

TYPE OF CONTRIBUTION

# THE GRAMMAR OF WELL- BEING: HOW TO TALK ABOUT ILLNESS AND HEALTH IN AN AMAZONIAN SOCIETY

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## ABSTRACT

Ways of talking about diseases, ailments, convalescence, and well-being vary from language to language. In some, 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'. 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. Different stages of disease – covering its onset, progression, wearing off, recovery, and cure – form 'the trajectory of well-being'. Our main focus is on grammatical means employed in talking about various phases of disease and well-being, and how these correlate with perception and conceptualization of disease and its progression and demise. I offer a brief taxonomy of grammatical schemas and means employed across the languages of the world. I then turn to a study of terminologies and grammatical schemas employed in the trajectory of well-being in Tariana, an Arawak language from north-west Amazonia (Brazil), with special focus on cultural and cognitive motivations. The emergence and spread of the COVID-19 pandemic has affected ways of speaking about this disease among the Tariana, especially with regard to the origins and the onset of this affliction.



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## DATES

– Received: 10/23/2020  
– Accepted: 12/04/2020  
– Published: 02/DD/2021

## HOW TO CITE

AIKHENVALD, Alexandra Y. (2021). The Grammar of Well-Being: How to Talk about Illness and Health In an Amazonian Society. *Cadernos de Linguística*, v. 2, n. 1, p. 01-32.

## RESUMO

As maneiras de falar sobre doenças, enfermidades, convalescença e bem-estar variam de idioma para idioma. Em alguns, uma doença 'atinge' ou 'pega' a pessoa; em outros, o sofredor 'pega' uma doença, passa a ser um 'recipiente' para ela ou é apresentado como um 'lutador' ou um 'campo de batalha'. Em linguagens com expressão obrigatória de fonte de informação, o ataque de doenças é tratado como 'invisível', assim como qualquer tipo de sentimento interno ou atividade xamânica. Diferentes estágios da doença - cobrindo seu início, progressão, desgaste, recuperação e cura - formam "a trajetória do bem-estar". Nosso foco principal está nos meios gramaticais empregados para falar sobre as várias fases da doença e bem-estar, e como eles se correlacionam com a percepção e conceituação da doença e sua progressão e morte. Eu ofereço uma breve taxonomia de esquemas gramaticais e meios empregados em todas as línguas do mundo e, em seguida, ofereço um estudo de terminologias e esquemas gramaticais empregados na trajetória de bem-estar em Tariana, uma língua aruák do noroeste da Amazônia (Brasil), com especial enfoque nas motivações culturais e cognitivas. O surgimento e a propagação da pandemia COVID-19 tem afetado as formas de falar desta doença entre os Tariana, especialmente no que diz respeito às origens e ao início desta aflição.

## KEYWORDS

Well-Being; Grammatical Schema; Tariana Language; COVID-19.

## PALAVRAS-CHAVE

Bem-Estar; Esquema Grammatical; A Língua Tariana; COVID-19.

## PREAMBLE

Ways of talking about diseases, ailments, convalescence, and well-being vary from language to language. In some, 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 ‘battleground’ or as a ‘fighter’. In languages with obligatory expression of information source, the onslaught of disease may be referred to as ‘unseen’, just like any kind of internal feeling or shamanic activity. How can we capture the nature of traditional attitudes and thoughts about the origins of adverse conditions through language? How are diseases understood to be inflicted and spread? What are the patterns involved in describing traditional healing practices and ‘getting better’, as the patient recuperates? And can the emergence of new diseases – such as COVID-19 – affect the linguistic practices?

Aspects of vocabulary for various stages of disease and recovery reflect traditional knowledge and attitudes. So do the metaphors. The power of metaphorical imagery impacts on the perception of disease and the effects of its treatment. A growing body of literature points towards ‘the trouble with medical metaphors’ (see a summary in Khullar, 2014, and also Reisfield and Wilson, 2004). ‘Military’ metaphors in contemporary discourse in English and a few other European languages represent the human body as a battlefield, and a patient as a victorious winner or a helpless loser. The effect may well be empowering – or it may be devastating. Sonntags’ timeless classics (1978, 1979) address the military metaphors their potentially adverse impact, especially with regard to cancer and HIV/AIDS (see Montgomery, 1996, pp. 178-84 on a brief history of presenting a disease as a ‘war zone’ in English and in French, and its correlations with the military history of the societies involved).

Stigma associated with naming diseases and being precise about the nature of an affliction may impinge upon their labelling and classification. In Kwaio, an Oceanic language from the Solomons, the terms *xuu* ‘leprosy’ and *fonomela* ‘a disease category partly overlapping with tuberculosis’ are ‘restricted in use, because of the danger of “contagion”. Especially in dwelling houses, euphemisms or alternative terms must be used’ (Keesing and Fifi’i, 1969, p. 160). Authors go on to saying that even these terms are known to have been discarded, as they acquired dangerous powers. This takes us to the domain of taboos and avoidance (see, inter alia, Allan and Burridge, 2006).

The absence of elaborate terminologies for diseases in some languages of the tropics, accompanied by a low frequency of use of the existing terms, is a corollary of the avoidance in mentioning a name of disease. In contrast, a wide range of terms will reflect symptoms and feelings (see examples for Gnao, a Papuan language, in Lewis, 1974, 1976, and further discussion in §3.2.1). The underspecification of disease may be connected to inhibitions and taboos on talking about adverse states (in the spirit of Benczes and Burridge, 2018).

In the grammatical structuring of meaning, we see the workings of cultural patterns at a more subtle level. As Enfield (2004, p. 3) put it, ‘encoded in the semantics of grammar we find cultural values and ideas, we find clues about the social structures’, and also about peoples’ attitudes. We hypothesise that the ways in which disease, ailment, recovery, and well-being are conceptualised, across languages and cultures, correlate with traditional speech practices – that is, the grammatical structures used to talk about them.

Different stages of disease – covering its onset, progression, wearing off, recovery, and cure – form ‘the trajectory of well-being’. Our main focus is on grammatical means employed in talking about various phases of disease and well-being, and how these correlate with perception and conceptualization of disease and its progression and demise. The ultimate aim is to contribute towards unveiling the cultural and conceptual underpinnings of the semantics of grammar.

In §1, I offer a brief taxonomy of grammatical schemas and means employed across the languages of the world, with the focus on languages in the tropical hot-spots of linguistic diversity and, as it happens, of infectious diseases (along the lines of Aikhenvald, 2019).<sup>1</sup> In §2, I turn to a study of terminologies and grammatical schemas employed in the trajectory of well-being in Tariana, an Arawak language from north-west Amazonia (Brazil).

New health hazards bring about new ways of saying things. In the times of the COVID-19 pandemic, Australian English has seen the emergence of new words – *quarantimes* for quarantine times, *quarantini* for martini drunk during the *quarantimes*, *iso* for isolation during the quarantine period, and *covidiot*, for a stupid person who does not recognise COVID as a danger (Burridge and Manns, 2020). Modern Russian is replete with blends of similar kinds – imposed holidays during the quarantine times are called *karantikuly* (a blend of *karantin* ‘quarantine’ and *kanikuly* ‘holidays’), and pictures people send to each other during quarantine times got the name of *karantinka* (a blend of *karantine* ‘quarantine’ and *kartinka* ‘picture’) (Shmeleva, 2020). In the times of a pandemic, a virus can be understood as an invisible enemy – comparable to a never-ending social evil. The omnipresent virus – and especially COVID-19 – has engulfed Brazil and continues ‘circling’ us, in a manner similar to the unending corruption within Brazilian society (as shown in Moura and Lopes da Silva, 2021). In §3, we turn to how the emergence and spread of the pandemic – COVID-19 – has affected ways of speaking about this disease among the Tariana. The last section contains brief conclusions.

