, 2003). See also Meakins (to appear) for an overview of contact languages in Australia.

of BK lexemes does match Dalabon patterns closer than English patterns. For instance, while English distinguishes between “hand” and “finger”, both BK and Dalabon have one single term meaning both “finger” and “hand”: BK *bingga* (<Eng. “finger”) and Dalabon *langu-no*.<sup>6</sup> But there are also dissemblances. For instance, the Dalabon term for “nose”, *dje-no*, can also mean “face.” Dalabon has no other term for “face”. This is not the case with BK *nos* (<Eng. “nose”), which cannot mean “face”—BK has *feis* (<Eng. “face”). Both resemblances and dissemblances call for explanations. They may be accounted for in several ways.

A possible explanation calls upon substrate influence and the notions of transfer, availability constraint and reinforcement principles devised by Siegel (2008:105-234). Siegel defines transfer as a mechanism that takes place during communication in L2, whereby speakers supplement their knowledge of L2 using their knowledge of L1 for the sake of effective communication. As a result of transfer, structural features of L1 (the substrate language) are imposed on L2 (the emerging creole). A condition of transfer is that a perceptually salient element is present in L2 for the substrate feature to be transferred upon: this is the availability constraint (Siegel 2008:148 onwards). Another modulating principle is reinforcement (Siegel 2008:148 onwards): when a given feature is common to several substrates, more speakers are likely to impose a similar feature on L2, and this feature is more likely to persist in the stabilized creole. The mechanism of transfer, the availability constraint and the reinforcement principle will be used to explain some of the resemblances and dissemblances between Dalabon and BK.

Another way to account for BK features is Roper Kriol influence. If, as suggested by Munro, the presence of Kriol across Northern Australia results from the spread of Roper Kriol, we must expect similarities between BK and Roper Kriol. In-depth studies of the Roper Kriol body-part lexicon should be carried out in order to assess the exact impact of Roper Kriol influence. In this preliminary

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<sup>6</sup> In Dalabon, a large number of words are followed by a suffix of the form *-no* which can endorse several functions. *-no* is the 3sg possessive suffix, but can also be (among other things) a morphological filler occurring on bound nouns. Body-part nouns are bound, which means that if they are not included in a verbal or nominal compound, they must be followed by a possessive suffix. This suffix agrees with the person of the possessor, and remains *-no* (3sg) if the possessor is not identified. Early in the study of Dalabon, a decision was made to include *-no* in the quotation form of body-parts (Evans and Merlan 2001). See Ponsonnet (in prep.) for a detailed descriptions of Dalabon nominal subclasses and of the *-no* suffix.

work, I rely on information provided by the linguist Gregory Dickson, a proficient second language speaker of Roper Kriol.<sup>7</sup>

Last but not least, superstrate influence may also account for BK features. Given features in which BK resembles English rather than Dalabon and/or other local or neighboring languages, it is reasonable to hypothesize superstrate influence.

At this stage of the research, it is not always possible to discriminate between each factor. In some cases, like with BK *hed* (5.3), transfer from substrate languages is the most plausible explanation. In other cases, like with BK *feis*, superstrate influence from English is more likely (4.2.1). This partition calls for an explanation: why does substrate influence dominate in some cases, and superstrate influence in other cases? My current hypothesis, developed in 6.2, is that the particular lexical patterns at stake and the nature of the semantic extensions they rely upon may have had an impact on substrate transfer.

#### **1.4 Data and methodology**

The lexical and semantic analyses presented below are based on data collected in the communities of Weemol, Wugularr/Beswick and Barunga/Bamyili between 2007 and 2011. The examples are extracted from a corpus containing a mix of narratives and contextualised elicitation. Another important portion of my data on body-parts comes from pointing tasks on life models, photos and pictures of animals, and other tests based on various stimuli. Some of them were designed in advance or repeated from other studies (e.g. Van Staden & Majid (2006)'s colouring task, carried out according to their recommendations); others were improvised in the field. Dalabon and BK speakers responded positively to these tasks and performed them with ease. These tests provide consistent and relevant non-verbal clues about speakers' assessments of their lexemes. The information provided by such tests should be distinguished from the information related to

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<sup>7</sup> Gregory Dickson works on Roper Kriol, and is also an accredited interpreter. However, he hasn't researched the semantics of body-parts, so his personal communications should not be treated as research outcomes but as second language speaker's intuitions.

the use of lexemes in context. Along the article, the code above each example indicates what type of data is being presented.<sup>8</sup>

I have carried out systematic pointing tasks, using standardized sets of photographs and drawings with the available speakers of Dalabon, 4 women in their fifties and sixties. I also carried out similar tests in BK with 14 speakers, ranging from 10 to 70 years old, relatively well distributed across generations. Most (but not all) of them were female of Dalabon descent. The 4 Dalabon speakers were asked to repeat the test in BK.<sup>9</sup> The tests repeated in BK and Dalabon focused on heads and legs of kangaroos and crocodiles, as well as human head/faces, hands and fingers, using the same photos and drawings with all participants.<sup>10</sup>

### ***1.5 Lexicographic issues***

For each lexeme considered, I start with its description in Dalabon, before comparing it with English and BK. I assess its denotational range, i.e. to which part of the body the term can refer to. I also determine which denotation is primary, i.e. which one is more frequent and/or more salient for speakers. This becomes apparent in stimuli-based tasks, and will be relevant when I try to explain some of the mismatches between BK and Dalabon. I will sometimes talk about “semantic extension” or say that the sense of a word “extends” from a given denotation to another denotation. By this I mean that, in synchrony, the former denotation is the primary denotation of the word, while the latter is secondary. I make no claim about diachrony.

Traditionally, a description of a lexical item includes an assessment of the relations between its different senses: is the lexeme polysemous or monosemous?

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<sup>8</sup> [Narr]: narratives; [Sc]: cultural script, scenario; [ContEl]: contextualised elicitation; [ElConv]: conversation in the course of elicitation; [Stim]: response to elicitation stimuli; [El]: pure elicitation.

<sup>9</sup> At a reasonable distance in time after their Dalabon performance.

<sup>10</sup> The stimuli were: photographs of a crocodile’s head and crocodile’s leg; of a kangaroo’s head, the drawing of an entire kangaroo; drawings of human heads and faces with and without the nose. Due to the circumstances and practicalities in the field, the setting of the test was not entirely standardized. Some of the speakers were presented with a slightly different range of stimuli, or the stimuli were presented in a different order, sometimes in several sessions. Nevertheless, the stimuli used and the questions asked were systematic enough to allow straightforward, unambiguous comparison between speakers’ respective responses and between languages.

A polysemous lexeme has several distinct senses, while a monosemous lexeme has one general sense. This distinction, essential to lexicographers, is usually revealed by speakers' reactions in disambiguation tests. While speakers seemed at ease with pointing tasks and stimuli-based tests designed to unfold denotational ranges, most polysemy tests resulted in speakers' confusion, in spite of my efforts to present them adequately. Only a small fraction of the outcome of such tests can be used, and with great caution. In the present study, it is not indispensable to discriminate unambiguously between polysemy and monosemy, but I will punctually exploit polysemy tests, where they provide information about how the speakers assess the sense(s) of their lexemes.

