

ABRALIN AO VIVO – 22/23 MAY 2020

*The grammar of well-being: how to talk
about health and illness in tropical
societies*

A gramática do bem-estar: o discurso de
saúde e doença nas sociedades tropicais

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Resumo

- Ways of talking about diseases, ailments, convalescence, and well-being vary from language to language.
- In some languages, an ailment 'hits' or 'gets' the person.
- in others, the sufferer 'catches' an ailment, comes to be a 'container' for it, or is presented as a 'fighter' or a 'battleground'.

Resumo - cont

In languages with obligatory expression of information source, the onslaught of disease is treated as 'unseen', just like any kind of internal feeling or shamanic activity.

- Do the grammatical means of talking about diseases and ailments reflect traditional attitudes and thoughts about the origins of adverse conditions?
- And what are the patterns involved in describing traditional healing practices and 'getting better'?

The main question is
How does language reflect
conceptualization and
perception of disease, its cure,
prevention, and consequences?

Resumo - cont

- My special focus is on languages from hot-spots of linguistic diversity and diseases of all sorts — especially Amazonia, with special attention to:
- **Tariana**, an Arawak language spoken in the multilingual Vaupes River Basin area. We also mention translations of COVID19 information brochures into this and other languages.

1 Preamble

- Every language has a variety of means for talking about diseases and ailments.
- The ways in which disease, ailment, recovery, and well-being are conceptualised, across languages and cultures, correlate with how people talk about them.

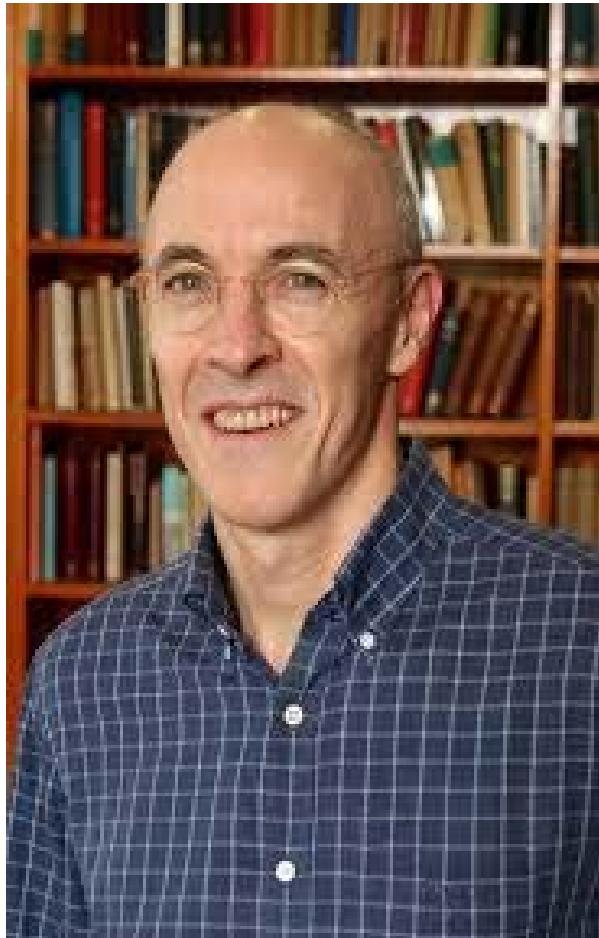
Different phases of disease or sickness

- tend to be expressed using different grammatical schemas, that is grammatical constructions
- and they may change as languages change.

Our focus is on

- grammatical means of talking about various phases of disease and sickness, across the world's languages
- and how these means may correlate with perception and conceptualization of disease

**As Nick Enfield
(2004:3) put it,**



**'Encoded in the
semantics of
grammar we find
cultural values and
ideas' and clues
about social
structures and
peoples' attitudes.**

The lexicon – or vocabulary – of any language

- is another obvious place to look for patterns of conceptualization of disease and well-being
- and we will get back to this at the very end of this presentation.

The expressions of diseases

may belong to a variety of word classes:

- They can be adjectives, e.g. English *sick*;
- They can be verbs, e.g. *be sick*, Portuguese *adoecer*, Tariana *-kamia*, Warekena *anua-*
-

- They can be nouns, e.g.
- English *fever*, *tuberculosis*,
- Tariana *iñe-itsa-le* (devil-hair-POSSESSIVE) 'tuberculosis, chest infection', *adaki* 'fever, dangerous disease', Manambu (Papua New Guinea) *ba:r* 'fever, malaria'.

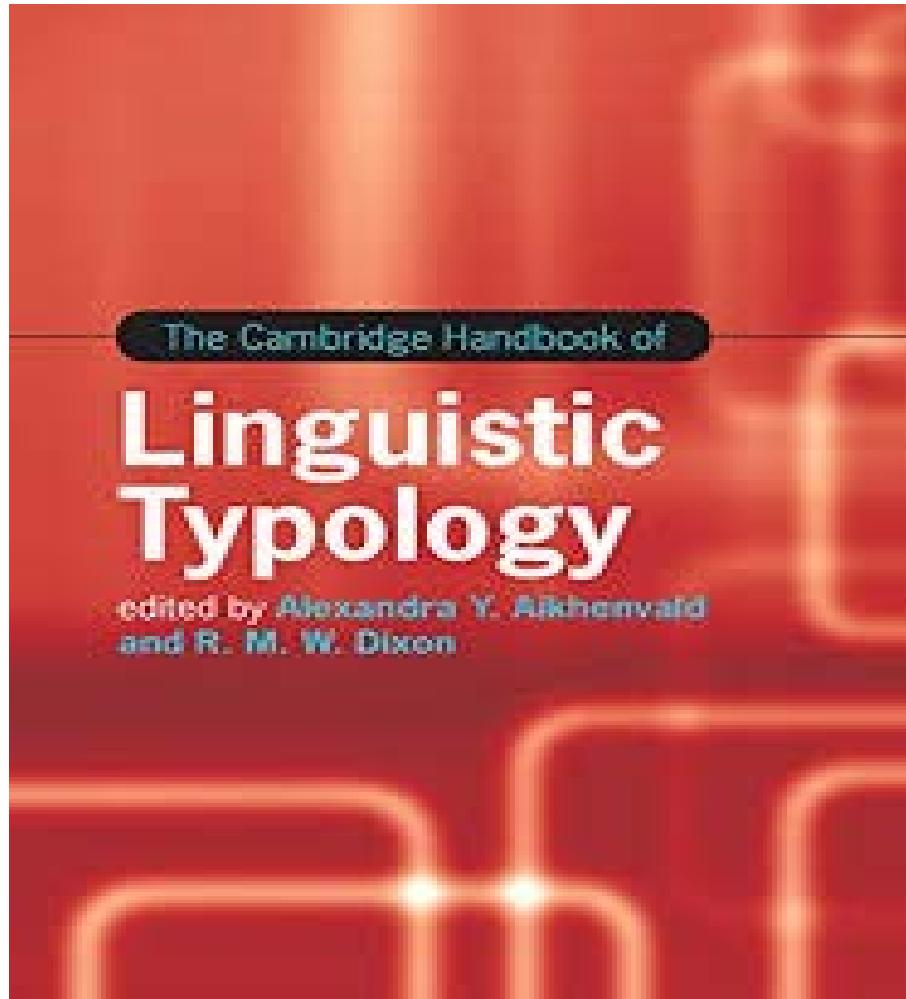
- Or different diseases and ailments can be expressed by members of different word classes.

