



ARC CENTRE OF EXCELLENCE FOR
THE DYNAMICS OF LANGUAGE



The Wellsprings of
Linguistic Diversity

Words and Dictionaries

Nicholas Evans

The Australian National University

Nicholas.Evans@anu.edu.au

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Kulu Language Institute, Honiara



Dictionaries, semantics and the quest for meaning

- The essence of linguistics is the quest for meaning (Whorf 1956)
- Different languages organise meaning in different ways
- The field of *semantics* is the part of linguistics where we study meaning
- We need to learn tools from semantics in order to build good dictionaries – the places where we gather all the words expressing meaning in a language

What is a dictionary?

A record of (all) the words in the language, showing:

spelling / pronunciation

meaning (one or more)

part of speech (noun, verb etc.)

examples

(if available: origins of the word ('etymology'))

Purpose: to give a guide to how to use every word in the language with its proper meaning, pronunciation and grammar

Dictionaries and the record of a language

Dictionaries are only part of the record of a language. They go together with:

(a) a grammar showing how words are built up, and fitted together into sentences (Dr Zobule's class, Tuesday)

(b) a collection of 'texts' – stories, conversations, songs, jokes – written, audio, video – which show how the language is actually used and preserve the wealth of knowledge passed down through the language

Different types of dictionary

- Monolingual (e.g. English only)
- Two-way bilingual balanced (e.g. English-Chinese; Chinese-English)
- One-way bilingual with finder list (e.g. Toqabaqita-English, with English-to-Toqabaqita finder list)
- Book dictionary vs multi-media dictionary (e.g. sound files, video files, app dictionary on phone)
- Offline (book, pdf file) vs online (e.g. Nen dictionary <https://dictionaria.clld.org/contributions/nen>)

Making is a full dictionary is a big, long job

Kalam dictionary (Andy Pawley and others, 2011) (PNG) – around 6,000 headwords and 14,000 distinct lexical units – team worked on this for 50 years

Toqabaqita dictionary (Lichtenberk 2008) – around 6,000 headwords and 9,000 distinct meaning – about 25 years, but built on earlier work James Caulfield and Clara Waterston (1924)

But don't let that put you off!

It is possible to start by making smaller dictionaries (e.g. with annual in-progress printouts), or by breaking down the job into meaning-groups (e.g. words for fish, words for house-building, words for family) which is how the Samoan dictionary has been built up

The Nen 'dictionary pole' in Bimadbn village, PNG – where each year we record the number of words in the dictionary so far



And there is now good software that can help

Computer programs like

Flex

WeSay

can help you build up dictionaries – Nick T will talk about these briefly later.

But for today we concentrate on the basics of how to make sure each word is well-covered, since that is the human job that you need to do anyway.

Words and ways of thinking

Languages differ widely in their vocabularies.

Very few words mean exactly the same thing from one language to another – because each language has developed its own way to make sense of the world

A challenge in dictionary-making is to show what each word means in a precise but understandable way

Example One: 'brother' and 'sister'

These seem like simple words – but do they work the same way in all languages?

How to discover a language's inner logic (emic – speakers' own concepts) as against universal logic (etic – all possibilities)

You are trying to learn a language – old-style Tok Pisin (the way brata and sista works is now more like English for most speakers, but used to be like this).

You talk to a man and point to another man who you know to be his brother:

'What do you call him?'

He replies: *brata blong mi*

To the same man, you point to a woman, who is his sister, and ask him:

'What do you call her?'

She replies: *susa blong mi*

Can we conclude that
brata means 'brother' and
susa means 'sister' ??

Meanwhile your female co-worker

...has asked the same questions to a woman:

She pointed to a man, who she knew to be the woman's brother, and asked her:

What do you call him?

The woman replies: *susa blong mi*

Then she points to a woman, who she knows to be her sister, and asks:

What do you call her?