I will not systematically discuss the issue of parthood and meronymy (as considered by Brown (1976), Enfield, Majid & Van Staden (2006)). Dalabon does not have a dedicated expression meaning "part of". BK has a suffix *-pat*, that occurs optionally on body-parts: *am* or *ampat* (<Eng. "arm" + "part"), *hed* or *hedpat* (<Eng. "head" + "part"), etc. And we also find *bodipat* (<Eng. "body" + "part"), but meaning "body", not "body-part". The BK suffix *-pat* bears some resemblance with the obligatory suffixes on Dalabon bound nouns (note 6). Otherwise, Dalabon has a verb *yidjnjan* "have", "hold", which can be used in contexts such as "a hand has a finger." But since the same verb can be used to express "the hand holds a spear", tests involving *yidjnjan* cannot distinguish parthood from contiguity. As a result, linguistic evidence of body hierarchies are not straightforward. For reasons of space, I have chosen not to explore this point systematically, although I will comment on hierarchies in section 5.

## 2. Around the hand

### 2.1 Dalabon langu-no, "hand", "finger"

#### 2.1.1 Denotational range

As pointed out by Wilkins (1996:283), many Australian languages use one single term to denote both "hand" and "finger", where English has two lexemes. This polysemy is found in Dalabon, as well as in the neighbouring languages—Jawoyn, Mayali, Rembarrnga. It is also found in Roper Kriol (Dickson pers. comm.).

Dalabon *langu-no* denotes both the finger and the hand. Across contextualised examples, pointing tasks and other tests, *langu-no* is found with the following denotations:

- the whole hand, including the fingers;
- the fingers, or one finger;<sup>11</sup>
- the front paws on animals like crocodiles and kangaroos;<sup>12</sup>
- the associated digits;
- the back feet on reptiles;
- the digits of the back feet on some animals, like reptiles;
- the long and thin legs of animals like crayfish (Figure 4 below).

Throughout narratives, pointing tasks and other stimuli-based tasks, *langu-no* was never used to denote the arm.<sup>13</sup> The term for “arm” is *warnu-no*, and pointing tests demonstrated that *langu-no* cannot be used to refer to the whole arm. Presented with Figure 3, a speaker rejected the sentence “*worrbbamb kab-yidjnjan kanh langu-wanjingh-walung*” “this one has three [marks] on one *langu-no*” in favor of “*worrbbamb kab-yidjnjan kanh warnu-wanjingh-walung*”, “this one has three [marks] on one *warnu-no*”, confirming that a mark on the arm cannot be described as “on the *langu-no*”.

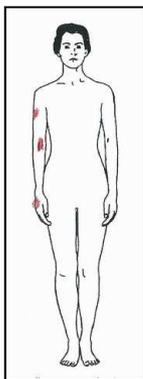


Figure 3. Body drawing used in hierarchy tasks.  
From Van Staden & Majid (2006). Used with permission.

<sup>11</sup> Since Dalabon does not mark plural on inanimates, all body-part terms can denote their referent as one or several.

<sup>12</sup> I have no data regarding feral animals.

<sup>13</sup> Claws and nails are labeled distinctly as *malanj-no* or *langu-malanj-no*. In pointing tasks, speakers' gestures usually identified nails and claws independently from fingers, and they often uttered the specific label for these body-parts.

In narratives, *langu-no* more often denotes a human body-part that can grab things and that may hurt or be hurt, etc.<sup>14</sup>



Figure 4. Crayfish, by a local artist.<sup>15</sup>



Figure 5. Short-necked turtle, by a local artist.<sup>16</sup>

The fact that the denotations can include the legs of the crayfish on Figure 4 suggests that the shape plays a part in the way *langu-no* is applied: a large number of long, thin body-parts attached to a larger mass are labeled *langu-no*. Shape may also explain why *langu-no* can denote the back feet on reptiles. On Figure 5, the back feet of the short-necked turtle are very similar in shape to the front feet.

Two types of distinctions observed in the English lexicon are merged in Dalabon. On the one hand, Dalabon *langu-no* applies indifferently to human and to animal body-parts, while English has at least two words, “hand” and “paw”. This remark applies throughout the body-part lexicon in Dalabon.<sup>17</sup> In contrast, English has at least two sets of terms, one for animals and one for humans (some terms—*head* for instance—are common to both sets). Other local languages, Jawoyn, Rembarnga and Mayali, resemble Dalabon in this respect. In addition, Dalabon merges the distinction between “hand” and “finger” also found in English:

<sup>14</sup> There is another term, *ngarrinj-no*, used more frequently by some speakers and less frequently by others. In all the occurrences observed, *langu-no* and *ngarrinj-no* display identical denotational range and semantics, so that I consider them equivalent for the purpose of this paper. Here I describe *langu-no*, the most frequent lexeme in the speech of my most reliable informant. LANGU and NGARRINJ are found in compounds denoting social behaviour such as *ngarrinj-yidjnjan* “hand”+“hold”, “shake hands”, *ngarrinj-ye-mang*, “hand”+comitative+“take”, “lend a hand”, etc.

<sup>15</sup> †Kamarrang Neal Manyita.

<sup>16</sup> †Kamarrang Billy Yalawanga.

<sup>17</sup> Even species-specific body-parts are often labeled with terms found for other species: the beak of a bird is called *dje-no*, which means “nose” for a human being (section 4.1.1). There are exceptions: the crest of crocodiles or birds for instance, is called *komdjilin-no*, which does not denote any human body-part.

[ContEI]

[If your wrist is crippled, paralysed; touching the back of her hands.]

(1) *Mak wuku-langu-roka-n.*

NEG 2sg:APPR-hand-move-PR<sup>18</sup>

‘[If your wrist is paralysed] you may not move your hand.’

[Stim]

[Describing the photo of a crocodile leg where a digit was missing.]

(2) *Wirrimab kardu worrbamb-wurd ka-b-langu-dib.*

or maybe four-DIM 3sg-R-finger-PRIV

*Wanjingb-walung kardu ka-b-langu-dadj-m-inj.*

one-ABL maybe 3sg-R-finger-cut-VBLZR-PP

‘Or maybe the small fourth finger is missing.

One finger might have been cut off.’

### 2.1.2 Salient denotation

Stimuli-based tests demonstrate that the salient sense of *langu-no* is the whole hand (or paw),<sup>19</sup> rather than individual digits. This becomes clear in pointing tasks, where speakers point at the whole hand (at the center of the palm, or circling the whole hand including fingers), not at one finger, for *langu-no*. The same phenomenon recurs in the colouring tasks, where Dalabon speakers asked to colour the area labeled *langu-no* coloured the whole hand, as shown on Figure 6.

<sup>18</sup> List of glosses used: ABL: ablative case; APPR: apprehensive mood; BEN: benefactive; COM: comitative; CSTVR: causativizer; DEM: demonstrative; LOC: locative case; DAT: dative case; DEF: definite article; DIM: diminutive; h: person higher in animacy; INTERJ: interjection; NEG: negation; PI: past imperfective; pl: plural; POSS: possessive; PP: past perfective; PR: present; PRIV: privative; PST: past; R: realis mood; SEQ: sequential; sg: singular; TRSVR: transitivizer; VBLZR: verbalizer.

<sup>19</sup> I will say “hand” for the benefit of brevity, but the reader should understand “hand or paw”.

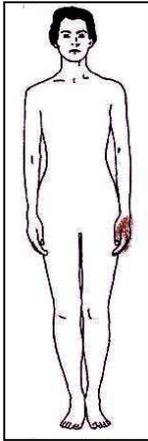


Figure 6. Body drawing used in colouring tasks.  
From Van Staden & Majid (2006). Used with permission.

In the case of *langu-no*, there are convincing indications that the term is polysemous—that is, the two senses are distinct. Example (2) above supports this view. Set up tests involving quantification confused speakers, but one test involving colours yielded better results. Presented with Figure 7, a speaker willingly repeated the following sentence:

[E]

- (3) Yo,                    *langu-ngurrimi*                    *bab*                    *langu-barmi*-*dorrungb*.  
 INTERJ                    hand-brown                    but                    finger-white-COM  
 ‘Yes, a brown hand, but with a white finger.’