For instance, In Tariana, the generic term 'be sick' is a verb, and names of specific diseases are nouns.

2 A Taxonomy of grammatical schemas in describing disease

- This taxonomy is based on the analysis of grammars and materials on c. 300 languages from different parts of the world, including those I did fieldwork on myself, similar to all typological work we do at the LCRC
- Cast in the framework of basic linguistic theory - see principles in:

The Cambridge Handbook of Linguistic Typology, 2017



A. Predication schema:

The disease is in the predicate slot of an intransitive clause.

A-1 State:

- **English** *I am sick, I am feverish*
- **Estonian** *külmetu-sin*
(cold+REFLEXIVE.CAUSATIVE-PAST.1sg)
'I caught a cold' (lit. I colded myself)
- **Tariana** (North-west Amazonia)
du-kamia-ka (3fem.sg-be.ill-
RECENT.PAST.VISUAL)
'she is sick'.

Estonians in Tallinn





- The Tariana people of Santa Rosa, Amazonas

A-ii. Process:

- English *I got sick, I became sick*
- Murui (Colombia)
kome raikotai- 'person become(s) sick'

Kasia Wojtylak working with a speaker of Murui, a Witotoan language of Colombian Amazonia



B. Motion schema:

Tariana

- (1) adaki di-nu-mha
fever he-come-PRESENT.NONVISUAL
nu-na
1sg-OBJECT
'Fever comes to me, meaning: I am
becoming sick with fever'.

C. Possession schema

C-i. Predicative possession and existential schema:

The 'sufferer' is the subject of the possessive verb 'have' and the disease is the possessee, as in English *I have a cold.*

C-ii. Locative possession schema:

the 'sufferer' is the location of the disease,
e.g.

- (2) ta-l on vähk **Estonian**
 he-ADESSIVE is cancer
'He has cancer' (lit. at him is cancer)

Or 'fever is to me', in Tariana:

- (3) adaki alia-mha
fever exist-NONVISUAL.PRESENT

nu-na
1sg-to

'I have fever' (lit. to me is fever)

'To me is fever'...



Possessive constructions in Schema C

- can be used if you wish to say 'I have a house', or 'I have two older sisters', you will do it in the same way.
- but expressions like (2)-(3) and *have* in 'I have a cold' in English behave differently.

- In English, one can use 'belong' to refer to a house, but not to a disease ('I have a cold' versus *a cold belongs to me). Same for Estonian, *kuuluma* 'belong'

- In English, Estonian, or Tariana, a possessor-oriented question sounds weird – 'I have a cold' versus *whose cold is this?.

D. Comitative schema

the 'sufferer' is the subject of a copula or verbless clause, and 'disease' accompanies the subject,
e.g. 'I am with fever' in Trio/Tiriyo
(Carib: Suriname, Brazil)

Or *estou com febre* 'I have fever'

Trio/Tiriyo

- (4) këi-ke n-ai pahko
fever-COMITATIVE he-is Dad
'My father has a fever'
(my father is with fever) (Carlin 2004:
475)

A Tiriyo man (Brazil)



Murui (Witotoan, Colombia)

- (5) n̄igarui oo diga jaai-de?
how.many.days you with go-it
'How many days have you had (the
sickness)' (lit. how many days does (it)
go with you?)
(Wojtylak 2018)

E. Acquisition schema with 'agentive' sufferer:

A transitive clause where the 'sufferer' is the subject and the disease is the object,

e.g. English *I caught a cold, he got malaria,*

Portuguese *ele pegou malaria* 'he got malaria'

and (6), from Baniwa, very closely related to Tariana.

Baniwa of Içana (Arawak, Brazil)

(6) whéetshi hipaka-ni
flu he.got/caught-it
'He got flu'

- Is the 'disease' here a true object?
- No: *I caught a cold* can hardly be questioned as
*What did you catch?.
- Saying *A cold was caught by me' is ungrammatical.

Afonso Fontes and Hilda da Silva (Hohôdene Baniwa) with their daughters



F. Acquisition schema with 'agentive' disease:

a transitive clause where the 'sufferer' is the object and the disease is the subject:

Manambu, Sepik area, Papua New Guinea

- (7) Malaria dekem kure-l
 malaria him get-she
'He got malaria' (lit. malaria got him)

Jacklyn Yuamali, Manambu



Trio/Tiriyo (Carib, Brazil/Surinam)

(8) j-apëi mararia
it.to.me-take.PAST malaria

'I have caught malaria' (lit. malaria has caught me) (Carlin 2004: 476)

Tariana (Arawak, Brazil)

(9) adaki dhipa-mhana

fever he+grab-REM.PAST.NONVISUAL

nu-na kaiperi

1sg-OBJECT painful

‘A painful fever grabbed me’ (meaning: I got very ill)

A split NP – for whoever is interested!

The late Américo Brito, the storyteller (Tariana)



Is the 'disease' here a true subject?

- No. It cannot be questioned: so, 'who or what caught him?' cannot be asked about a disease.
- Nor can the expression be passivized.

G. Container schema:

a copula clause or a verbless clause with the 'sufferer' in the subject function and the disease marked as a location, or a container:

Trio/Tiriyo

- (9) mararia-tao
malaria-CONTAINER.LOCATIVE
w-ae
it.to.me-be
'I have malaria' (lit. I'm in malaria,
malaria is surrounding me)' (Carlin
2004: 476)

Murui (Witotoan, Colombia)

- (10) n̥inomona nai-e oo-mo
where anaphoric you-in
komui-de raiko
grow-it sickness
'Where has the sickness grown in you?'
(Wojtylak 2018)

H. Topic schema:

the 'sufferer' is the topic in clause initial position and the disease is the subject of the subsequent clause.

Manambu (Papua NG)

- (11) de yap war-el
he breath/asthma go.up-she
'He has asthma (or heart attack)' (lit. he
breath goes up (breath/asthma is
feminine))

Mandarin Chinese and many languages of the Mainland Southeast Asia

- (12) Zha:ngsa:n hěn tóu téng
 Zhangsan very head ache
'Zhangsan has a severe headache'

(Zhangsan (,) very head ache) (Li and
Thompson 1980: 70-1)

Note the part-whole relationship between
the 'sufferer' and the affected part.

At least some of the schemas are special, e.g.

- Constructions in C Possession schema behave differently from superficially similar possessive constructions.
- But they do differ from other possessive constructions – slides 29-31 repeated here

Possessive constructions in Schema C – slide 29

- can be used if you wish to say 'I have a house', or 'I have two older sisters', you will do it in the same way.
- but expressions like (2)-(3) in Estonian and Tariana, and *have* in 'I have a cold' in English behave differently.

Slide 30

In English, one can use 'belong' to refer to a house, but not to a disease ('I have a cold' versus *a cold belongs to me). Same for Estonian, *kuuluma* 'belong'

Slide 31

In English, Estonian, or Tariana, a possessor-oriented question sounds weird – 'I have a cold' versus *whose cold is this?.

At least some of the schemas
are special, e.g.