1 This is based on the information from c. 500 grammars and descriptions of languages from various parts of the world, and the results of my own fieldwork on several languages in Amazonia and New Guinea (following the methodological principles of linguistic typology in AIKHENVALD and DIXON, 2020). All Tariana examples come from my own work (starting from 1991).

## 1. GRAMMATICAL SCHEMAS EMPLOYED IN TALKING ABOUT WELL-BEING

Ways of talking about the basic experiences of ailments and disease, and various stages of well-being, involve a number of conventionalised syntactic patterns. These patterns are captured by the notion of a grammatical schema (see Heine, 1993, pp. 27-8, 1997, pp. 45-6). The recurrent structures of predicative possessive expressions can be accounted for by a number of event schemas including action, location, companion, and source (Heine, 1993, p. 47). A schema will reflect significant attributes abstracted from a number of conceptually related events. Schemas can be seen to function as generalized construals of recurrent events, scenes, or situations. Grammatical schemas serve as representations of recurrent ‘conceptual archetypes grounded in the experiential domain’ (Shibatani, 1996, p. 192).

The linguistic expressions to do with ailments and diseases may belong to a variety of word classes. They can be adjectives, e.g. English *sick*, nouns, e.g. English *fever*, *tuberculosis*, Portuguese *febre*, *tuberculose*, or verbs, e.g. English *vomit* or Portuguese *vomitar*. A detailed study of their grammatical possibilities across the world’s languages remain a matter for further investigation.

In §1.1, we start with a taxonomy of grammatical schemas which account for recurrent expressions of disease, ailments and well-being. We concentrate on physical well-being of humans (leaving the complex issue of mental affliction and approaches to mental health for future studies). In §1.2, we outline some special features of the grammatical schemas which set them apart from similar structures. Potential correlations between the choice of a schema and stages of well-being are the topic of §1.3.

### 1.1. GRAMMATICAL SCHEMAS IN THE LANGUAGE OF WELL-BEING

We have identified the following eight recurrent grammatical schemas which capture different stages of well-being, encompassing the onset of disease, its progression, and recovery. The schemas are briefly discussed one by one (see also Aikhenvald, 2019).

#### A. The Predication schema

Within this schema, the term for the disease appears in the predicate slot of an intransitive clause. Two subtypes cover the state of having a disease (**A-i**) and the process of acquiring a disease (**A-ii**).

Examples of schema **A-i, State**, include English *I am sick*, *I am feverish*. An example from Estonian, a Balto-Finnic language, is in (1), and an example from Tariana, an Arawak language from north-west Amazonia (Brazil) is in (2). Both examples are based on author’s own data.

- (1) külmetu-sin *Estonian*  
cold+REFLEXIVE,CAUSATIVE-PAST.1sg  
'I caught a cold' (lit. I colded myself)
- (2) nu-daki-ri *Tariana* di-kamia-ka  
1sg-grandchild-masc.sg 3sgnf-be.sick-RECENT.PAST.VISUAL  
'My grandson is sick'

Examples of schema **A-ii, Process**, include English *I got sick, I became sick* and Murui (a Witotoan language from Colombia) *kome raikotai* 'person become(s) sick'.

In languages which make a grammatical distinction between active (S<sub>a</sub>) verbs and stative (S<sub>o</sub>) verbs, expressions of disease may belong to either class. In Warekena of Xié, an Arawak language from north-west Amazonia, only stative verbs express disease, e.g. *anua* 'be sick, get sick' (Aikhenvald, 1998). In the related Tariana, verbs used to refer to being sick are active intransitive verbs. Verbs referring to symptoms do not take prefixes and belong to the category of stative intransitives. We return to this feature of Tariana in §3.2.1. A general take on the distribution of expression of diseases across word classes in different languages is the matter for a separate study.

### B. The Motion schema

According to this schema, the disease is the subject of a motion verb, and the 'sufferer' is a 'goal' or a 'destination'. This schema can be rephrased as 'disease comes to/onto X' = 'X is becoming sick with the disease'. Examples include (3), from Fuyug, a language from Central Province of Papua New Guinea, and (4a-b) from Tariana.

- (3) veylima sal ge val *Fuyug* llitumin=ti hindel-a  
so sickness TOP back.here llitumun-ILLATIVE come.out-it  
'...so that sickness came upon llitumun' (BRADSHAW, 2007, p. 142)

- (4a) adaki di-nu-mha *Tariana* nu-na  
fever 3sgnf-come-PRES.NONVIS 1sg-OBJECT  
'Fever comes to me (that is, I am becoming sick with fever)'

- (4b) nu-kamia-mha *Tariana* nu-wa  
1sg-be.sick-PRES.NONVIS 1sg-enter(open space or state)  
'I am getting sick' (lit. enter the state of sickness)

The motion schema presupposes movement of a disease towards or onto the sufferer. The movement of disease may be framed differently from motion events which imply physical movement of objects or persons. Events involving physical motion in Tariana are expressed with serial verb constructions – a sequence of independent verbs marked for the same subject, with a single value of tense, evidentiality, aspect, and illocutionary force

(see Aikhenvald, 2018a, and references there, on cross-linguistic properties of serial verbs). An event involving physical motion will be presented as a set of subcomponents, specifying direction, manner, and result of the event, within one serial verb construction. A typical serial verb construction consisting of two components – go down and come – is shown in (5). The serial verb construction is in square brackets.

(5)	diha	nawiki	[di-ruku	di-nu-pidana]	<i>Tariana</i>
	he	man	3sgnf-go.down	3sgnf-come-rem.p.rep	
	'The man reportedly came going downstream'				

The verbs of motion employed in the expressions of disease cannot occur in serial verb constructions: the verb *-nu* 'come' is always used as a single verb within the predicate.

### C. The Possession schema

Within this schema, a predicative possessive construction is deployed to express the affliction. Of eight schemas employed in the expression of predicative possession (see Heine, 1997, pp. 47-67; Aikhenvald, 2013, pp. 27-30), **C-i, the Action schema**, and **C-ii, the Location schema**, represent recurrent patterns in talking about disease.

#### C-i. The Action schema

The action schema involves a possessive verb, such as 'have' or 'hold'. The 'sufferer' has the function of the subject of the possessive verb 'have'. The disease is the possessee. Prime examples are English *I have a cold* or Portuguese *Eu tenho febre* 'I have fever'.

#### C-ii. The Location schema

Within this schema, the 'sufferer' is marked as a destination or a location of the disease, e.g. 'cancer is to him', as in Estonian, or 'fever is to me', in Tariana.