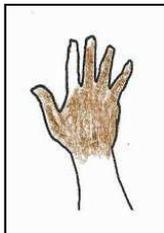


Figure 7. Drawing of hand used in polysemy tests.

Another clue in favor of polysemy is that in pointing tasks, speakers quantify for *langu-no* “hand” and *langu-no* “finger” separately. Thus, speakers listing body-parts on a drawing may indicate that there are two *langu-no*, and immediately after, that there are many *langu-no*.

*Langu-no* is genuinely polysemous between “hand” and “finger”, and there is no other term meaning “any digit”, or meaning the “body of the hand” (without the

fingers).<sup>20</sup> However, it is interesting to note that the series of compound expressions used to label the palm and back of the hand on the one side, and types of digits on the other side, delineate a distinction between the “hand” and the “finger” senses of *langu-no*. The palm and the back of the hand, i.e. the two sides of the “body of the hand”, can be described using compounds of the form *langu+body-part noun+no*.

- |     |  |     |   |
|-----|--|-----|---|
| (4) | <i>langu-kangu-no</i><br>hand-belly-3sg.POSS<br>'palm of the hand' | (5) | <i>langu-dolku-no</i><br>hand-back-3sg.POSS<br>'back of the hand' |
|-----|--|-----|---|

These two expressions activate a metaphor whereby the hand is compared to a whole body, with a back and a belly. Dalabon also has compound nouns to distinguish the thumb from other fingers.<sup>21</sup> These compounds have a slightly different form: *langu+adjective+no*.

- |     |  |     |  |
|-----|--|-----|--|
| (6) | <i>langu-boyenj-no</i><br>hand-big-3sg.POSS<br><i>langu-badjan-no</i><br>hand-mother.one-3sg.POSS<br>'thumb' | (7) | <i>langu-yawo-no</i> <sup>22</sup><br>hand-small-3sg.POSS<br>'smaller fingers' |
|-----|--|-----|--|

The contrast between the thumb and other fingers operates via specification of size; a possible metaphor is “the fingers are a family”. Both the morphology and the semantics of the compounds in (4) and (5) on one side, and (6) and (7) on the other, covertly contrast the labels for the parts of the “body of the hand” and the labels for different kinds of fingers. This confirms that while the primary denotation of *langu-no* is “hand”, the “finger” denotation of *langu-no* is also a well-identified denotation, which speakers perceive and activate as a sense of itself.

<sup>20</sup> A part that typically lacks an individual label in English, as pointed by Cruse (1986:171).

<sup>21</sup> Fingers are used to sign the name of species of kangaroos, in hunting, and each finger can also be called by the name of the species it signs. These labels are no longer well-known and are never used in ordinary speech, nor even in pointing tasks.

<sup>22</sup> *Badjan-no* and *yawo-no* are among the few Dalabon lexemes for which it is hard to determine whether they are nouns or adjectives. In any case, they are not “straightforward” nouns as body-part nouns are. *Boyenj* “big”, on the other hand, is clearly an adjective. (See Ponsonnet (in prep.) for a description of word classes in Dalabon.)

## 2.2 *Barunga Kriol bingga and hen*

### 2.2.1 *Matches*

In BK, *bingga* (<Eng. “finger”) adequately translates *langu-no*. Evidence from contextualised examples and tests shows that *bingga* covers the denotational range of *langu-no*, including the extremity of front limbs of humans and animals as well as their digits, and, marginally, the back feet of reptiles and associated digits.<sup>23</sup> Examples (8) and (9) exemplify *bingga* as used unambiguously in its “hand” and then “finger” senses respectively.

[Narr]

[Touching the back of her hands.]

- (8) *Imin itim im iya langa dis bingga tu said.*  
 3sg:PST hit:TRSVR 3sg here LOC DEF hand two side  
 ‘He hit her here on both hands.’

[Stim]

[Describing the photo of a crocodile leg where a digit was missing.]

- (9) *Im oni goda bobala bingga.*  
 3sg only have four finger  
 ‘It only has four fingers.’

Speakers’ quantificational habits replicate those observed with *langu-no* (5.1.3): speakers are happy to alternate between two and five when they count *bingga* on a drawing. In addition, BK speakers also use adjective+HAND collocations to refer to the thumb as “big finger” and to other fingers as “small fingers”: *big bingga*, *lil bingga*.<sup>24</sup>

Thus, as shown by Figure 4 in section 4.2.3, BK *bingga* aligns with Dalabon *langu-no* to the extent that it replicates the polysemies described above: between animal and human body-parts, and between “hand” and “finger”. English does not display such polysemies. Similar polysemies between “hand” and “finger” occur in

<sup>23</sup> BK also has the term *hen* (<Engl. “hand”), which seems to have the exact same denotation range as *bingga*. *Hen* is less frequent than *bingga*, and younger speakers in particular do not use it very spontaneously. I focus on the most frequent lexeme.

<sup>24</sup> Also *big hen*, *lil hen*.

the other three local languages—Jawoyn, Mayali and Rembarrnga. They occur in Roper Kriol as well.

### 2.2.2 Possible mismatch

There are some indications that *bingga* may also be used to refer to the whole arm, as suggested in example (10). This is somewhat marginal, as the most common BK term is *am* (<Eng. “arm”). This extension was encountered only with younger speakers, under 30 years old. In contrast, Dalabon *langu-no* cannot refer to the whole arm. Further investigation is needed to confirm this extension of *bingga* to “arm”. Even if it does confirm, this use of *bingga* seems relatively marginal.

[Stim]

[Pointing at the shoulder on the photo of a kangaroo.]

(10) *Leig iya ba im, en am ba im,*  
 leg here DAT 3sg and arm DAT 3sg

*laik bingga en leig ba im.*  
 like hand(arm) and leg DAT 3sg

‘And this is its back leg, and its front leg, like its *bingga* and *leg*.’

### 2.2.3 Interpretation

The table below compares the lexical structures of Dalabon (and other local languages), BK and English—leaving aside the animal/human merging, which occurs across the whole body-part lexicon in Dalabon and BK.

	upper DIGIT i.e. ‘finger’	WHOLE ENDING of upper LIMB i.e. ‘hand including finger’	upper LIMB i.e. ‘arm including hand and finger’
Dalabon	<i>langu-no</i>		<i>warnu-no</i>
BK	<i>bingga</i>		<i>am</i>
BK (to be confirmed)	<i>?bingga?</i>		
English	<i>finger</i>	<i>hand</i>	<i>arm</i>

Figure 8. Compared lexical structures of Dalabon *langu-no* and *warnu-no*, BK *bingga* and *am*, English *finger*, *hand* and *arm*.

There may be two reasons why BK lexical structures match Dalabon and other local languages with respect to the “hand”/“finger” polysemy. It may be a case of substrate influence: since this polysemy is present in all local languages, the transfer of this feature would have been amply reinforced. On the other hand, Roper Kriol has the same word *bingga*, with the same polysemy. This Roper Kriol lexeme may be the source of the BK lexeme.

With respect to the possible extension of BK *bingga* to “arm”, which is absent in Dalabon, influence from Roper Kriol is less plausible, since in Roper Kriol *bingga* is not attested for “arm” (Dickson pers. comm.). But the hand/arm polysemy is found in one local language, Jawoyn. It is possible that this Jawoyn feature also transferred to BK. This would indicate that Jawoyn had a greater influence than other substrates, which is not implausible considering what is known of the local language ecology at the time (see 1.2). In addition, “hand”/“arm” polysemies are common cross-linguistically (Brown 1976:405), so that transfer may have been favored by universal trends.