- Constructions in E, Acquisition schema with agentive sufferer and disease as ‘object’, differ from other transitive clauses: here ‘disease’ lacks many object properties – see slide 37 repeated here:

Slide 37 -Baniwa of Içana (Arawak, Brazil)

(6) whéetshi hipaka-ni
flu he.got/caught-it
'He got flu'

- Is the 'disease' here a true object?
- No: *I caught a cold* can hardly be questioned as
*What did you catch?.
- Saying *A cold was caught by me' is ungrammatical.

At least some of the schemas are special

Constructions in F, Acquisition schema with ‘agentive’ disease, differ from other superficially similar transitive clauses: ‘disease’ lacks many subject properties – slides 42 and 44, repeated here.

Slide 42 Tariana (Arawak, Brazil)

(9) adaki dhipa-mhana

fever he+grab-REM.PAST.NONVISUAL

nu-na kaiperi

1sg-OBJECT painful

‘A painful fever grabbed me’ (meaning: I got very ill)

Slide 44: Is the 'disease' here a true subject?

- No. It cannot be questioned: so, 'who or what caught him?' cannot be asked about a disease.
- Nor can the expression be passivized.

- In B, Motion schema, the verb of motion cannot be part of a serial verb construction - see Slide 24 repeated here

Slide 24 B. Motion schema:

Tariana

(1) adaki di-nu-mha

fever he-come-PRESENT.NONVISUAL

nu-na

1sg-OBJECT

'Fever comes to me, meaning: I am becoming sick with fever'.

* di-nu-mha di-uka??? (came arrived?)

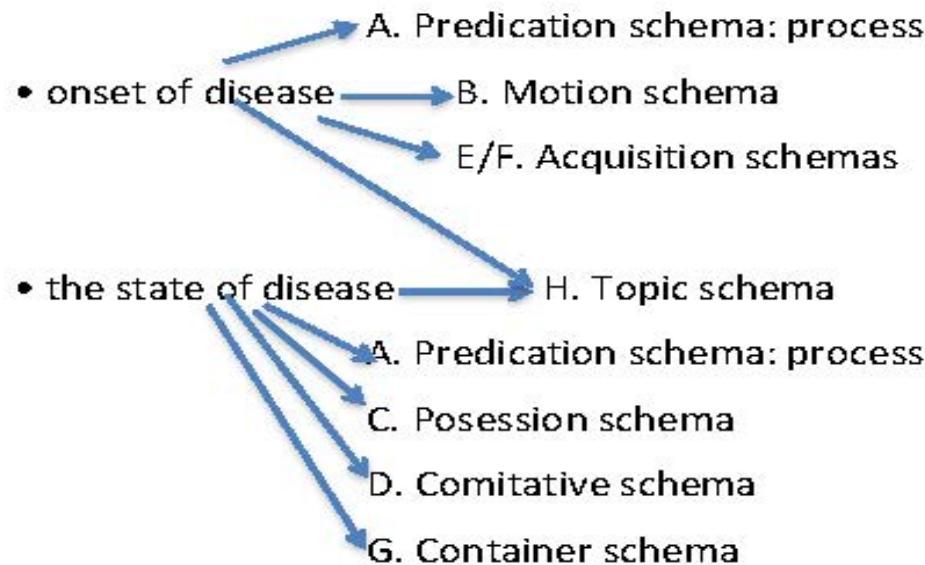
Such special features

associated with grammatical schemas used
for talking about disease/well-being

suggest

that it makes sense to talk about ‘the
grammar of well-being’.

3 Different stages of disease reflected in different schemas



So,

- Motion schema B may be used for onset/acquisition of disease
- Predication schema A-I used for the state of disease:

Tariana, (1): adaki di-nu-mha nuna
‘fever comes to me’ (nonvisual)

A-i: du-kamia-ka duha
‘she is sick’

In Trio/Tiriyo

- Acquisition schema F with agentive disease expresses the onset of disease (8).

(8) j-apëi mararia
it.to.me-take.PAST malaria
'I have caught malaria' (lit. malaria has
caught me) (Carlin 2004: 476)

- Once the disease has taken hold, Comitative schema D expresses a symptom ('fever' (4)).

(4) këi-ke n-ai pahko
fever-COMITATIVE he-is Dad

'My father has a fever'

(my father is with fever) (Carlin 2004: 475)

- Specific illnesses, such as malaria or a cold, are 'seen as an all-encompassing phenomenon', that is, an illness 'takes/grabs someone' (Carlin 2004: 476), container schema (G) is employed — the person is conceptualised as being subsumed 'inside' the illness (9).

(9) mararia-tao wae

malaria-CONTAINER.LOCATIVE it.to.me.be

'I have malaria' (lit. I'm in malaria, malaria is surrounding me)' (Carlin 2004: 476)

The stages of well-being in Trio:

Onset of disease:	F. Acquisition schema (agentive disease): 'Fever catches me' (8)
Once the disease has taken hold	D. Comitative schema - 'I am with fever' (5)
Disease set in:	G. Container schema - 'Fever is surrounding me, I am in fever' (9)

How about the subsequent stages — Recovery and getting well?

I. Change of state-cum-motion schema:

Tariana

(13) Matsia di-a-ka

well he-become/go-RECENT.PAST.VISUAL

'He got better, got well'

-

J. Predication schema

Baniwa

- (14) hálhaame nhoa
 be.better I
 'I got better, am well'

More?

What about inflicting and spreading disease, and curing it (that is, orchestrating recovery)?

And more?

The questions are -

What are the cognitive and attitudinal underpinnings and motivations for the use of each particular schema?

The questions are -

- What are the cognitive and attitudinal underpinnings and motivations for the use of each particular schema?
- Can we provide an explanation for their choice?

Establishing trajectories of well-being will help provide answers!

The trajectory of well-being

- For each language and society, this will be a combination of the ways of verbally describing the various stages of
 - onset of disease
 - disease setting in
 - disease on the wane
 - disease cured, sufferer recuperating

And the schemas will come in handy!

4 The trajectory of well-being: an example from Tariana

- Tariana (Arawak) is spoken by no more than 100 people in three villages in the remote areas of north-west Amazonia, Brazil (border with Colombia), in the basin of the Vaupés River.
- The language is endangered. There is a dictionary, a large collection of stories, a lengthy grammar (see the references), and a school program.

- The State of Amazonas in Brazil





- The municipality of São Gabriel da Cachoeira and the area known as Cabeça de Cachorro (Dog's head), and adjacent areas

Travelling on the Rio Negro before turning off to the Vaupés



Travelling on the Vaupes



Our arrival in the Tariana village of Santa Rosa, border between Brazil and Colombia



Only c. 100 of 3000 ethnic Tariana

- speak the language...
- A few speakers have now moved to Iauarete, a mission centre, and to São Gabriel da Cachoeira, the capital of the municipality (same name)
- SGC is among the most indigenous cities of Brazil, and the one with the largest number of COVID-19...