(6)	ta-l	on	vähk	<i>Estonian</i>
	he-ADESSIVE	is	cancer	
	'He has cancer' (lit. to him is cancer)			

(7)	adaki	alia-mha	nu-na	<i>Tariana</i>
	Fever	exist-NONVISUAL.PRESENT	1sg-OBJECT	
	'I have fever' (lit. to me is fever)			

Superficially similar possessive constructions are used to express actual ownership of an object, or a kin relationship. That is, if one wishes to say 'I have a house', or 'I have two older sisters', this will be done using the same grammatical means.

There are, however, notable differences in the syntactic possibilities of the possessive verb *have* in expression of disease (such as 'I have a cold' in English) and in expressions

related to actual possession and ownership (along the lines of Aikhenvald, 2013, pp. 5-6, Dixon, 2010, pp. 261-5). The verb *have* in its purely possessive sense in English can be replaced with the verb *belong* (creating a dichotomy of H-possession and B-possession: see Heine, 1997, and a summary in Aikhenvald, 2013, p. 29). The distinction is pragmatically motivated. A ‘have’- construction is focused on the possessor, as in *I have a house*. The ‘belong’-construction centres on the possessee, as in *The house belongs to me*. The verb *have* in a possessive action schema in English (and other languages) does not offer an option of using ‘belong’: one cannot say \*A cold belongs to me.

The option of phrasing a possessor-oriented content question is another criterion which serves to differentiate expressions of possession and ownership and the possession schemas in the expressions of disease. In English, Estonian, and Tariana, a possessor-oriented content question (‘whose’) with regard to an expression of disease would sound weird (‘I have a cold’ versus \*whose cold is this?).

The full extent of such differences between ‘true’ possession and the possessive schemas in the expression of disease and affliction requires in-depth individual studies for each language. Their existence points toward a distinct nature of possessive-like schemas in the expression of disease.

#### D. The Comitative schema

Within this schema, the ‘sufferer’ is the subject of a copula or verbless clause, and ‘disease’ is marked as a companion to the subject. In (8), from Trio, a Carib language from Suriname, ‘fever’ takes the comitative case

- (8) kēi-ke                      n-a-Ø-i                                      pahko                                      Trio  
fever-COMITATIVE    he-be-PRESENT-NONCERTAIN                      Dad  
‘My father has a fever’ (my father is with fever) (CARLIN, 2004, p. 475)

In Murui, a Witotoan language from Colombia, the sickness is the subject, and the sufferer is marked as its ‘companion’ (using the postposition ‘with’).

- (9) nigarui                      oo                      diga                      jaai-de?                                      Murui(Colombia)  
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. The Acquisition schema with ‘agentive’ sufferer

This schema is represented by a transitive clause where the ‘sufferer’ is the transitive subject and the disease is the object. Typical examples are English *I caught a cold*, *he got malaria*, or Portuguese *ele pegou malaria* ‘he got malaria’. A similar example comes





used for the expression of disease. In §3.3.2 we turn to some cognitive and cultural underpinnings of grammatical representation of disease as an agentive force in Tariana.

### G. The Container schema

This schema involves a copula or a verbless clause with the ‘sufferer’ in subject function and the disease marked as a container, or an encompassing location engulfing the patient. This is what we see in (14), from Trio.

- (14) mararia-tao                                    w-a-Ø-e                                    *Trio*  
 malaria-CONTAINER,LOCATIVE            it.to.me-be-PRESENT  
 ‘I have malaria’ (lit. I’m in malaria, malaria is surrounding me)’ (Carlin, 2004, p. 476)

In Murui, sickness ‘grows inside’ the person, as shown in (15).

- (15) ninomona            nai-e    oo-mo            komui-de raiko                                    *Murui*  
 where                    anaphoric you-in            grow-it    sickness  
 ‘Where has the sickness grown in you?’ (Wojtylak, 2018)

### H. The Topic schema

Within this schema, the ‘sufferer’ is presented as a clausal topic in the clause initial position with the disease being the subject of the subsequent clause. This schema is a wide-spread feature of many languages of the Mainland Southeast Asia and the Pacific (see also Clark, 1996). An example from Mandarin Chinese is in (16).

- (16) Zhāngsān hěn    tóu téng                                    *Mandarin Chinese*  
 Zhangsan very    head ache  
 ‘Zhangsan has a severe headache’ (Zhangsan very head ache) (Li and Thompson, 1980, pp. 70-1)

A similar example from Manambu, a Ndu language from Papua New Guinea, is shown in (17a) (author’s own fieldwork).

- (17a)de            yap                                    war-el                                    *Manambu*  
 he            breath/asthma            go.up-3fem.sg  
 ‘He has asthma (or heart attack)’ (lit. He breath goes up)

A notable feature of this schema is an inalienable part-whole relationship between the ‘sufferer’ and the affected part, reminiscent of the Topic-schema in predicative possessive constructions.

Both the topicalised constituent (‘the sufferer’) and the part have a full set of subject properties (see Luo, 2013, pp. 196-7, and also Heine, 1997, p. 62, on the applicability of the notion of ‘double subject’ within clauses involving an extraposed topic). In Manambu, the

affected body part triggers feminine agreement on the predicate: this is what we see in (17a). But it is the sufferer that will trigger the same-subject switch-reference marking within a clause chain, as shown in (17b) (see Aikhenvald, 2008, pp. 531-5, on the subjecthood in expressions involving bodily states and diseases in Manambu).

(17b)de yap war-ku kiya-d Manambu  
He breath/asthma go.up-COMPL.SAME.SUBJECT die-3masc.sg  
'He died of asthma (or heart attack)' (lit. He breath having gone up died)

A further feature which sets the expressions involving a Topic schema apart is the application of content questions. The body part in (17a) cannot be questioned: \*He, what went up?' will sound nonsensical. The only way of asking about the affliction is via a general question, *De ata ata* (he how how) 'How is he? What's the matter with him?'

## 1.2. SPECIAL FEATURES OF THE GRAMMATICAL SCHEMAS IN THE EXPRESSIONS OF WELL-BEING

Our brief survey of the eight recurrent grammatical schemas employed in the expression of well-being has revealed a few features which set them apart from superficially similar syntactic patterns outside the realm of health and affliction. The properties identified so far are summarised in Table 1.

SCHEMA	SPECIAL FEATURE
B. The Motion schema	Lack of use of serial verb constructions, typical for events involving physical motion
C. The Possession schema	Different syntactic possibilities of the possessive verb and restrictions on possessive content questions
E. The Acquisition schema with 'agentive' sufferer	Disease as 'object' does not have all object properties
F. The Acquisition schema with 'agentive' disease	Disease as 'subject' does not have all subject properties
H. The Topic schema	Restrictions on content questions

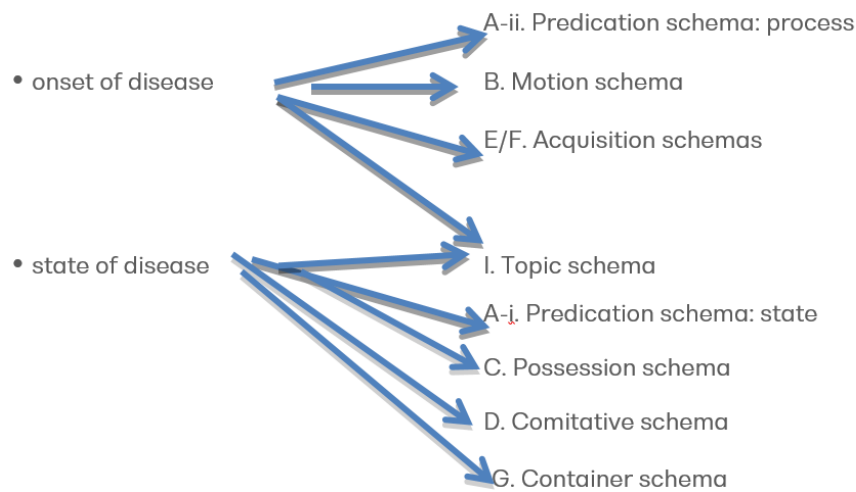
**Table 1.** Special features of grammatical schemas used in the expressions of well-being.