### 3. Around the foot

#### 3.1 Dalabon *dengu-no*, “foot”, “toe”

Dalabon displays the same polysemy between the extremity of back limbs and their digits, as with the extremities of front limbs and their digits. Dalabon *dengu-*

*no* “foot”, “toe” mirrors *langu-no* in many respects, albeit for back limbs.<sup>25</sup> Because the case is similar to the one of *langu-no* in section 2, I will present *dengu-no* very briefly.

*Dengu-no* and *langu-no* display parallel denotational ranges. *Dengu-no* can refer to:

- the whole human foot;
- less frequently, the toes of a human;
- the back paws of various animals with four limbs, including reptiles’ back feet (the use of *langu-no* is marginal);<sup>26</sup>
- the digits of back paws and feet;
- the whole foot of an emu;
- the claws of an emu.

In context, *dengu-no* is often used to talk about the human body-part—on which one walks, which hurts, etc. It is also an important edible part in animals like emus and kangaroos.<sup>27</sup> *Dengu-no* is also used to mean “shoe(s)”.

“Foot” is the most salient sense, as shown by speakers’ responses in pointing and colouring tasks. Polysemy tests with colours yielded comparable results with *dengu-no* as with *langu-no* (example 3). *Dengu-yawo-no* (*dengu*+“small”+*no*) and *dengu-badjan-no* (*dengu*+“big”+*no*) are also attested, contrasting “big toe” and “smaller toes”, mirroring the contrast between *langu-badjan-no* “thumb” and *langu-yawo-no* “smaller fingers”. However, the covert distinction between the “body of the hand” and the fingers is not as clear with foot and toes.

### 3.2 *Barunga Kriol* but, “foot”, “toe”

BK has *but* (<Eng. “foot”) which displays the same range of denotations as Dalabon *dengu-no*, covering both the extremity of lower limbs and the associated digits, across species. *But* is also used for “shoe(s)”. In addition, BK also has the word *tow* (<Eng. “toe”), which means “toe”. The table below compares Dalabon, BK and English patterns.

<sup>25</sup> This parallel conforms to Brown’s prediction (Brown 1976:405).

<sup>26</sup> Snakes have no *dengu-no*.

<sup>27</sup> DENGU is attested in one compound with a social behaviour sense, namely *dengu-rokan* “foot”+“move”, in negative clauses: *mak nga-dengu-rokan*, “I don’t move my feet”, “I’m not influenced by what I was told”.

	lower DIGIT	WHOLE PART ENDING lower LIMB
Dalabon and others	<i>dengu-no</i>	
BK	<i>but</i>	
BK	<i>tow</i>	
English	<i>toe</i>	<i>foot</i>

Figure 9. Compared lexical structures of Dalabon *dengu-no*, BK *but* and *tow*, English *foot* and *toe*.

BK and Dalabon both display a “foot”/“toe” polysemy which is absent in English. The same polysemy is attested in Mayali. Maybe because people do not often talk about toes, it is difficult to find data on “toe” in published material. As a result, it remains difficult to explain the related BK lexical structures and the existence of *tow* in BK. Like with *bingga* “hand”/“finger”, the BK *but* “foot”/“toe” polysemy may result from substrate transfer of local features, or may possibly originate from Roper Kriol. BK *tow* “toe” may result from English superstrate influence.<sup>28</sup> More data on the lexicon of the other local languages, and of Roper Kriol, is needed to clarify these points.

## 4. Around the face

### 4.1 Dalabon *dje-no*, “nose”, “nostril”, “face”

#### 4.1.1 Denotational range

Dalabon *dje-no* translates to “nostril”, “face” and “nose”. Between occurrences in context, pointing tasks and other tests, *dje-no* was found to apply to the following:

- On human beings:

- the nostrils;
- the nose, including the nose bridge;
- the whole face (the front part of the head).

<sup>28</sup> Neither the Jawoyn nor the Rembarrnga dictionary mention a separate term for “toe”. But since they do not mention “toe” at all (either as a separate lexeme, or as an extension of another term), it is difficult to draw any conclusion.

- Parallel denotations are found on animals, with a couple of differences:

- on crocodiles, the nostrils and the tip of the nose are the most salient denotations;
- on birds, *dje-no* is the beak.<sup>29</sup>

Apart from body-parts, *dje-no* can also refer to little holes in trees, or to the hook of a spear-thrower. Here again, shape seems to play an important part, since the little holes on a tree resemble nostrils visually (especially nostrils of animals, like on a crocodile), and the hook of a spear-thrower is a small protuberance, sticking at an angle out of the main body of the instrument.

In discourse, *dje-no* is more often used to denote the nose. The sense “face” is attested (example 12 below) but is less frequent, and difficult to exemplify because most contexts do not allow to disambiguate between the “nose” and “face” denotations. However, this sense is confirmed by speakers’ reactions in pointing tasks: they label the whole face *dje-no* when prompted to give it a name (e.g. circling the face on a drawing), and younger speakers spontaneously use *dje-no* to describe isolated drawings of faces (Figures 10 and 13 below).<sup>30</sup>

*Dje-no* covers the denotations expressed by three distinct English lexemes: “nose”, “nostril” and “face”. Example (11) shows how in some contexts, *dje-no* is used where “nose” would be used in English (as opposed to “face”, which would be inadequate). In contrast, in example (12), *dje-no* may not be translated as “nose”, but as “face”. Unfortunately, I have no contextualised example displaying a clear contrast between “nostril” and “nose”. However, the distinction between these two denotations became clear in elicitation, for instance when speakers pointed twice separately to each nostril, labeling them *dje-no*. Nostrils may alternatively be labeled *dje-dun-no*, literally *dje*+“hole”+*no*.

[ContE1]

- (11) *Dje-no-walung* [...], *ka-b-dja-kulu-bo-n*, *kanh wurdurd-wurd* [...].  
 nose-3sg.POSS.ABL 3sg-R-just-mucus-go-PR DEM child-DIM  
 ‘[It’s running] from her nose, this child’s nose is running.’

<sup>29</sup> *Dalu-no* “mouth” cannot be used for “beak”.

<sup>30</sup> A couple of verbal compounds including DJE lexicalise a social or emotional sense. Examples of these compounds are *dje-bruh(mu)*, DJE+“blow”: “be sad”, “be upset”; *dje-bengan*, DJE+“know”: “think about someone” or “know someone”.

[ContEI]

[Touching her cheek and side of chin.]

- (12) *Wurdi*            *nga-h-dje-werleberrk-mu!*  
 INTERJ            1sg-R-nose-?hang.down?-VBLZR:PR  
 ‘Oh dear, I’m all wrinkled!’<sup>31</sup>

Just like *langu-no* ‘hand’, ‘finger’ and *dengu-no* ‘foot’, ‘toe’, *dje-no* applies across human and animal species. Modulations between species are more significant, probably because the differences in shape across species are more important than with limbs. In English, ‘nose’, ‘nostril’ and ‘face’ also apply to animals, hence in this case, Dalabon does not differ from English.

#### 4.1.2 *Salient denotations*

##### 4.1.2.1 Nose and nostril

The ‘nose’ denotation of *dje-no* is the most salient. When asked to point at *dje-no* on a human being, speakers pointed at the tip of the nose or circled the whole nose; on kangaroos they pointed at a relatively large area around the nostrils; and on birds they pointed at the beak. On crocodiles, however, they usually pointed at the tip of the nose, which corresponds to the nostrils (but the tip of the lower jaw, where there is no nostril, was also sometimes called *dje-no*). In colouring tasks, speakers coloured the whole nose, and the nose only.