‘Sleeping beauty’ (‘Bela Adormecida’: Kurikuriari) – a view from SGC



O porto: SGC



Rafael Brito,
Serewhali Enu
Irine, – one of the
most eminent
Tariana - lives
and works in
SGC



His father
Leonardo Brito
is one of the
few remaining
elders who
speak the
language and
know the lore



The Tariana are highly multilingual

Tariana belongs to the Arawak language family. It is surrounded by speakers of unrelated Tucanoan languages. The main principle of organization is 'linguistic exogamy':

- 'My brothers are those who share a language with me', and
- 'We do not marry our sisters'
- One absolutely has to marry a spouse who will speak a different language (those who do not do this are 'like dogs')
- As a consequence, the area is highly multilingual: every Tariana would know a few Tucanoan languages, plus Portuguese and Spanish.

- Tariana's closest relative is Baniwa of Içana, also Arawak. Baniwa is a bigger group (more than 5,000 people). It is spoken outside the multilingual Vaupés, so there is no influence from Tucanoan.
- Baniwa shares 70-80% lexicon with Tariana.
- Baniwa is different from Tariana in many structural aspects, including talking about disease.

How to talk about disease in Tariana

- The general term for a serious disease is *adaki* which also means 'fever' (as one of the symptoms).
- Minor diseases which can be treated with white people's medicines or herbs include *wesi* 'flu' (cf. Baniwa *whéetshi* (6)).

What causes *adaki*?

- The main reason for onset of *adaki* 'serious disease' is believed to be shamanic intervention, often superficially realised as 'anger'.
- This is why 'scolding' has negative and dangerous connotations: by scolding (*di-kwisa*) someone could inflict a serious disease..

The concept of *puaya*

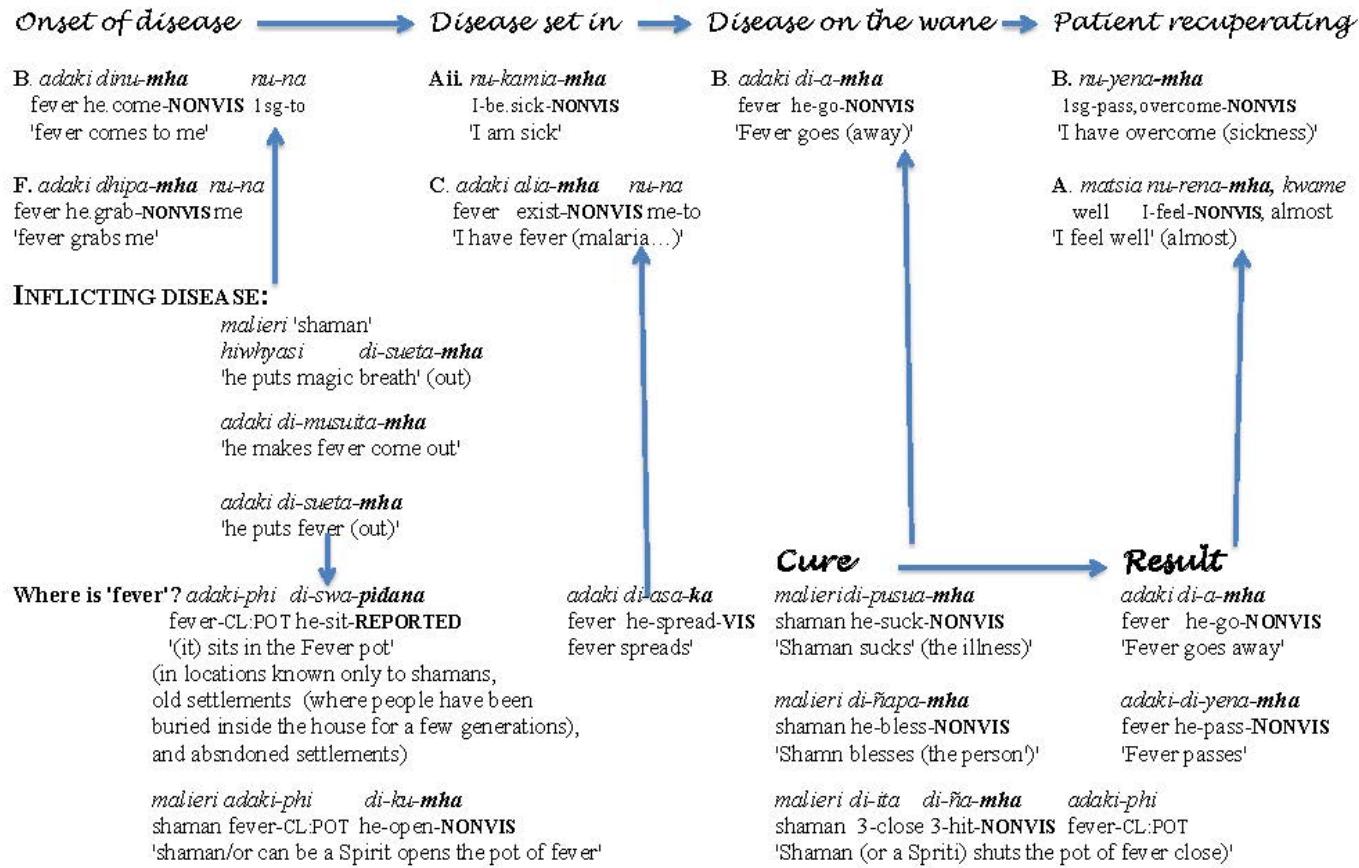
- *Puaya* means 'adverse, other, *diferente*'.
- Bodily states — such as being pregnant or menses — are *puaya* 'adverse'.
- Any ritual misbehaviour is likely to produce adverse consequences. This includes having sex before going hunting, or (as we are all good Catholics), doing any 'work' on Good Friday. When I thought I could take a picture of a healing session, the shaman warned us of it being *puaya* – bringing 'adverse consequences' — so no pictures are available.

What may cause a *puaya* state, a disease (*adaki*) or worse?

- Breaching the restrictions might unleash the actions of the Evil spirit who will 'eat the person up', and then only a strong shaman might help.

- Shamanic activities ('breath' and 'opening the pot of fever') are the major causes of disease. Then the illness 'spreads' — unlike Dyirbal where illness is 'crossing' from one person to another, and can be given by one person to the next.

The trajectory of well-being in Tariana



Cultural and cognitive underpinnings -

- The use of Schema F, ‘Agentive disease’, reflects the agentivity of someone who inflicts the disease, *adaki*,
- Or of a powerful shaman who takes on the form of *adaki* - cf. the principles of Amazonian perspectivism (Viveiros de Castro 2004) and Peter Riviere’s ‘What you see is not what you get (WYSINWYG) in Amazonia’ (1994)