In a nut-shell, this selection of distinctive grammatical features of each schema used for describing disease and well-being point towards the reality of the special 'grammar of well-being'. Its recurrent and language-specific features are a fruitful avenue for further research.

## 1.3. GRAMMATICAL SCHEMAS AND THE STAGES OF WELL-BEING

The choice of a grammatical schemas may correlate with different stages of well-being, including the onset of disease and the ensuing state of illness. For instance, the Motion schema (B) may be used for acquisition of disease, and the Predication schema (A) for a statement on existing disease: this is what we saw for Tariana in (4a) and (2).

In Trio, the acquisition schema F with agentive disease expresses onset of disease, as shown in (13). Once the disease has taken hold, the Comitative schema D expresses a symptom ('fever' in (8)). Specific illnesses, such as malaria or a cold, are 'seen as an all-encompassing phenomenon', that is, an illness 'takes/grabs someone' (Carlin, 2004, p. 476), the Container schema (G) is employed – the person is conceptualised as being subsumed 'inside' the illness (14). Figure 1 offers an outline of recurrent patterns identified so far.



**Figure 1.** Grammatical schemas and their correlations with the stages of well-being

A full trajectory of well-being will include:

- the onset of disease
- the disease setting in
- the disease on the wane
- the patient recuperating.

Three schemas have been identified so far for the expression of patient recuperating and getting better. Schema I, Change of state-cum-motion, is illustrated with (18), from Tariana.

(18) matsia di-a-ka  
well 3sgnf-become/go-RECENT.PAST.VISUAL  
'He got better'

*Tariana*

Similarly to the Motion schema (B) in (4a), the verb *-a* 'go, become' cannot occur in a serial verb construction. Schema II involves another motion verb, *-yena* 'surpass, pass, overcome', illustrated in (25) and (40). Schema II, State, is illustrated in (19), from

Baniwa of Içana, an Arawak language closely related to Tariana (a similar example from Tariana is in (41b)).

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

*Baniwa of Içana*

The cognitive patterns underlying each schema at every stage of well-being are embedded in the culture-specific stereotypes and attitudes to various stages of well-being and their motivations. What are the cognitive and attitudinal underpinnings for each particular schema? Can we provide an explanation for their choice in a given linguistic and cultural context? And how do the ways of phrasing the processes of inflicting and spreading disease, and orchestrating recovery correlate with cultural practices and conceptions specific for each language and the society of its speakers?

Plotting a trajectory of well-being for each individual language and society is a means to this end. A trajectory of well-being involves outlining a combination of verbal description for various stages of well-being, focusing on grammatical schemas established this far. A trajectory of well-being in Tariana, a North Arawak language from Brazilian Amazonia, is the topic of our next section.

## 2. THE TRAJECTORY OF WELL-BEING: A CASE STUDY FROM TARIANA

We start with a few general facts about the Tariana language and those who speak it (§3.1). We then turn to lexical terminologies and grammatical means in the expressions of well-being, especially evidentials (§3.2). The trajectory of well-being and the grammatical schemas reflecting its various stages are addressed in §3.3, with a focus on cultural underpinnings of the driving forces of disease and recovery.

### 2.1. WHAT THE TARIANA LANGUAGE IS LIKE

Tariana is spoken by no more than 100 people in two villages in the remote areas of north-west Amazonia, Brazil (on the border with Colombia), the basin of the Vaupés River, and now also in São Gabriel da Cachoeira, the capital of the municipality with the same name and an urban centre. The language is endangered. The linguistic area of the Vaupés River Basin in Brazil is known for its institutionalised multilingualism based on the language group exogamy operating between speakers of Tariana and of languages

belonging to the East Tucanoan subgroup (including Tucano, Piratapuya, Wanano and Desano), and multilateral diffusion.<sup>2</sup>

Traditionally, there is a cultural inhibition against ‘language mixing’, that is, against any loan forms, especially from Tucano or any Tucanoan languages; many patterns, including sounds, intonation etc., are shared with Tucanoan languages. These inhibitions are currently becoming relaxed, as more and more loan forms from Tucano and from Portuguese make their way into the language. There is a marked difference between the ‘Traditional Tariana’ (now almost gone; documented by the author in the 1990s – early 2000s) and the ‘Innovative Tariana’, currently in use by the majority of living speakers. This bears an increasing impact of Tucano and of Portuguese, especially in syntax and discourse patterns.

In its typological make-up, Tariana is agglutinating with some fusion, and highly synthetic. Similarly to other Arawak languages, the only prefixes are cross-referencing markers, relative prefix *ka-* and its negative counterpart *ma-*. Person-marking prefixes have the same form for transitive subjects (A) and active intransitive subjects (S<sub>a</sub>) on verbs, and possessors on obligatorily possessed nouns. Stative verbs do not take prefixes. In addition, a foregrounded, salient or agentive subject of transitive and intransitive verbs takes the focussed subject marker *-ne/-nhe*. A topical non-subject marker *-nuku* occurs on any non-subject constituent, provided it constitutes the topic of previous or future discourse. Personal pronouns distinguish subject and non-subject forms each of which can take the focussed subject and the topical non-subject marker. The language has an instrumental-comitative case *-ne*, and one locative case *-se* which covers location, direction, and source. The expression of grammatical relations in the language bears a strong imprint of Tucanoan languages (Aikhenvald, 2002).

A large set of classifiers occur in multiple environments (including number words, demonstratives, interrogatives, adjectives, and possessive constructions, and nouns). Classifiers also serve to derive adjectives from verbs, thus making the class of adjectives open by derivation. Underived adjectives form a small closed class of about 29 members (spanning the semantic types of dimension, age, value, colour, and physical properties; further information in Aikhenvald, 2003, 72-4). Obligatory marking of information source (known as evidentiality) fused with tense is a salient feature of Tariana verbal morphology (see Aikhenvald, 2018b, for a typological outline and references on the phenomenon).

2 Further discussion of the Brazilian Vaupés is in Aikhenvald (2002, 2015: 75-82), and references there. For Tariana, there is a dictionary, a large collection of stories, a comprehensive grammar (AIKHENVALD, 2002, 2003, AIKHENVALD and BRITO, 2002), and a school program operating in the mission centre of Iauaretê).

## 2.2. TALKING ABOUT WELL-BEING: LEXICAL TERMS AND THE USE OF EVIDENTIALS

We start with lexical terms in talking about disease and well-being (§3.2.1), and then turn to the specific uses of evidentials in these contexts (§3.2.2).