The nostril denotation is also relatively salient (and maybe prominent on crocodiles). In pointing tasks, speakers often embedded a discrete double pointing at the nostrils as they circled the nose. With quantification, speakers can identify one *dje-no*, circling the whole snout of a kangaroo for instance, and immediately after, state that there are two *dje-no*, meaning that there are two nostrils. This suggests that *dje-no* is polysemous between ‘nose’ and ‘nostril’, with the larger part, the ‘nose’, being the most salient denotation.

Thus the pattern is the same as the one identified in section 2.1 for *langu-no*, between the senses ‘hand’ and ‘finger’. That is, while the ‘nose’, the larger part, is the primary denotation of *dje-no*, the ‘nostril’, the smaller part, is also a well-

<sup>31</sup> There is no reason to think that *dje-weleberrkmu* attracts a non-compositional reading. *Weleberrkmu* is found in verb compounds of the form *body-part+weleberrkmu*, with body-parts of various sorts, where the compounds have a compositional reading meaning ‘body-part hangs down’.

identified sense, and a denotation that speakers activate independently and identify somewhat consciously. Like with *langu-no*, the primary denotation for *dje-no* is the larger part (hand or nose), while the secondary but well-identified denotation is a smaller part (finger or nostril).

#### 4.1.2.2 Nose and face

In contrast, the “whole face” denotation of *dje-no*, while relatively common in discourse,<sup>32</sup> becomes radically backgrounded in stimuli-based tasks. Speakers will only label the whole face *dje-no* if prompted—there is no alternative word to refer to the face, so that in fact speakers rarely label the face. Older speakers, who have learnt BK as a second language and have had less exposure to English, only label the face if the prompt to do so is very straightforward. For instance, tests based on drawings where part of a human head was coloured so as to isolate the face as a whole, in order to trigger the label *dje-no* for “face”, systematically failed. In pointing tasks, older speakers would only associate the label *dje-no* to the whole face when I explicitly encouraged them to do so, circling the whole face with my finger. The “face” sense of *dje-no* is slightly more salient for speakers who are more familiar with BK and more exposed to English. I account for this phenomenon below (4.2.1).

No test could ever demonstrate a polysemy between *dje-no* “nose” and *dje-no* “face”. When Figure 10 was presented to speakers, one of them came close to saying “*nunb dje-no kab-dje-dib*”, “this *dje-no* has no *dje-no*”—“this face has no nose”. But her reaction of surprise and denegation indicated that this co-occurrence of the two denotations of *dje-no* in the same sentence sounded abnormal to her.



Figure 10. Face drawing used in polysemy tests.

In principle, this judgment may indicate that the item is monosemous between “nose” and “face”. Based on a traditional definition of monosemy, this amounts to saying that *dje-no* is general between “nose” and “face”, “nose” and “face” thus being subsumed under one general concept. But since the salient denotation of

<sup>32</sup> Albeit often within verbal compounds.

*dje-no* is “nose”, the smaller part, monosemy is implausible—because it would entail that the concept of face should be subsumed under the concept of nose, which is counter-intuitive. In fact, the result of this polysemy test is better interpreted as an indication that the “face” denotation of *dje-no* is so secondary that it is virtually inaccessible to speakers’ metalinguistic awareness. In this sense, Dalabon speakers do not have a well-identified concept of face. As a result, it is less surprising that speakers do not distinguish the “face” denotation from the “nose” denotation, of which they are aware.

To summarize, *dje-no* operates two distinct mergings as compared to English. One of them, the merging of “nostril” and “nose”, displays a similar structure as the *langu-no* “hand”/”finger” merging. In this merging, the larger part is the most salient denotation, the smaller part is a well-identified denotation, and the lexeme is polysemous. The other merging displays a different structure: the salient denotation is the smaller part, the larger part is a very secondary denotation, and speakers’ awareness of the second denotation is so low that polysemy tests cannot obtain it.

## 4.2 *Barunga Kriol nos and feis*

### 4.2.1 *Matches and mismatches*

Here again, BK lexical structures resemble Dalabon lexical structures, albeit partially. The lexeme *nos* (<Eng. “nose”) appears to denote the nose and the nostrils:

[ContEl]

- (13) *Nos raningdan, bedkol.*  
 nose run.down mucus  
 ‘His nose is running, with mucus.’

With respect to “nose” and “nostril”, the respective denotations of *dje-no* and *nos* display an accurate match.<sup>33</sup> Across species, the BK speakers I have interviewed used *nos* exactly like Dalabon speakers used *dje-no*. For instance, the tip of the nose

<sup>33</sup> However, it seems that *nos* cannot be used to describe the hook of spear-throwers (which is called *huk* (<Eng. “hook”)).

is salient on crocodiles; gestures and counting practices are identical, etc. The expression *noshol*, (<Eng. “nose”+“hole”) replicates Dalabon *dje-dun-no* (literally “nose hole”), for “nostril”.<sup>34</sup>

While BK *nos* replicates the “nose”/“nostril” polysemy found in Dalabon, BK *nos* does not occur with the “face” denotation. Instead we find *feis* (<Eng. “face”):<sup>35</sup>

[Sc] [About signs of pregnancy.]

- (14) *Laiik if dat mamivan im grou rili puti feis en lait skin.*  
 like if DEF mother 3sg grow very pretty face and light skin  
 ‘Like if the mother’s face gets really pretty, and light skin.’

The table compares the lexical structures of the lexemes presented above.

	SMALLER PART	LARGER PART	WHOLE
Dalabon	<i>dje-no</i>		
Dalabon	<i>dje-dun-no</i>		
BK	<i>nos</i>		<i>feis</i>
BK	<i>noshol</i>		
English	<i>nostril</i>	<i>nose</i>	<i>face</i>

Figure 11. Compared lexical structures of Dalabon *dje-no* and *dje-dun-no*, BK *noshol*, *nos* and *feis*, English *nostril*, *nose* and *face*.

More data on Jawoyn, Rembarrnga, Mayali, and Roper Kriol is needed to clarify the source of the “nose”/“nostril” polysemy in BK. Considering the precise match in denotational range between Dalabon *dje-no* and BK *nos*, transfer from local languages is an attractive hypothesis; on the other hand, borrowing from Roper Kriol remains a possibility.

But the status of BK *feis* raises a more intriguing question. So far, all the polysemies observed in Dalabon, while absent from English, were replicated in BK. Yet the “nose”/“face” extension is not. Instead, BK has a dedicated lexeme,

<sup>34</sup> The use of *nos* rather than *noshol* for “nostrils” seems to be gaining ground among younger speakers. This became apparent when I interviewed a 60-year-old BK speaker of Mayali background along with her 35-year-old daughter (also a speaker of Mayali). All along the interview, the younger speaker kept using *nos* for “nostril”, while her mother insisted in correcting her the whole time, implicitly relying on her parental authority, to impose the use of *noshol*—with little or no success.

<sup>35</sup> The two older BK speakers I worked with, who have learnt BK as adults and have not been extensively exposed to English, both display the same bias with respect to the word *feis* in BK: they do not seem to use it spontaneously, and they interpret it as denoting the nose.

*feis*. Influence from Roper Kriol could be an explanation, since Roper Kriol is not reported to have a lexeme covering both “nose” and “face” (Dickson pers. comm.). But the study of the lexemes denoting the head, namely Dalabon *kodj-no* and BK *hed*, indicates that this is probably not a good explanation. Section 5 presents these two lexemes, before returning, in section 6, to the question of why BK *nos* does not extend to denote the face.