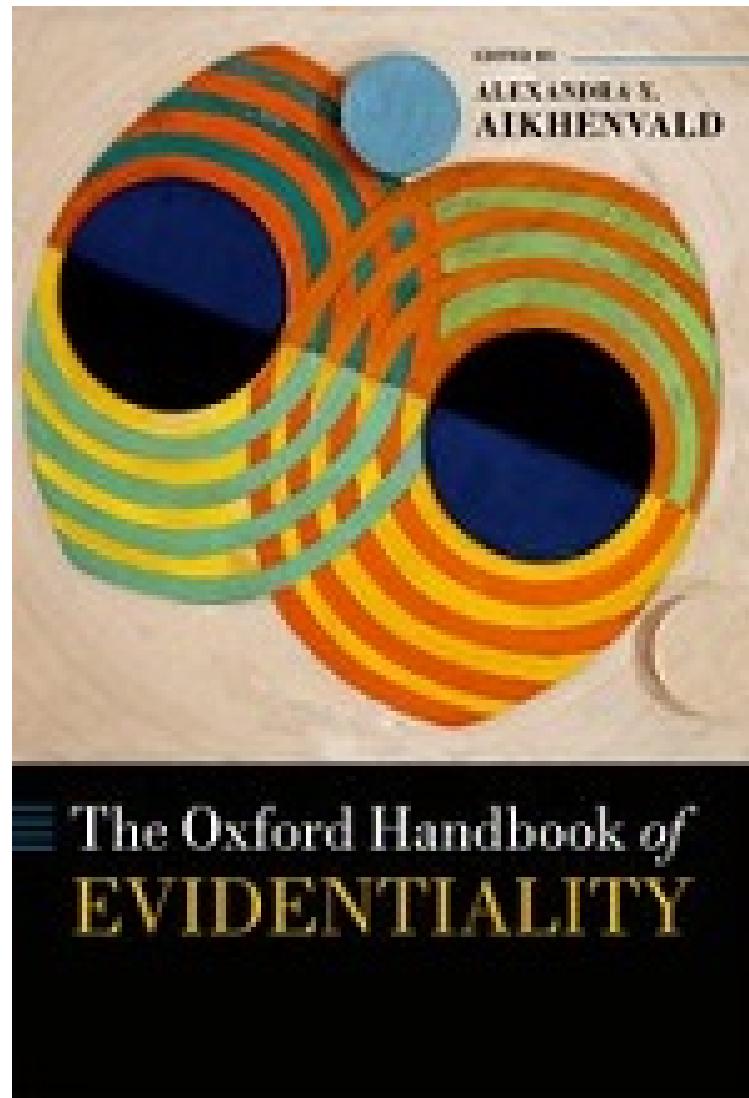
How do you say that you are sick?

Tariana and its Tucanoan neighbours have a significant feature: grammatical marking of information source, or **evidentiality**.

Frans Boas (1858-1942), a founding father of modern linguistics, put it this way: 'while for us definiteness, number, and time are obligatory aspects, we find in another language location near the speaker or somewhere else, source of information — whether seen, heard, or inferred — as obligatory aspects' (1938: 133)



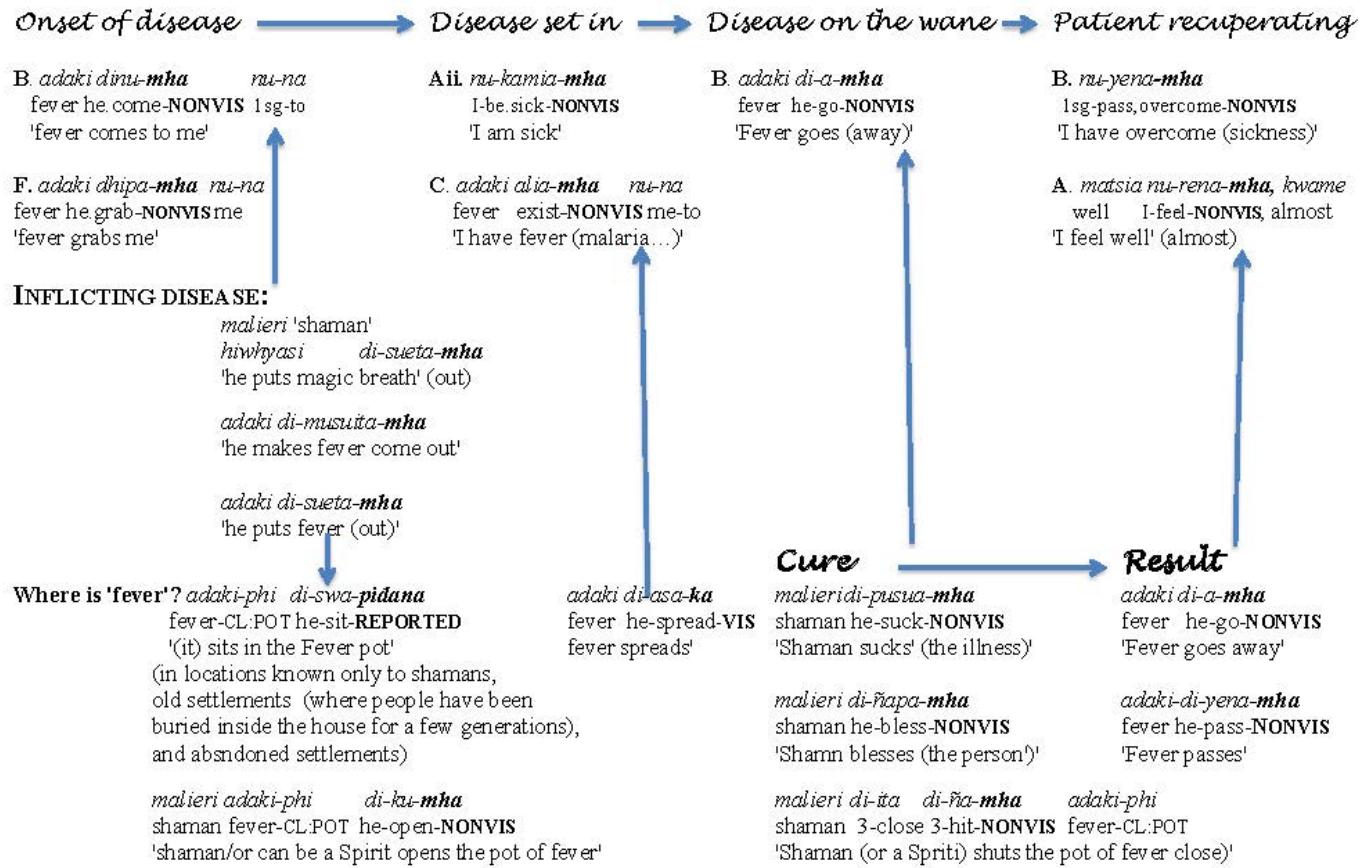
More on this phenomenon –



Evidentiality is obligatory in Tariana

- you saw it: visual *-ka*
- you heard it or smelt it or felt it, could not see it: non-visual *-mha*
- you inferred it: inferred *-nihka*
- you assume this is so, based on common sense: assumed *-sika*
- you know it based on someone telling you: reported *-pidana*

The trajectory of well-being in Tariana



Nonvisual evidential –*mha*...

- ❖ One talks about one's own disease or any internal state using a nonvisual evidential.

Nonvisual evidential –*mha*...

- ❖ One talks about one's own disease or any internal state using a nonvisual evidential.
- ❖ This is why we have *-mha* in the Trajectory of well-being when talking about one's own sensations (and also in (1) and in (9)).

Nonvisual evidential –*mha*...

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- ❖ Shamanic actions are not seen: talking about a shaman inflicting a disease involves *-mha*.

Nonvisual evidential –*mha*...

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- ❖ Shamanic actions are not seen: talking about a shaman inflicting a disease involves *-mha*.
- ❖ 'Fever spreads' has *-ka*: we can see this...

Nonvisual evidential –*mha*...