She replies: *brata blong mi*

Conclusion (for this old-style of Tok Pisin, but for many others as well)

Brata: brother of a man, sister of a woman; 'same-sex sibling'

Susa: sister of a man, brother of a woman; 'opposite-sex sibling'

The story so far

English	Male referent	Female referent
Male speaker / ‘anchor’	<i>brother</i>	<i>sister</i>
Female speaker / ‘anchor’	<i>brother</i>	<i>sister</i>

Tok Pisin (old-style)	Male referent	Female referent
Male speaker / ‘anchor’	<i>brata (=)</i>	<i>susa (≠)</i>
Female speaker / ‘anchor’	<i>susa (≠)</i>	<i>brata (=)</i>

Emic concepts: those used by the speakers of the language – are shown by the colour groupings.

The ‘etic grid’ – our logical way of analysing the concepts into their smallest parts – is shown by the squares in the table

Translating between Kayardild and English

Word	Rough meaning	True meaning
<i>thabuju</i>	Brother	Elder brother (of a man)
<i>kularrint</i>	Brother, sister	Brother (of a woman), sister (of a man)
<i>yakukathu</i>	Sister	Elder sister (of a woman)
<i>duujint</i>	Brother, sister	Younger brother (of a man); younger sister (of a woman)

Just looking at ‘brother’ and ‘sister’ there are over a thousand ways languages can do things – here are the **commonest**

Figure 0.1. *Some Possible Sibling Term Systems*

	♂ referent		♀ referent		
	♂ speaker	♀ speaker	♂ speaker	♀ speaker	
(elder)	1	3	5	7	Maximal
(younger)	2	4	6	8	
(elder)	bi:	ubaj	edzij	ayas	Yakut
(younger)	ini	surus	balis		
(elder)	tuqa(ka)	m ^w aqane	papine	tuqa(ka)	proto Oceanic
(younger)	taci			taci	
(elder/younger)	worok	wili-ngo	elut-ngo	edok	Kaulong
(elder/younger)	brother		sister		English
(elder)	kakak				Indonesian
(younger)	adik				
(elder/younger)	tamania		saqi	tamania	Bilua
(elder)	ani		ane		Japanese
(younger)	otōto		imōto		
(elder)	aki:n		eki:n		Evenki
(younger)	neku:n				

Handout, exercise 1: look at the sibling terms in your
language

‘Semantic fields’ / *lan blong mining* : relating words to other words

Words are like garden plots marked off from others by fences: you need to know what they include, and when you are in the ‘territory’ of another word. Linguists call the groups of words that bound each other ‘semantic fields’

English

	Food needing cooking (application of heat)	Food not needing cooking (changes through time with no heat)
Ready to eat	<i>cooked</i>	<i>ripe</i>
Not ready to eat	<i>raw</i>	<i>unripe</i>

Kriol

	Food needing cooking (application of heat)	Food not needing cooking (changes through time with no heat)
Ready to eat	<i>kukwan</i>	<i>kukwan</i>
Not ready to eat	<i>rowan</i>	<i>rowan</i>

‘Semantic fields’ and verbs of cooking

Kayardild

karnaj ‘burn; cook (something)’; *naaj* ‘(something) burn, cook’

English

cook (\neq *burn*), *roast*, *boil*, *grill*, *fry*

Pijin

Kuki (\neq *bonem*)

motum, *kornisim*

Now do exercise 2

Special words

One of the most interesting things about making dictionaries is finding the special words that don't easily translate into English, Pijin etc. These are what give languages their special character and taste.

Two examples:

Kayardild *ngaarrngij* '(of a child) have their spiritual conception indicated by a special event, such as a large fish or animal giving itself up to the future father, or something unusual happening; this event will later give the child his name and special rights to the place where it happened', e.g.

ngada ngaarrngija bangaa [I ngaarrngij turtle]

'Something unusual involving a turtle signalled my spiritual conception'

Mundari (India): *epara-ipiri* '(1) the habit in two persons of omitting some work with the intention that it should or will be done with the other; or of putting off, now the one, then the other, a work which should be by the two together, so that the work remains undone'

Now do exercise three

Words and word families

talk *talker* *talkative* *talkfest* *talk up*

[different base words, but all in the same family or ‘lemma’]

talks *talked* *talking*

[not usually listed in dictionaries since they are different ‘inflections’ of the same word – *talk-ed* is the past tense of *talk*]

Note also the ‘heterosemy’ (class-crossing) of *talk* – in an English dictionary this is shown by putting it both as a noun (e.g. *talk* (n.)) and as a verb (e.g. *talk* (v.i.)) with different but related meanings

talk (noun)

The talk / a talk / my talk : *the dog / a dog / my dog*

talk (verb)

I talked / I am talking / I will talk: *I speak / I am speaking / I will speak*



One meaning or many?