## 5. Around the head

### 5.1 Dalabon *kodj-no* “crown of head”, “head”

#### 5.1.1 Denotational range

Dalabon *kodj-no* is an adequate translation for the English body-part term “head” in most situations.<sup>36</sup> Across species, *kodj-no* denotes the upper part of the body, the body-part that contains the brain, the locus of intellect.<sup>37</sup> Used metonymically for the brain,<sup>38</sup> *kodj-no* refers to an important part to be consumed when a kangaroo is killed; the word may also refer to the edible part of a yam. Both Dalabon *kodj-no* and English *head* can refer to the whole head or to a part of the head of a human or an animal, depending on the context. There are contexts where *kodj-no* can only be the crown of the head, not the whole head, as in example (15). But usually, it is ambiguous which portion of the head is being referred to.

[Sc]

[After explaining how a kangaroo head gets split to open the skull and access the brain.]

- (15) *Duway-no*                      *buka-b-Ing-marnu-yin*  
          husband-3sg.POSS      3sg>3sg.h-R-SEQ-BEN-say:PR

<sup>36</sup> There is another term, *bamburridj-no*, which has cognate forms in Jawoyn. *Bamburridj-no* is very rarely used, and for that reason I will leave it out of this study.

<sup>37</sup> KODJ is used in compounds related to intellectual functions and states (e.g. *kodj-mayah*, KODJ+“lost”: “think wrongly”, *kodj-muk*, KODJ+“cover”: “forget”), and also, via a complex network of metaphors and metonymies, the social individual (e.g. *kodj-ngalka*, KODJ+“find”: “have a child”, *kodj-djawan*, KODJ+“ask”: “seek “official” permission”). See Ponsonnet (2009).

<sup>38</sup> The specific term for the brain is *kodj-kulu-no*.

*nunda ngey nga-b-dulubun-inj*

DEM 1sg 1sg-R-spear-PP

*da-b-lng-kodj-ngu-n ngey kunj-yelung*

2sg>3-R-crown.head-eat:PR 1sg kangaroo-?common.POSS?

*nga-b-yin.*

1sg-R-say:PR

‘Then her husband would say to her, I killed one, you can eat the head [the content of the skull, the brain] of our common kangaroo, here it is.’

### 5.1.2 Salient denotation

The Dalabon term *kodj-no* and English term *head* appear in many respects to overlap semantically. There is, however, an important difference between *kodj-no* and *head*: the salient denotation of *kodj-no* is not the whole head, but the crown of the head. Gestures that accompany speech are informative in this respect: in a hunting narrative collected by Sarah Cutfield, for instance, a speaker pointed at the top of his skull, raising his arm above his head, as he explained how he speared a kangaroo in the head.

That *kodj-no* primarily denotes the crown of the head also becomes clear in various stimuli-based tasks. In pointing tasks, speakers most systematically point at the curve of the skull or at the tip of the skull when asked to point at *kodj-no*. In colouring tasks, speakers only colour the crown of the head. In contrast, English speakers usually circle the whole head with their finger in pointing tasks, and colour the whole head in colouring tasks. Listing practices provide further evidence: speakers list *kodj-no* along with *mumu-no* ‘eyes’, *dje-no* ‘nose’, and *dalun-no* ‘mouth’. Order, gestures and intonation indicate that these parts are on the same level (rather than *kodj-no* ‘head’ containing the others). In one of the tasks, speakers attributed labels to the parts of a car.<sup>39</sup> The part they labeled *kodj-no* was the roof, as shown on Figure 12. Like with *dje-no* and the face, *kodj-no* comes to denote the whole head only when triggered by context (for instance, when

<sup>39</sup> One speaker deemed the exercise creative, as she claimed most car parts weren’t assigned a conventional name in Dalabon.

describing the picture of a whole body without a head) or by an explicit question or gesture.

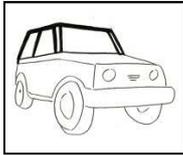


Figure 12. Part of a car labeled *kodj-no* (in bold).

Since the “crown of head” denotation of *kodj-no* is so prominent, and because most contextualised examples allow, strictly speaking, both a “crown of head” and a “whole head” interpretation, one may wonder if *kodj-no* actually means “whole head” at all. Stimuli-based tests, however, made it clear, as in Figure 13 where a head without a crown was described as *kodj-no*. Interestingly, speakers’ responses to this picture and to other tests showed that the “whole head” denotation of *kodj-no* is slightly more prominent than the “face” denotation of *dje-no*.

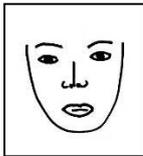


Figure 13. Drawing used in polysemy tests about *kodj-no*.

In addition, reactions to Figure 13 suggested that *kodj-no* is probably polysemous (rather than monosemous) between “crown of head” and “head”. One of the speakers willingly accepted and repeated the statement *kodj-no kab-kodj-dih*, “this *kodj-no* has no *kodj-no*”—“this head has no crown”—thus grouping the two denotations of *kodj-no* in one utterance. As stated in section 4.1.2.2, a parallel statement with *dje-no* (“this *dje-no* has no *dje-no*” for “this face has no nose”) was deemed abnormal. This was interpreted as an indication of the low salience of the “face” denotation of *dje-no*. With *kodj-no*, a sentence including both denotations was accepted. This confirms that the “whole head” denotation of *kodj-no* is slightly more accessible to speakers’ metalinguistic awareness than the “face” sense of *dje-no* (consistent with what was found in pointing tasks).

5.1.3 Meronymy

Neither *dje-no*, which primarily means “nose”, nor *kodj-no*, primarily “crown of head”, have larger parts of the head as salient denotata. These other denotata are only remotely accessible to speakers’ metalinguistic awareness. Echoing these lexical features, Dalabon speakers describe heads as assemblages of features rather than wholes. This has consequences with respect to Dalabon lexical hierarchies, namely the human and animal body meronymy (see Cruise 1986:157-180). In most languages in the world, including English, there is a “primary” label for “head”, and it occupies the first level of the hierarchy under the “body” label (Brown 1976:405). But in Dalabon, it is “crown of head”, *kodj-no*, that sits on the same level as the limbs and the trunk, along with other features of the head and face. Hence the Dalabon body meronymy (Figure 14) differs from cross-linguistically standard body meronomies (Figure 15).<sup>40</sup> While the Dalabon pattern is unusual, other languages in the world also diverge from the standard meronymy (see Terrill (2006:307) about Lavukaleve, Papuan, Solomon Islands).

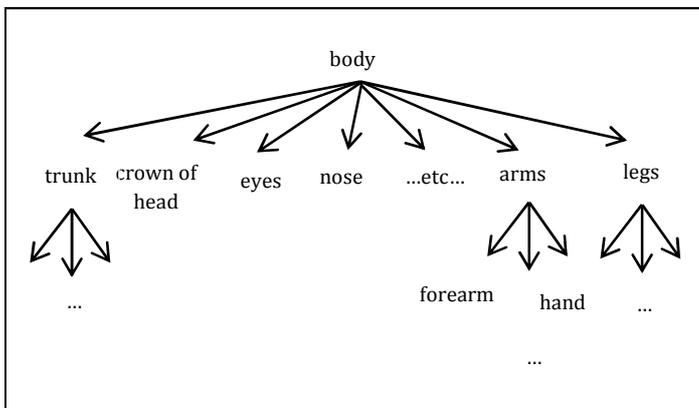


Figure 14. Dalabon body meronymy.