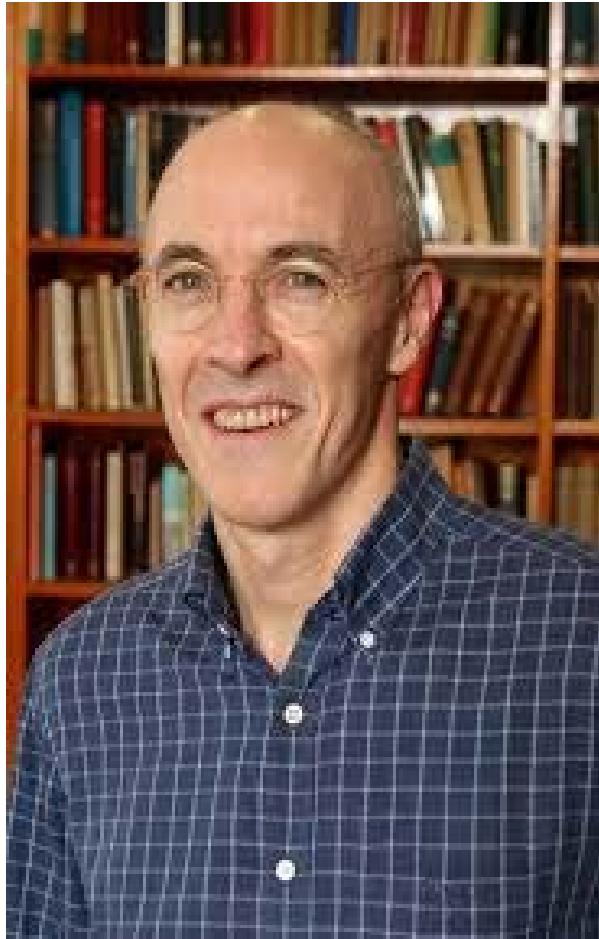
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- ❖ Shamanic actions are not seen: talking about a shaman inflicting a disease involves *-mha*.
- ❖ 'Fever spreads' has *-ka*: we can see this...
- ❖ If he or she is sick, and we can see that they are sick, we use *-ka* as in Aii.

The use of evidentials

appears to reflect cultural stereotypes

and the ways of understanding the mechanisms of inflicting disease and its onset...

**Recall Nick
Enfield's
(2004:3) words -**



'Encoded in the semantics of grammar we find cultural values and ideas' and clues about social structures and peoples' attitudes.

This is what we have seen

- For the use of evidentials and
- For the use of the Agentive schema F with regard to *adaki* ‘disease’ and its causation.

4 How languages change

Manambu, Sepik area, Papua New Guinea

(7) Malaria dekem kure-l

malaria him get-she

'He got malaria' (lit. malaria got him)

- Jacklyn, a traditional speaker

How languages change?

Manambu, Sepik area, Papua New Guinea

(7) Malaria dekem kure-l

 malaria him get-she

‘He got malaria’ (lit. malaria (she) got him) - Jacklyn, a traditional speaker

(15) de malaria kure-d

 he malaria get-he

‘He got malaria)\’ – young Jemima

Young Jemima on the boat, off the Sepik River Papua NG



- Jemima (now 14) speaks Tok Pisin, an English-based Creole, most of the time.
- Her mother Jacklyn is a traditional speaker of Manambu.
- Jemima's Manambu is 'affected' by Tok Pisin – such as

Mi kisim malaria

I got malaria

And PNG English taught at school...

How languages change:

Baniwa

(6) whéetshi hipaka-ni
flu he.got/caught-it

'He got flu'

Tariana

(9) adaki dhipa-mhana nu-na
fever he+grab-REM.PAST.NONVISUAL me
'Fever grabbed me' (I got ill)

Why so?

- Baniwa uses Schema E, Agentive sufferer
- Tariana uses Schema F, Agentive disease
- Has Baniwa been affected by Portuguese?
- The ways of speaking change over time – but do the concepts?

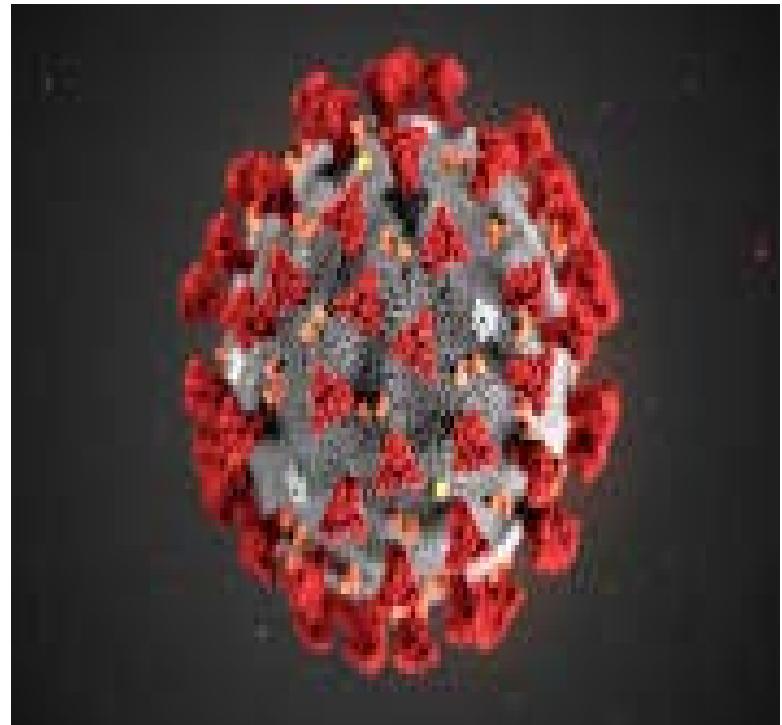
Take-home points

- We have identified schemas A-J used in talking about well-being.
- The next move is to establish the trajectory of talking about different phases of well-being, the spread of disease, its cure: what are the schemas employed?
- What concepts are at work behind the schemas? The Agentive Schema F may disease may reveal the nature of the spirit or shaman behind it...
- Ways of speaking well-being and diseases correlate with special features of grammar — especially evidentials.
- Ways of speaking about diseases change because of contact between languages and people — but do the concepts?

COVID19 affects the ways we speak

The expansion of blends:

- **Quarantimes** = quarantine times
- **Quarantini** = martini drunk during quarantimes
- **Covidivorce** = ?