Polysemy : one word with multiple meanings

- These meanings are distinct concepts in the mind of the speakers
- e.g. ‘head’ (body part) vs ‘head’ (of an organisation)

Monosemy : one word where a single meaning can be characterised (even though it may have more than one translation into a different language)

- e.g. ‘meal’ covers breakfast, lunch and dinner

Heterosemy : one form, related meanings, but different parts of speech (e.g. *fish* (noun) ‘gilled animal with scales living in water’, *fish* (intransitive verb) ‘engage in activity of trying to catch fish (noun) or other sea animals out of water’)

Toqabaqita: *thato* ‘1. (noun) sun 2. (verb) be sunny.

si thato kiniloqo ‘Kiniloqo’s sun’

(Fanua) qe thato naqa ‘It’s sunny now’

Finding a single meaning

An important part of dictionary-making is going through recorded stories and pulling out words for the dictionaries, along with the meanings they have in that context

Ex.: *molk-*, *molkkûn* en Dalabon

1. *Balah-molkkûn-bon*

they-MOLKKÛN-go

'They are sneaking around, without asking clan members for permission.'

[First attempt: *molkkûnbon* means 'sneak around', maybe *molkkûn-* means 'secretly']

Molkkûn #2

[An old Dalabon lady says to me when I am leaving:]

Kardûngah-molkkûn-doniyan

maybe I-molkkûn-will.die

‘I might die suddenly.’ (Context: so, leave your phone number with my family so they can contact you)

Molkkûn #3

Context: two of us cannot let another old lady know we will arrive, turn up in the night and camp nearby, then find her the next morning:

deh-molkkûn-bong *kanghno*

you.two-MOLKKÛN-came night

'You two came in the night without letting me know beforehand.'

Molkkûn #4

[Discussing a man who is sleeping on a big rock, thirsty,
and not knowing there is water underneath it]

kah-molkkûn-kolh-yu

it-MOLKKÛN-water-lies

‘There is water there, but he doesn’t know, poor feller.’

Molkkûn : summing up

Even though all these translations use different sentences, using different words in English. But we can find a single meaning for molkkûn (‘mono-semy’ – one meaning):

‘something happens, or someone does something, but someone doesn’t know’. It is left to the hearer to work out who doesn’t know:

- without me/the clan leaders knowing (people sneaking around, two of us turning up unannounced)
- without you knowing (if I die suddenly)
- without him knowing (the thirst man on top of the rock)

This is an example of how we can find a single meaning even when there are different translations

But sometimes there are several different meanings of the same word

This is ‘polysemy’ – ‘many-meanings’ and here what is interesting is tracing the way one meaning is linked to another.

We know we have polysemy when it is impossible to find a single definition that covers all the cases

An example of polysemy in Dalabon (an Aboriginal language) *karru-no*

karrû-no *n.*

1. Calf of leg.

◆ Bi kah-karru-moh-ni, bûlah-moh-dukang. Bûlah-karrû-dukang kah-moh-ni. *The man has a sore calf, they've tied up the sore. They've tied up his calf, which is sore.*

2. Leg.

◆ Biyi **karru**-boyenj, kirdikird **karru**-bik. *The man has big legs, the woman skinny ones.*

3. Song.

◆ Bûlah-**karrû**-yidjnaninji nayunghyungki dadbûkûn. *They used to have a song, the old people, for the king brown snake. [Gram: Incorporable. This extension of meaning, from 'leg' to 'song', is widespread in Arnhem Land and is mediated by the idea of there being different 'legs' or stretches of a song cycle.]*

4. Voice.

◆ **Karru-no** kah-mon, kah-melkmon. *His voice is good, he sings well.*

5. Aboriginal law.

◆ Ngorr-kûn biy-kûn **karrû-no** ngarra-wokan. *We're talking about our Aboriginal law.*