### 2.2.1. LEXICAL FORMS IN THE EXPRESSION OF WELL-BEING

Lexical forms used in the expressions of well-being in Tariana are nouns, verbs and underived value adjectives. None of the other members of the closed class of underived adjectives are used in the expressions of well-being.

The verbs used in the descriptions of disease are active intransitive (as mentioned in §2.1). These verbs include two verbs with general meanings, *-kamia* ‘be ill’ and *-herena* ‘be seriously ill’. Verbs referring to bodily actions – which may or may not be associated with an illness – include *-khetya* ‘cough, make a coughing sound’, *-sikená*, *-siketa* ‘breathe heavily, sneeze’, *-kayana* ‘be burning, stinging (e.g. after eating hot pepper, or when speaking of severe pain)’, and *-khata* ‘vomit (including ritual vomiting)’. Each of these can be turned into nouns with general nominalizing suffixes *-nipe* ‘state or result nominalization’ and *-li* ‘process nominalization’, e.g. *pa-kamia-nipe* (impers-be.ill-nom.res) ‘illness, state of being ill’, *di-kamia-li* (3sgnf-be.ill-nom.process) ‘his falling ill’.

The verb *-herena* ‘fall/be seriously ill’ stands apart from the rest. This verb can only be nominalised with a non-productive suffix *-si*. The suffix is attested in a handful of nouns mostly referring to ritual practices, e.g. *hiwya-si* (indef+breath-nom) ‘magic breath’ and *i-aku-si* (indef-speak-nom) ‘speech, especially shamanic speech’ (see Aikhenvald, 2003, p. 129). The resulting form *i-rena-ka-si* (indef-be.seriously.ill-them-nom), or *herenasi* (be.seriously.ill-nom) (for innovative speakers), is used to refer to a serious disease. In traditional times, diseases referred to in this manner would be inflicted by shamanic activities and only treated by shamans (some examples are in Aikhenvald and Brito 2002, 161, 260, 269, 338).<sup>3</sup> The term *adaki* is used as a general term for dangerous disease. We return to its meanings in §3.3.1.

Verbs referring to symptoms of adverse bodily states do not take prefixes and belong to the category of stative verbs. These include *kai* ‘have pain, be painful’, *dupai* ‘be sick’, *we* ‘be itchy’, *wepa* ‘be numb, be paralysed’, *kapua* ‘have headache, be (of headache), be vertiginous and giddy’, *keru* ‘be angry, be acutely painful’. They can take classifiers and can then be used as modifiers, as we saw in (12) where *adaki* ‘fever’ is modified with the forms *kai-peri* (be.painful-cl.coll).

<sup>3</sup> Cognates include Baniwa of Içana inalienably possessed noun *-renaa* ‘chronic illness’ (RAMIREZ 2001, p. 278), Kurripako *-renaa* ‘illness’ (BEZERRA, 2005, p. 61), cf. Piapoco *-réni-* ‘be painfully hot’ (KLUMPP, 1995, p. 40).

Forms referring to specific bodily states and symptoms of ailment can be used as stative verbs and as nouns without having to be nominalized (akin to ‘double-duty’ forms in English; see Dixon, 2014, pp. 35-43). These include a number of monomorphemic forms, such as *adaki* ‘be feverish; fever’, *yari* ‘be dizzy, tipsy; dizziness’, *tsuli* ‘have diarrhoea; diarrhoea’, *wesi* ‘have a running nose or a flu; running nose, mucus’, *dai* ‘be sleepy; sleepiness’, and *khēnolena* ‘be nauseous’.

Visible states of illness can be described by noun phrases, e.g. *pa-thi iri-peri* (impers-eye red-cl.coll) ‘eye sickness’ (lit. red eyes), *iri sede-peri* (blood neg.exist-cl.coll) ‘anaemia’ (lit. lack of blood). A sick, weak, or anaemic person is typically referred to as *di-daki sedite* (3sgnf-body neg.exist-cl.anim) literally, ‘the one who has no body’.

The two value adjectives, *matsa* ‘good, healthy, proper, beautiful’ and *ma:tsi* ‘bad’, evil, naughty’, describe general evaluation of the person’s state of well-being. A recovering sufferer becomes ‘good’ (as in (18)). A dangerous disease with painful symptoms is referred to as ‘bad’ (as in (39)) or as ‘dangerous’ (as in (35b)).

A number of nouns refer to visible evidence of affliction or a wound, e.g. *i:sa* ‘wound’, *haira* ‘large, serious wound’, *hi:mi* ‘cramp, twitch’, *siña* ‘ulcer; fungal disease’. The terms for powerful evil spirits of the jungle occur in the descriptions of two diseases – *waki* ‘coughing fit; also used for whooping cough’ (literally, evil spirit) and *iñe itsale* (powerful.spirit hair-poss) ‘evil spirit’s hair’ (a loan translation from Tucano *wātī-poari* (evil.spirit-hair) ‘tuberculosis’ (Ramirez, 1997, pp. 299). The terms themselves were provided by one of the main collaborators for the work on the dictionary of Tariana, the late Graciliano Brito, a trained nurse, who insisted on including equivalents to Portuguese terms in the dictionary. Both are rarely used in day-to-day communication, and not familiar to many speakers.

Table 2 summarises the terms for diseases and ailments and their distribution across word classes in Tariana.

WORD CLASS	ACTIVE INTRANSITIVE VERBS	STATIVE VERBS	DOUBLE-DUTY: STATIVE VERBS AND NOUNS	UNDERIVED ADJECTIVES OF VALUE	NOUNS
MEANINGS	general state: be/fall ill be/fall be seriously ill	general symptoms of adverse states	specific symptoms of adverse states	state of health and well-being (good or bad)	visible evidence of affliction, such as a wound; two terms for specific illnesses rarely used

**Table 2.** Terms for diseases in Tariana and their distribution across word classes.

In summary: the terms for various symptoms of disease and adverse states appear to be neatly distributed across word classes. Notably, Tariana has numerous terms for symptoms of disease, and just a few for specific illnesses. This is not unlike other languages of the tropics (e.g. Gnu, a Torricelli language from Papua New Guinea, in Lewis, 1974, 1976).



The lack of specification of the actual ill is akin to name avoidance and taboo. In §4, we turn to an emergent exception to this principle within the discourse of COVID-19.

## 2.2.2. HOW DO YOU KNOW YOU ARE UNWELL?

Tariana (similar to the neighbouring Tucanoan languages) has an obligatory grammatical marking of information source, or evidentiality, fused with tense and clause type. In every sentence, speakers have to specify how they obtained the information. Evidentials as exponents of information source have the following meanings.

- VISUAL EVIDENTIALS are used if the speaker has seen the event or the state, or the event can be easily observed.
- NONVISUAL EVIDENTIALS refer to something heard, or smelt, or felt by touch (or something one cannot quite discern).
- INFERRED EVIDENTIALS refer to something inferred based on visible results: for instance, that it has rained because one can see the puddles, or that someone has eaten chicken because their hands are greasy.
- ASSUMED EVIDENTIALS are used if a statement is based on reasonable assumption and general knowledge.
- REPORTED EVIDENTIALS are employed if the information comes from a speech report by someone else.