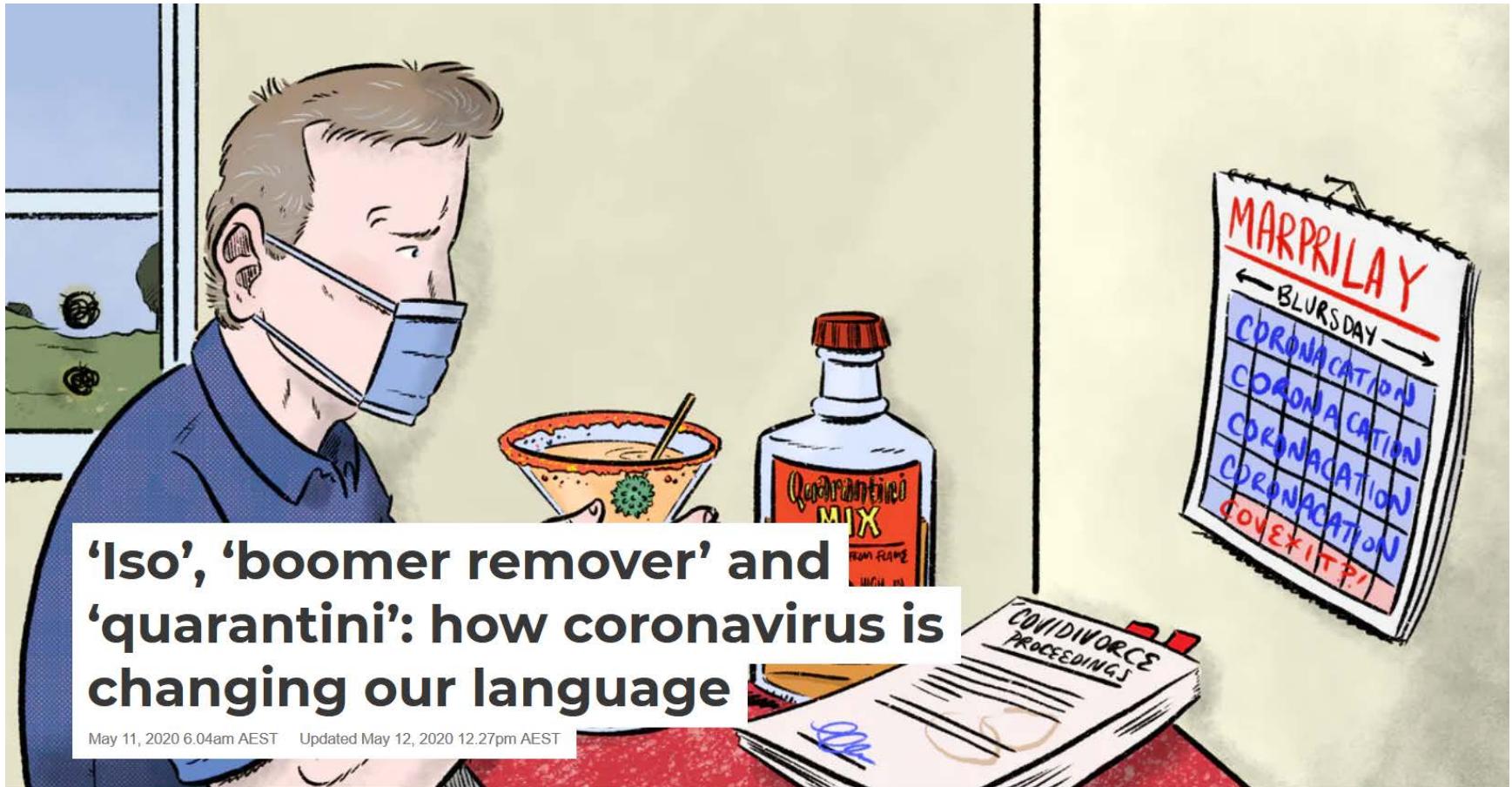
A covidiot -



And more – not known pre-BCV

- *Coronacation* = working from home
- *Covexit*: strategies to escape the lockdown (cf. exit, Brexit, Grexit..)
- *To social-distance*, *to zoom-bomb* – new verbs?
- ‘*Being voluntold*’ – a recent formation
- And more: *infodemia*?

K.Burridge and H. Manns <https://theconversation.com/iso-boomer-remover-and-quarantini-how-coronavirus-is-changing-our-language-136729>



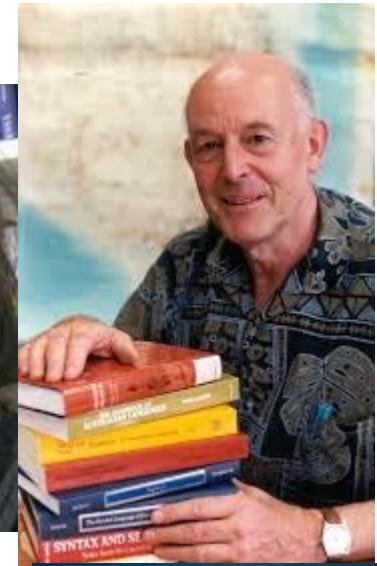
This project, ‘The language of well-being’,

- started on 6 June 2018
- continued throughout 2019
- and is still healthy and expanding as we speak
- preliminary materials available on academia.edu

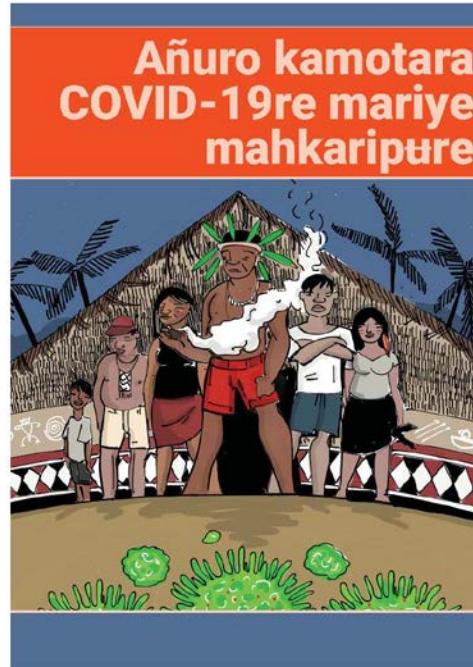
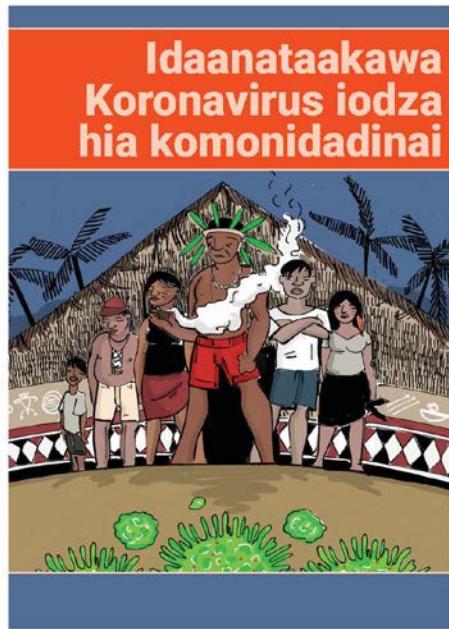
Group picture, Symposium 'The language of well-being', LCRC Cairns, 23-4 April 2019