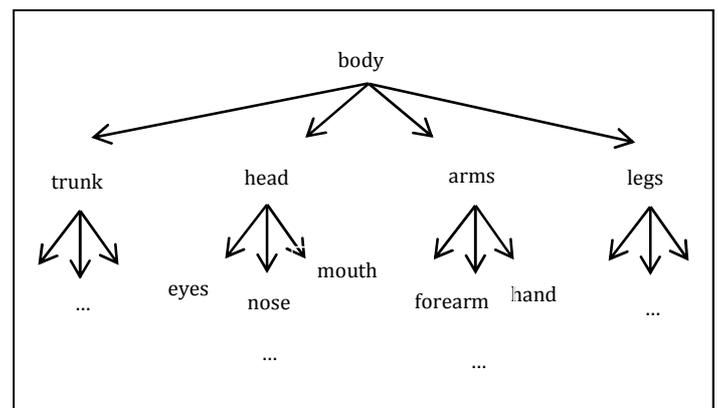


Figure 15. English body meronymy.

Interestingly, the crown of the head takes some importance in a number of culturally specific situations. One example is the distribution of game: as indicated in example (15), the skull containing the brain, once cut off from the rest of the head, is a valued staple and an important social symbol in sharing.<sup>41</sup> Another context that comes to mind is the observation of animals in long grass, or

<sup>40</sup> Alternatively, on Figure 15, “crown of head”, “eyes”, “nose” etc. may align with the level below, on the same level as “hand”.

<sup>41</sup> It may be noted that one of the youngest BK consultants, in her early twenties, claimed that *kodj-no* “crown of head” and *dengu-no* “foot”, named on the photo of a kangaroo, were the only two Dalabon words known to her (in fact, she probably has passive knowledge of more lexemes).

crocodiles in water, where the crown of the head would often be the crucial body-part to be spotted.<sup>42</sup>

It is possible to risk a speculative explanation with respect to this specificity of Dalabon. As pointed out in section 4.1.1, Dalabon (and BK alike) has only one set of body-part terms. These body-part terms apply across species, whether human or animal. It was also shown in the same section that shape is an important factor in determining the denotational range of a given term. Animals' heads (crocodiles in particular, but also emus, and kangaroos to a lesser extent) are somewhat more likely to be visually perceived as an assemblage of features as opposed to a human head, which is relatively spherical. With many animal species, the nose doesn't look like an appendix on a flat face as it does on humans (yet when prompted, speakers can also use *dje-no* to label the whole face of animals like kangaroos, including the snout, the eyes, the jaws etc.). A similar point could be made about limb extremities (front limbs in particular) where digits are more identifiable visually on humans than on most other species. Thus, it is possible that Dalabon lexical divisions with respect to body-parts are modeled on speakers' perceptions of animals rather than humans (for a similar case in a Papuan language, see Levinson (2006:232)).

## 5.2 *Barunga Kriol hed and gabarra*

BK has two words for head: *hed* (<Eng. "head"), and *gabarra* (<NT Pidgin "gabarra" <Sydney language, Harris 1986:288). BK speakers of Dalabon background use *hed* exclusively, but I have collected data about *gabarra* with BK speakers of Mayali background. *Gabarra* is also found in Roper Kriol, also meaning "head" (Harris 1986:288).

*Hed* is found in the same range of contexts as *kodj-no*. It is also treated as the locus of intellectual functions, and can refer to the part of the skull to be eaten in a kangaroo. I haven't observed that it can refer to the edible part of a yam, but apart from this, the denotational range is exactly the same as with *kodj-no*. Pointing tasks and stimuli-based tests demonstrate that the primary denotation of *hed* is the same as with *kodj-no*, i.e. "crown of head". The label comes to denote the whole head in

<sup>42</sup> It may be noted that cutting off the head of an animal when roasting it (whether a turtle, a goanna, a fish, a kangaroo, or a bird) is unnecessary and, to my knowledge, unusual.

the same situations as with *kodj-no*, i.e. when it is induced by the context or by a question.

BK has another term for “head”, namely *gabarra* (<NT Pidgin “gabarra” <Sydney language), which is not used by BK speakers of Dalabon background. However, the data collected with the speakers of predominantly Mayali background show that *gabarra* covers the same range of denotations as BK *hed* (and Dalabon *kodj-no* within the body-part domain). Like with *hed* and *kodj-no*, the primary denotation is “crown of head”. This point is particularly interesting because the form *gabarra* is also found in Roper Kriol, albeit apparently with a different, more standard lexical structure (Dickson pers. comm.).

### 5.3 Substrate transfer

Since this particular lexical structure of BK *hed* and *gabarra* is not reported for Roper Kriol, and since it is too unusual to exemplify any universal trend,<sup>43</sup> it must result from a transfer from local features. This is further supported by the fact that the salience of the “crown of head” denotation is also found in Mayali (Garde pers. comm.).

The fact that this substrate feature transferred to BK is particularly interesting because *kodj-no*, *hed* and *gabarra* encapsulate unusual aspects of the Dalabon body meronymy. The lexical structure of *dje-no* (“nose”, “nostril”, secondarily “face”) and *kodj-no* (“crown of head”, secondarily “head”) match the fact that Dalabon speakers describe the head and face as an assemblage of features rather than a whole (section 5.1.3). This distinctive aspect of the descriptions of the body channeled by Dalabon is replicated with the lexical structures of *hed* and *gabarra*. But as we saw in section 4.1.2, it isn’t entirely replicated, since BK has *feis* for “face”. Native BK speakers’ reactions in pointing tasks also show that they are much more familiar with the concept of the face as a whole than speakers whose mother language is Dalabon.

<sup>43</sup> While the “hand”/“arm” polysemy, being cross-linguistically common, could have been reinforced by universal trends, this does not apply to the “nose”/“face” monosemy. “Eye” and “face” are often merged across languages of the world (Andersen 1978:356; see also Brown & Witkowski 1981; Burenhult 2006:166; Wegener 2006:346), but this is less frequent with “nose” and “face”. It is not particularly frequent in Australia either (although it does occur, see Gaby (2006:211) for Kuuk Thaayorre).

## 6. Why doesn't BK *nos* extend to mean “face”?

Of the 5 Dalabon polysemies (or semantic extensions) presented above—*langu-no*: “hand”/“finger”; *dengu-no*: “foot”/“toe”; *dje-no*: “nose”/“nostril”; *dje-no*: “nose”/“face”; *kodj-no*: “crown of head”/“head”—only one, the “nose”/“face” extension, is not matched in BK. Why does it stand out? Influence from Roper Kriol is possible, but since BK *hed* and *gabarra* match Dalabon lexical structures regardless of the fact that Roper Kriol *gabarra* is reported to have a different lexical structure, we still need to explain why things are different in the case of BK *nos*. The existence of *feis* in BK probably reflects superstrate influence from English, but why does superstrate influence apply here, when I does not apply elsewhere? Two hypotheses are considered in the following sections.

### 6.1 Reinforcement principle

In order to explain why not all features of substrate languages transfer to creoles, Siegel suggests two regulatory principles, namely the availability constraint and the reinforcement principle (Siegel 2008). According to Siegel, the mechanism of transfer results in a large pool of L1 (the substrate) structural features being imposed on L2. But which subset of these features are retained in the stabilized creole depends on whether a given feature is common to several substrate languages, or restricted to one or a few. This reinforcement principle may explain the lexical structure of BK *nos*.