The nonvisual evidential in Tariana is employed in the descriptions of what cannot be seen – one’s own physical and mental states, including illness, suffering, fever, and also thought, sadness, happiness (described as ‘first person effect’ in Aikhenvald, 2004, pp. 224-5, or as ‘endophoric’ meaning in Aikhenvald, 2018b, p. 26; Sun, 2018). In (4), (7), and (12), the descriptions of fever and sickness which have affected the speaker contain the non-visual evidential. Similarly, in (20), Olívia Brito, talks about her own sickness using a non-visual evidential. The same evidential is used with the stative verb *kherunikana* ‘be miserable’. Evidentials are in bold face.

(20)wha kherunikana-**mhana**, nu-kamia-ka-**mha** nuha,  
 We be.forlorn.poor-REM.P.NONVIS 1sg-fall.ill-DECL-PRES.NONVIS I  
 wa-kamia-ka-**mha** wha ai-nuku  
 1pl-fall.ill-DECL-PRES.NONVIS we here-TOP.NON.A/S  
 ‘We have been forlorn, I fell ill, we fell ill here’

When talking about someone else’s physical and mental state, a different evidential will be chosen. A visual evidential is employed if the speaker can see that another is sick. In (21), Olívia reports the fact that our younger brother Jovino is sick: she had seen him herself (similar examples are in (2) and (23)).

(21) Hĩhĩ      wa-weri                      Jovino ma:tsi                      di-kamia-ka-**naka**                      diha  
 this.very 1pl-younger.brother Jovino be.bad                      3sgnf-fall.ill-decl-pres.vis                      he  
 'This younger brother of ours Jovino, he fell badly ill'

The non-visual evidential is used to describe events which are conceived as not available to the human eye. Dreams by normal mortals are not seen, and are cast in non-visual evidentials; only shamans can talk about their prophetic dreams using visual evidentials. Shamanic actions cannot be talked about using visual evidentials by those who are not shamans themselves. Talking about a shaman inflicting and curing a disease involves a non-visual evidential (see examples (26a,b)-(28) and (30)-(33) in §3.3.2).

A major token of a proficient speaker and of a reliable person is their ability to use evidentials in the appropriate way. Those who deviate from the norm in their use of evidentials are looked upon with suspicion: they are considered either incompetent or as exposing potentially dangerous powers (if they overuse the visual evidential, as if they were shamans or sorcerers). White people are said to 'always lie' because they never tell you how they know things. This is the reflection of the fact that Portuguese and Spanish, referred to as the languages of 'White people' (*yalana yarupe*), do not have obligatory evidentials. For medical practitioners in the area, using evidentials correctly is a prerequisite for establishing successful rapport with the patient, and finding an appropriate cure.

### 2.3. THE TRAJECTORY OF WELL-BEING IN TARIANA

We start with the main notions and terms involved in describing a person's well-being and disease at its various stages in §3.3.1. The focal points of the trajectory of well-being are the topic of §3.3.2.

#### 2.3.1 DESCRIBING WELL-BEING AND DISEASE

Any disease can be referred to as *pa-kamia-nipe* (impers-be.sick-nom.action) 'disease in general'. The term *i-rena-ka-si* (indef-feel-decl-nom) means 'serious disease'. Another way of referring to a serious affliction is *adaki*. This term also means 'fever' (as a major symptom of being unwell). The main reason for the onset of *adaki* is believed to be shamanic intervention, often overtly realised as anger and aggressive behaviour by someone who has special powers. This is why scolding and aggressive verbal attacks are considered dangerous. By scolding, the person can inflict serious damage to the addressee, as a display of special power to unleash negative events. In numerous stories, 'scolding' by a shaman (*di-kwisa-nipe* (3sgnf-scold-nom.action) results in a serious accident or an incurable disease befalling the one being scolded.

In terms of its grammatical properties, *adaki* belongs to a subclass of stative verbs which do not have to be nominalized to be used as arguments. It can be considered ‘double duty’, used as a verb and as a noun without changing its form. In this respect, this noun is similar to other denominations of symptoms of disease (see §3.2.1). Similar to other members of the same class, the noun *adaki* triggers agreement in classifier *-peri* used for collective and mass nouns (including *uni* ‘water (as substance)’ or *surupe* ‘clay’). It can be modified with the adjective *ma:tsi-peri* (bad-cl.coll) ‘bad, strong fever’ and the stative verb *kai* ‘be painful’ which then takes the collective classifier *-peri*. An example is in (12): here *adaki kai-peri* (fever be.painful-cl.coll) refers to strong and painful disease (which may be realised as fever).

The term *adaki* has two meanings – (a) disease in general and (b) fever as its overt symptom. In its meaning (a), *adaki* can be replaced with *irenakasi* ‘serious illness’. It stands apart from other terms referring to overt symptoms of disease in several ways.

FIRSTLY, the term *adaki* ‘disease’ can be used in three schemas:

- (i) the Motion schema (B, as in (4), referring to the onset of disease;
- (ii) the Possession Location schema (C-ii), as in (7), to describe the disease which has already set in, and
- (iii) the Agentive Schema F, as in (12), to describe both the onset of disease and the patient in its grips.

In contrast, *adaki* ‘fever’ and other terms from the same syntactic class can only occur in the Possession Location schema (C-ii), but not in any of the others. Saying *\*wesi dhipa-mha nu-na* ‘?catarrh grabs me’ or *\*wesi di-nu-mha nu-na* ‘?catarrh came onto me’ would be ungrammatical.

SECONDLY, *adaki* in its both senses can be used as the subject of a transitive verb, in infrequent descriptions of how people feel when they are feverish. An example is in (22).

(22) <i>adaki</i>	<i>nu-na</i>	<i>di-kukumeta-mahka</i>
fever/sickness	1sg-OBJ	3sgnf-shiver+CAUS-REC.P.NONVIS
‘Fever made me shiver’		

No such examples have been attested with terms for symptoms of disease other than *adaki* in its meaning (b) ‘fever as an overt symptom of disease’.

THIRDLY, *adaki* ‘disease’ can occur with the classifier *-phi* ‘pot’ to refer to the magical ‘pot of fever’ (see (27)-(28)). Inflicting disease (as described in §3.3.2) involves only *adaki* in its meaning of ‘disease’ and none of the terms for symptoms.

Adverse states – including diseases – are generally described as *puaya*, a stative verb meaning ‘different, unfamiliar, adverse’ (see Aikhenvald, 2003, pp. 601-3 on the negative

overtones of the notion ‘different’ throughout the language). A breach of a taboo, or ritual misbehaviour, is likely to produce something described as *puaya*, ranging from an accident to a jaguar attack or a disease. Possible breaches include having sex before going hunting, or – since all the Tariana are observant Catholics –, doing any work, including hunting on Good Friday. When I made an attempt to take a picture of a healing session with a shaman in lauretê, he immediately warned us that this would be *puaya* and bring about adverse consequences. Female bodily states – menstruating and being pregnant – are potentially *puaya*: as a consequence, if a pregnant woman is taken on an expedition, this may be the cause of any mishap. Breaching the restrictions might unleash the actions of most powerful evil spirit *iñe* (we can recall, from §3.2.1, that the few specific names of diseases include this term). Only a powerful shaman would be able to counteract the effects of *iñe* (see also Aikhenvald, 2003, pp. 13-14, for a traditional classification of shamans and their powers).