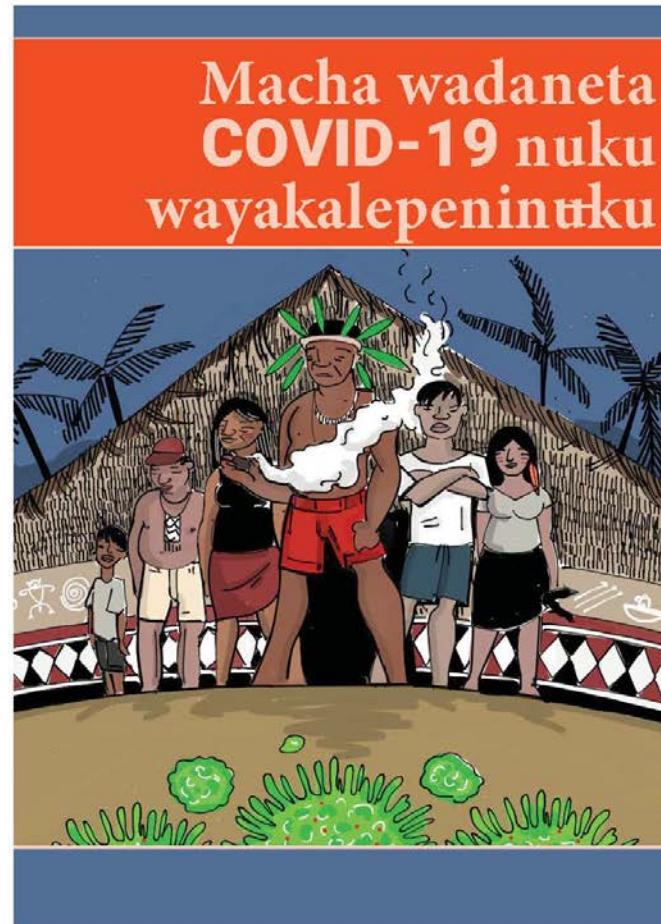
The current team – Sacha, Prof Kate Burridge, Prof Nerida Jarkey, Prof Bob Dixon (linguists), Prof Borut Telban (anthropologist), Dr Rene van den Berg (linguist), Prof Maxine Whittaker, and Dr Kris McBain-Rigg (public health)



Rafael Serewhali Enu Irine and myself are working on a COVID-19 cartilha in Tariana based on those made available by ISA-Baniwa-Tucano



Work in progress...Cartilha
tariana and Rafael Brito
Serewali Enu Irine



Selected references

- Aikhenvald, Alexandra Y. 1999 *Tariana Texts and Cultural Context*. Lincom Europa Languages of the World/Materials 007. Munich, 149 pp.
- .2000. *Manual da língua tariana* (100 pp.). *Histórias tariana* ((360 pp). Textbook and text collection for the Tariana-speaking community of Middle Rio Negro. Mimeographed.
- 2002 *Dicionário Tariana-Português e Português-Tariana*. Museu Goeldi: Belém, 435 pp. (*Boletim do museu Goeldi* 17: 1, Julho 2001, copyright 2002).
- 2002. *Language Contact in Amazonia*. Oxford: Oxford University Press. xxv, 363 pp. (paperback with revisions 2010).
- 2003. *A grammar of Tariana, from northwest Amazonia*. Cambridge: Cambridge University Press. xxiv, 705 pp. Paperback reissue 2006.

- 2004. *Evidentiality*. Oxford: Oxford University Press. xxvii, 452 pp.
Paperback edition 2006.
 - 2012. *The languages of the Amazon*. Oxford: OUP.
- Allan, Keith and Kate Burridge. 2006. *Forbidden words. Taboo and the censoring of language*. Cambridge: Cambridge University Press.
- Bleakley, A. 2017. 'Force and presence in the world of medicine'. *Healthcare* 5, 3: 58.
- Bleakley A, Marshall R, Levine D. 2014. 'He drove forward with a yell: anger in medicine and Homer'. *Med Humanit.* 40(1): 22-30.
- Carlin, Eithne B. 2004. *A grammar of Trio, a Cariban language from Suriname*. Frankfurt am Main: Peter Lang.
- Clark, Marybeth. 1996. 'Where do you feel? — Stative verbs and body-part terms in Mainland Southeast Asia', pp. 529-63 of Chappell, H. and W. McGregor (eds.). 1996. *The Grammar of inalienability: a typological perspective on body part terms and the part-whole relation*. Berlin: Mouton de Gruyter.

- Dixon, R. M. W. 2018. 'Being ill and getting ill in Dyirbal'. Talk at LCRC discussion forum.
- Khullar, Dhruv. 2014. 'The trouble with medicine's metaphors'. www.theatlantic.com/health/archive/2014/08.
- Li, Charles N. and Sandra A. Thompson. 1980. *Mandarin Chinese. A functional reference grammar*. Berkeley: University of California Press.
- Lienhard, John H. 2019. 'No. 1210. Pasteur's biomilitarism'. uh.edu/engiones/epi1210.htm.
- Matisoff, James A. 2000. *Blessings, curses, hopes, and fears. Psycho-ostensive expressions in Yiddish*. Stanford: Stanford University Press.
- Montgomery, Scott L. 1996. *The scientific voice*. The Guilford Press (especially Chapter 3).
- Moura, Heronides e Fábio Lopes da Silva. Forthcoming. 'O vírus nos ronda: metáforas sobre vírus e sobre corrupção'.
- Reisfield, Gary M. and George R. Wilson. 2004. 'Use of metaphor in the discourse on cancer'. *Journal of Clinical Oncology* 22, 19 4024-27.

- Riviére, Peter 1994. 'WYSINWYG in Amazonia', *Journal of the Anthropological Society of Oxford* 25: 255-262.
- Sonntag, Susan. 1978. *Illness and metaphor*. Farrar, Straus and Giroux.
- Sonntag, Susan. 1989. *Aids and its metaphors*. Farrar, Straus and Giroux.
- Viveiros de Castro, Eduardo. B. 2004. 'Exchanging perspectives: The transformation of objects into subjects in Amerindian ontologies', *Common Knowledge* 10: 463-484.
- Whittaker, Maxine. 2017. 'How infectious diseases have shaped our culture, habits and language'. *The conversation* July 13 2017.
- Wojtylak, Katarzyna I. 2018. 'How did this grow in you? About the expression of disease in Murui (Witotoan)'. Talk at LCRC discussion forum.
- Zinsstag, Jakob, Kristina Pelikan, Tanja Hammel, Julia Tischler, Antoine Flahault, Jürg Utzinger, and Nicole Probst-Hensch. 2019. 'Reverse innovation in global health'. *Journal of public health and emergency* 3: 2: 1-5.

Envoi: on military metaphors

- What about disease as a 'war zone': fighting the disease, with body as a battleground?
- The imagery of human body affected by disease as a war zone does not appear to be applicable outside European languages.
- The use of military metaphors to describe illness dates back to at least the seventeenth century.



The poet John Donne (1572-1631) described his illness as ‘a canon shot’ and ‘a siege’ (in 1627, *Meditations I, XI*).



- The physician Thomas Sydenham (1624-1689) described medical intervention as a military attack (1848-50 edition, 267-8): 'I attack the enemy within', where 'A murderous array of disease has to be fought against, and the battle is not a battle for the sluggard'.
- This was not a conventional or frequent way of talking about disease: the disease was talked about as plagues 'laying' upon people (Montgomery 1996): there was no aggression implied.



Louis Pasteur's (1822-95) description of germ theory employed military metaphors of 'invading armies laying siege to the body that becomes a battlefield'. According to John Lienhard (2019), he may have been influenced by the military metaphors overrunning the language during the Franco-Prussian war (the 1870s).

- From then on, the tradition got gradually established.
- In 1904, a 'war against cancer' was described in a lead article in *The British Medical Journal*.
- Further on, cancer cells were identified with Bolsheviks, as 'anarchic', threatening the stability of the body (Bleakley et al. 2004: 25).



Susan Sonntag (1933-2004), whose criticism of 'military metaphors' in writing about disease is a timeless classic (1978, 1989)