Kwaio example: polysemy and cultural knowledge

'ulasi-a	Open	open ritually, e.g. by desacralisation
lafu-a	Lift, lift up	raise for sacrifice, give up in sacrifice
fa'abono-a	Close	close up, close off ritually; block or shut off (a place, activity)
siufi-a	Wash	Ritually expiate, cleanse symbolic pollution
bani-a	Wall up (a thatch hut)	Close off ritually or magically
sifo	Descend	Become desacralised
bibi	Press down	Magically suppress; magically bury a piglet to acquire power from the spirits
fa'ala'ua	Parcel up, wrap	Expiate pollution, ritually atone

Not all cultures will extend meanings in the same way – so including different meanings like this also reveals a lot about the culture

Words and word families: a Kwaio example

ano 'ground, land' (noun)

anoa 'bury' (transitive verb)

Add *-mi-* to root

anomia 'plant something' (transitive verb)

+ transitive intensifier *me'e* (and following *m* becomes *n*)

anome'enia 'bury (it), put it beneath the surface

-me'e- > *-ma'i-*

anoma'i 'sink beneath the ground', e.g. *Sina ka anoma'i* 'The sun has set'

+ *-te'enia* 'transitive suffix plus direct object'

anoma'ite'enia 'perform magic to cause a person to waste away', that is, 'cause a person to do down, the way the sun sinks below the horizon'



‘Encyclopaedic dictionaries’ – put in the cultural knowledge that goes with words

Kalam dictionary entry for ‘cassowary (bird)’

KOBTI ... Not classified as a bird (*yakt*). The local species, to which the term used by the Upper Kaironk and Simbai people normally applies, is probably the small Mountain Cassowary, *Casuarinus bennetti*. Hunted. Cassowaries must be killed in ritually appropriate manner with blunt instrument and the flesh must be cooked on raised ovens with appropriate rituals. A man who has killed a cassowary remains ritually contaminated for several weeks. Tall men are often nicknamed **kobti**.

‘Encyclopaedic dictionaries’ – put in the cultural knowledge that goes with words

Or in the Aboriginal language Kayardild:

markurlija v.t.

1. Get “mulgri”.

Mulgri is a potentially fatal illness, whose symptoms are cramps and pains in the stomach, and/or vomiting. It results from the mixing of land and sea foods (e.g. goanna meat and fish, or yams and fish) on the one fire, or entering sea when still polluted with the fat of land foods. Shooting stars are believed to indicate that someone has just got mulgri.

2. Commit “mulgri”, i.e. commit an act causing mulgri.

‘Encyclopaedic dictionaries’ – put in the cultural knowledge that goes with words

Often this knowledge can be incorporated as an example sentence:

markuuja v.t.

Syn. of markurlija.

1. Get *malgri*.

2. Commit *malgri*.

Dadhina ngijinda dalk, ngalawanda

dalka Kungarr. Markuuwangka

daglha, markuwarri. Dagleha

hukawaha markuuwarrha,

nganyarrawa yulari diyaj,

nganyarrawa hangaa diyaj,

nganyarrawa biyarra diyaj. That's

my country, our country, Kungarr.

People must not commit malgri there.

(they) do not commit malgri. People

can die of malgri, from eating greasy

fish, or eating greasy turtle, or eating

greasy dagong.

Etymology: mar- 'hand' plus uuja

'bathe'.

Summing up: to understand a word we must know

- (i) how it combines with other words (know a word by the company it keeps), including its 'word-class' (noun, verb)
- (ii) what it means – definition (monolingual) / translation(s)
- (iii) what word-family it belongs to (e.g. read, reader, reading)
- (iv) (also useful and interesting): what its origins are e.g. bead in English ≤ prayer (German beten 'to pray') – how?
'He was at his beads'. (originally_ at his prayers (counted off by prayer-beads)
(later: the meaning shifted from 'prayer' to 'prayer (counted off by beads)'
to 'bead (used for prayer)' to 'bead' (modern meaning)

That is what we need for every word.

But full dictionaries have many thousands of words – so, a big job!

One of the great advantages of having good dictionaries – by showing how the categories of your language don't line up with English, they can make you much sharper and more accurate not just in using your own language but also in using English