Other major causes of dangerous diseases are shamanic activities referred to as *hiwyasi* ‘(breath-nom) ‘breath, or malevolent breath’ and subsequent ‘opening of a pot of fever’ (see §3.3.2). The illness ‘spreads’ as a result of the actions of a shaman or a spirit (this is in contrast to Dyirbal, an Australian language, where illness can be described as ‘crossing’ from one person to another, and thus can be transmitted from person to person: Dixon, 2019).

A further feature of Tariana discourse relevant to describing well-being is protective speech and attenuative register. A hidden shaman or an evil spirit may attack a person at any time. Hence the reluctance to overtly talk about one’s being physically well, for fear that evil spirits or malevolent shamans might overhear a person boasting of their well-being. One hardly ever says ‘I am fine’ in Tariana: if one is to speak ‘properly’, one needs to say ‘I am fine, more or less/almost’. This is comparable to a protective register in switching genders with reference to vulnerable small children in Amharic: as Pankhurst (1992, p. 160) puts it, ‘By referring to the boy as “she” or the girl as “he”, people believe they can trick the ‘death-wishers’ and increase the likelihood of survival’.

In (23), from a conversation, the speaker qualified his statement about his grandchildren being well with *kwamhe* ‘almost, more or less’. Evidentials are in bold face.

(23)	Nu-daki-ni	Manau-se	ka-ka-kali	hado-ne
	1sg-grandchild-pl	Manau-loc	REL-arrive-PART.PAST	mother-COMIT
	heku- <b>ka</b>	na-dia	naka,	matsa- <b>naka</b> -niki
	yesterday-REC.P.VIS	3pl-come	3pl+arrive	well-PRES.VIS-COMPL
	‘My grandchildren who had arrived from Manaus returned yesterday, they are fine, almost’			kwamhe. almost

An alternative is the suffix *-iha* ‘approximative, more-or-less’ and also the frustrative *-tha* ‘in vain, contrary to expectation’. In (24), the speaker used both the frustrative marker and the adverb *kwamhe*.

(24) Nuha matsa-tha-niki ai-nuku,  
I well-FRUST-COMPL here-TOP.NON,A/S  
kwamhe alia-naka nu-daki-ni-ne  
almost exist-PRES.VIS 1sg-grandchild-pl-COMIT  
'I am well here (contrary to expectation), I am more or less with my grandchildren'

An older speaker in (25) described her recovery from COVID-19 (see §4), using the approximative suffix *-iha*, the frustrative-counterexpectation suffix *-tha* and the adverb *kwamhe*.

(25) ai-nuku wha matsa-iha-tha kwamhe,  
here-TOP.NON,A/S we well-APPROX-FRUST almost  
wa-yena-iha-tha, kasina-tha matsa-mha-da  
1pl-overcome-APPROX-FRUST now-FRUST well-PRES.NONVIS-PROBABLY  
'Here we are just about more or less ok (against expectations), we have just about overcome (the illness), now we are probably feeling ok (against expectations)'

The use of the modal marker *-da* is an additional feature of the protective attenuative register, taking epistemic certainty out of a statement concerning 'being ok': one is always in danger of falling into the hands of an adverse state and one can never be certain that one is fine.

### 2.3.2. THE STAGES OF WELL-BEING

The focal stages on a trajectory of well-being are: the onset of disease, the disease setting in, the disease on the wane, patient recuperating. Table 3 features the descriptions of these focal points in Tariana.

FOCAL POINT	EXPRESSION USED	SCHEMA
ONSET OF DISEASE	<i>adaki di-nu-mha nu-na</i> fever/sickness 3sgnf-come-PRES.NONVIS 1sg-OBJ 'fever or sickness comes to me'	B Motion
	<i>nu-kamia-mha nu-wa</i> 1sg-be.sick-PRES.NONVIS 1sg-enter 'I am getting sick' (lit. enter the state of sickness)	
	<i>adaki dhipa-mha nu-na</i> fever/sickness 3sgnf+grab-PRES.NONVIS 1sg-OBJ 'fever or sickness grabs me'	F Agentive disease
DISEASE SETS IN	<i>nu-kamia-mha</i> 1sg-be.sick-PRES.NONVIS 'I am sick'	A-ii Predication
	<i>adaki alia-mha nu-na</i> fever/sickness exist-PRES.NONVIS 1sg-OBJ 'I have fever/sickness'	C-ii Possession

DISEASE ON THE WANE	<i>adaki di-a-mha</i> 'Fever goes (away)'	Motion check
PATIENT RECUPERATING	<i>nu-yena-mha kwamhe</i> 1sg-pass/overcome-PRES.NONVIS almost 'I have overcome (disease) (more or less)'	n/a
	<i>matsia-naka kwamhe</i> good-PRES.VIS almost 'I am fine (more or less)'	n/a

Table 3. The stages of well-being in Tariana.

Inflicting disease is associated with the involvement and the agency of a shaman, *malieri*. The subsequent actions (described with the non-visual evidential, as mentioned in §3.2.1) are described as follows:

(26a) *hiwyasi di-sueta-mha*  
magic.breath 3sgnf-stay+CAUS-PRES.NONVIS  
'He puts magic breath (out there)'

(26b) *adaki di-musu-ita-mha*  
fever/sickness 3sgnf-go.out-CAUS-PRES.NONVIS  
'He makes fever come out'

(26c) *adaki di-sueta-mha*  
fever/sickness 3sgnf-stay+CAUS-PRES.NONVIS  
'He puts fever (out there)'

Fever is located in the Fever pot (a hidden location known only to powerful shamans, associated with old abandoned settlements where people had been buried inside the houses for a few generations). This is described as (27). The reported evidential is used here, since speakers who do not have shamanic powers themselves cannot have supernatural non-visual experience of the phenomenon, and are supposed to know about it only by hear-say.

(27) *adaki-phi di-swa-pidana*  
fever/sickness-CL:POT 3sgnf-stay-REM.P.REP  
'The pot of fever stays'

Shamanic actions in inflicting disease involve opening the pot of fever:

(28) *malieri adaki-phi di-ku-mha*  
shaman fever/sickness-CL:POT 3sgnf-open-PRES.NONVIS  
'A shaman opens the pot of fever'.

As a result of (28), the disease *adaki* spreads (29), and the disease takes hold. One can see the spread of fever, which is why a visual evidential is appropriate.

(29)	<i>adaki</i> fever/sickness 'Fever spreads'	<i>di-asa-ka</i> 3sgnf-spread-REC.P.VIS
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Alternatively, a shaman can put *adaki* wherever or onto whoever he chooses:

(30)	<i>adaki</i> fever/sickness 'He puts up fever'	<i>di-emeta-mha</i> 3sgnf-stand.up+CAUS-PRES,NONVIS
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Cure can be achieved by actions of another shaman, described as 'blessing' the sufferer (using traditional herbal remedies) (31), sucking (the illness) (32), and ostensibly closing up the pot of fever (33).