Apart from Dalabon, both Bininj Gun-wok and Rembarrnga have a term for “nose” which also means “face”, but Jawoyn does not. This absence could explain the presence of a lexeme meaning “face” in BK. This hypothesis is complicated by the fact that Jawoyn does not seem to have a term meaning “face”. Nevertheless, divergence between substrates may have prevented transfer. However, this hypothesis also forces us to admit that Jawoyn would have had a significantly greater influence on BK than did other substrate languages.<sup>44</sup> We would have to accept that the absence of the feature at stake in Jawoyn alone would have been enough to prevent *nos* from acquiring the sense “face”. Section 2.2.3 also hypothesized that the possible polysemy between “hand” and “arm” in BK may have been inspired by Jawoyn. If these hypotheses confirm, then Jawoyn

<sup>44</sup> This hypothesis echoes one put forward by Dickson (pers. comm.) about Marra in the Roper region.

influence at the time when creole emerged would have been significant. This is not inconsistent with what is known of the language ecology around Barunga at the time (see 1.2), but further historical research is needed to assess this hypothesis.

## 6.2 *The nature of polysemies*

In addition, the nature of the semantic extensions at play in each case of polysemy may also contribute to explain why certain lexical features have transferred to BK, and others haven't. The 5 polysemies considered so far can be grouped into two types, as shown in Figure 12. The second line of the table lists the lexemes in Dalabon and in BK. The third line displays the primary denotation first (in capitals), then the secondary denotation (in lowercase). In the "type 2" columns, the second denotation appears between parentheses because it is not a well-identified sense. The last two lines show which polysemies are present in Dalabon (all of them), and then in BK (all but the "nose"/"face" semantic extension).

I call the three following cases type 1:

- *langu-no*, "hand" and "finger";
- *dengu-no*, "foot" and "toe";
- *dje-no*, "nose" and "nostril".

In these cases, the pattern of the polysemy is as follows:

- the larger part denotation is the primary denotation;
- the smaller part denotation is secondary but well-identified (the lexemes are polysemous).

The "nose"/"face" semantic extension in *dje-no* and the "crown of head"/"head" semantic extension in *kodj-no* present a different pattern, which I call type 2. This pattern shows the following characteristics:

- the primary denotation is the smaller part denotation;
- the whole denotation is extremely secondary (speakers are hardly aware of this sense of the word).

	TYPE 1			TYPE 2	
	<i>langu-no</i> <i>bingga</i>	<i>dengu-no</i> <i>but</i>	<i>dje-no</i> <i>nos</i>	<i>dje-no</i> (not <i>nos</i> )	<i>kodj-no</i> <i>hed, gabarra</i>
	1. HAND  2. finger	1. FOOT  2. toe	1. NOSE  2. nostril	1. NOSE  (2. face)	1. CROWN of head  (2. head)
Dalabon	YES	YES	YES	YES	YES
BK	YES	YES	YES	NO	YES

Figure 12. Summary of semantic extensions.

With type 1, the semantic extension goes from the larger to the smaller part; with type 2, from the smaller part to a larger part denotation. These patterns are inherently different. While type 1 is pragmatically automatic and predictable, type 2 isn't. If I have a cut on my finger, strictly speaking it remains accurate to say that I have a cut on my hand.<sup>45</sup> In contrast, if I have a pimple on my cheek, it is not automatically granted that I can say that I have a pimple on my nose. A different mechanism of semantic extension is at play.<sup>46</sup>

Based on these patterns, we can observe that all the Dalabon polysemies falling under type 1 are replicated in BK. Type 2 polysemies diverge: BK *hed* and *gabarra* match Dalabon *kodj-no*; but BK *nos* does not entirely match *dje-no*—BK has an extra lexeme, *feis*. This difference is easily explained by Siegel's availability constraint, which stipulates that a common, morphologically integrated, perceptually salient element must be available for the substrate feature to transfer

<sup>45</sup> It may be deemed unacceptable for pragmatic reasons (because of a maxim of quantity, Grice 1975:45), but in terms of truth conditions, it is true to the extent that the finger is part of the hand.

<sup>46</sup> This echoes a remark by Wilkins (1996:275), who states that semantic extensions from part to whole and extensions from whole to parts are not logically symmetrical. In the context of the human body, the concept of a part calls for the concept of a whole, while when we have the concept of a whole, we do not need the concept of a part. My claim seems to reverse the pattern, stating that a whole calls for a part, while a part does not call for a whole. I believe these claims are in fact similar, the difference being that Wilkins considers the point in diachrony, while I consider synchronic matters.

to. The English expression “crown of the head”, a fairly uncommon collocation in ordinary speech, is not a good candidate to support transfer. English has only one ordinary term, *head*, to talk about both “head” and “crown of head”—whereas with the face and the nose, both English terms are available to support transfer. Thus the availability constraint predicts that BK *hed* had to encode both senses.

As a result, out of the 5 cases presented in Figure 12, the “nose”/“face” extension remains the only Dalabon semantic extension for which the availability constraint is satisfied, and which is not matched in BK. It is tempting to hypothesize that the fact that the “face” extension of *dje-no* is structurally different, and is a very secondary extension, may have affected the transfer of this lexical feature.

If this is correct, the factors modulating transfer have to do with the nature of the semantic extension at stake in the lexical structure of a given lexeme. This point is important, because while it confirms the importance of substrate influence, it also suggests that substrate influence may be modulated by universal trends. These trends may dictate which lexical structures are more easily replicated in creoles than others, depending on the intrinsic nature of these features. The scale of the present study is too limited to allow firm conclusions on this point. Further research on local language ecologies, on the body-part lexicon in Jawoyn, Rembarrnga, Mayali and Roper Kriol, and on similar issues in other regions of Australia is necessary in order to explore the above hypotheses.

## 7. Conclusions

I have presented and analysed four Dalabon lexemes and their counterparts in BK: *langu-no* and *bingga*, “hand” and “finger”; *dengu-no* and *but*, “foot” and “toe”; *dje-no* “nose”, “nostril” and “face”; *nos* “nose” and “nostril”; *kodj-no* and *hed* (or *gabarra*) “crown of head” and “head”. All these lexemes merge lexical distinctions present in the lexifier, English. Overall, BK lexical structures in many respects resemble Dalabon (and other local languages’) lexical structures more than English. However, there are mismatches.

This is the case in particular with the semantic extension from “nose” to “face” in Dalabon *dje-no*. This extension is not replicated by BK *nos*, which cannot denote the face. Among the cases presented in the article, this semantic extension stands out as the only one without a BK counterpart. The lexical study reveals that the particular nature of this semantic extension may contribute to explain why it did not transfer to BK. Most lexemes have a larger part as a primary denotation, and a smaller part as a secondary, but well-identified denotation. With the “face” sense of *dje-no*, things are reversed. The primary denotation is the smaller part; the larger part denotation is extremely secondary, and is very remote in speakers’ metalinguistic awareness. I hypothesize that the nature of this semantic extension may have impeded the transfer of this feature.

The fact that the “nose”/“face” extension is not replicated in BK is a significant shift. Indeed, it is a remarkable Dalabon specificity that neither the head nor the face are the primary denotations of any lexemes. As a result, the Dalabon body meronymy displays an unusual pattern. Echoing these particularities, Dalabon speakers prefer to describe the head as an assemblage of features rather than a whole. While some of these aspects persist in BK, a shift towards more standard/English descriptions of this part of the body is perceptible. The existence of the lexeme *feis*, with “face” as its primary denotation, goes hand in hand with the fact that in pointing tasks, Kriol speakers tend to identify the face as a whole more spontaneously than native Dalabon speakers.

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