(31)	<i>malieri</i> shaman 'Shaman blesses (the person)'	<i>di-ñapa-mha</i> 3sgnf-bless-PRES,NONVIS
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(32)	<i>malieri</i> shaman 'Shaman sucks (the person)'	<i>di-pusua-mha</i> 3sgnf-suck-PRES,NONVIS
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(33)	<i>malieri</i> shaman 'Shaman closes up the pot of fever'	<i>di-ita</i> 3sgnf-close	<i>di-ña-mha</i> 3sgnf-hit-PRES,NONVIS	<i>adaki-phi</i> fever/sickness-CL:POT
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As a consequence of shamanic actions, *adaki* goes away and the patient overcomes the disease — something described using the protective attenuative register.

The schemas used in talking about the four stages of well-being reflect the inherent agentivity behind a disease (*adaki*) being inflicted. The disease may be presented as agentive by itself (reflected in Schema F). However, the discourse of disease and well-being reveals the agentivity of a power behind it — an omnipotent shaman whose actions are perceivable in the form of *adaki* (as we saw in examples (26)-(33)).

This is consistent with a pan-Amerindian conceptualization of the world, based on an ontological principle of a spiritual unity and a corporeal diversity. What one sees or perceives in physical terms, and the cause-effect relations one might establish based on one's experience, 'is not necessarily that which it is in essence' (as Carlin, 2018, p. 315 puts it). Following the same principle, a shaman may appear in various guises — a jaguar, or a deer. The appearances, and the outer form (or 'clothing'), may be deceptive. Similarly, a

hidden agency behind a physical realization is elusive and dangerous. This principle is succinctly phrased in the title of Peter Rivière’s classic paper ‘WYSINWYG (What you see is not what you get) in Amazonia’ (1994), captured within the concept of Amazonian perspectivism by Viveiros de Castro (2004).

The agency of *adaki*, a dangerous disease, whose main realization and symptom is ‘fever’, reflects hidden actions of superior forces (similar to agentive powers behind the spread of disease among the Cashinawa in Peru and Brazil: see a preliminary investigation in Camargo, 2020, ms which points in a similar direction). Those forces will also be responsible for removing the disease and the danger. The established expressions and traditional ways of talking about disease and afflictions are centred around these.

What happens when a new calamity – the COVID-19 pandemic – comes on the scene? This is what we turn to now.

### 3. THE LANGUAGE OF A PANDEMIC: HOW THE TARIANA LANGUAGE EMBRACES COVID-19

Times of social upheaval engender language change – new forms and patterns emerge in discussing new and hitherto unfamiliar happenings. The COVID-19 pandemic has seriously affected all generations of the Tariana, and nearly each of the remaining speakers: all of them, young and old, have been through COVID-19. The ways of talking about COVID-19 as a new phenomenon stand apart from talking about other afflictions in four ways: the emergence of disease (§4.1), the onset of disease (§4.2), specification of the disease (§4.3), emergent name avoidance (§4.4), and the increasing influence of Portuguese onto the discourse of disease (§4.5).<sup>4</sup>

#### 3.1. THE EMERGENCE OF COVID-19

We saw in Table 3 that a disease – inflicted by a powerful shaman – ‘grabs’ a person and may spread – unless another powerful sorcerer makes it diminish and finally disperse. COVID-19 has descended upon Amazonia as an extraneous force, ostensibly spread by outsiders. COVID-19 is described with the stative verb *hiku* ‘appear’, as if coming out of nowhere. An example is in (34).

4 Based on my interactions with the speakers, via voice messages on WhatsApp and Facebook (started in early June 2020). The current corpus contains dozens of short recordings, adding up to two hours, and is growing. We are aware of the limitations of the data obtained via these means, as they do not allow us to register the patterns of interaction between speakers themselves.



- (34) aĩ-se-nuku                      kiaku-naka                      hĩ                      kovidži  
 here-LOC-TOP.NON,A/S                      strong-PRES.VIS                      this:ANIM                      COVID.19
- hiku-pita,                      emi-peni-nuku-**naka**                      hiku-nha  
 appear-AGAIN                      child-PL-TOP.NON,A/S-PRES,VIS                      appear-PAUS
- ‘Right here this COVID appears again, it appears with regard to children’ (after older people had recovered)

The speaker uses the visual evidential, because the statement is based on what he can see.

### 3.2. THE ONSET OF DISEASE: A NEW SCHEMA FOR COVID-19

The onset of COVID-19 has been described in two ways. Similar to *adaki* in (12) and in Table 3, the onset of the new affliction has been described using the Agentive schema (F). This is shown in (35).

- (35a) mēda                      kovidži-ne                      emi-peni-nuku                      kiaku dhipa  
 COUNTEREXP                      COVID-FOC.A/S                      child-PL-TOP.NON,A/S                      strong 3sgnf+grab  
 ikasupiaka-nuku  
 now-TOP.NON,A/S  
 ‘However, COVID has now taken a strong hold on children’,

- (35b) karuna-pu                      di-ni-niki-ta                      pa:tsi  
 dangerous-AUG                      3sgnf-do-COMPL                      wayward/different  
 pa:tsi                      pa-kamia-nipe                      kayu-peri  
 wayward                      IMPERS-be.sick-NOM                      be.thus-CL.COLL  
 hiku di-ni-**naka**                      aĩse-nuku.  
 appear 3sgnf-do-PRES,VIS                      here-TOP,NON,A/S  
 ‘This wayward (disease) makes it dangerous again, there has appeared something like a different (wayward) sickness here’

The name of COVID is specified, with a borrowing from Portuguese. The form contains a loan phoneme, a palatalized affricate *dʒ* absent from the traditional language (attested only as an allophone of the word-initial *y* in the innovative Tariana: Aikhenvald, 2002, p. 45). Introducing loan forms from Portuguese, and occasionally from Tucano, is a feature of innovative speakers (which goes against the traditional Vaupés-wide inhibition on loan forms).

An alternative to this is a schema not attested before. Speakers use the verb *-keta* ‘run into accidentally, encounter by chance’. The verb *-keta* is often used to describe how one encounters a snake or some other unpleasant phenomenon in the jungle, or just something or someone unplanned (see some examples in Aikhenvald and Brito, 2002, pp. 194-5). The other verb with a somewhat similar meaning, *-korota*, ‘meet on purpose, hit the target, catch

(something)’ (Aikhenvald and Brito, 200, pp. 196-7), is not used in any expressions of disease. An example of ‘running into’ COVID-19 in (36).

(36)ma:tsi-peri            i-rena-ka-si-nuku  
 bad-CL.COLL            INDEF-be.seriously.ill-THEM-NOM-TOP.NON.A/S  
 nu-keta-yume  
 1sg-run.into-AFTER:SS  
 nu-kamia-**mha**            nuhua  
 1sg-be.sick-PRES.NONVIS    I  
 ‘After I’d run into the bad illness, I am sick’

The speaker does not specify the exact name of the disease, referring to it as a ‘bad serious illness’ – we return to this in §4.4.

### 3.3. SPECIFICATION OF THE DISEASE

In traditional discourse on disease, the name of the affliction is left unspecified. As shown in §3.2.1, the few existing terms for specific diseases (such as tuberculosis) are not used in day-to-day interaction. The ways of talking about COVID-19 are markedly different. When talking about being sick with the virus, its name can be stated (as we saw in (35)). The name of the disease can accompany the verb *-kamia* ‘be sick, ill’, as shown in (37). The speaker uses the reported evidential, because she learnt about her nephew (who lives in a different town) from someone else.

(37)wa-idoali-tiki        Rosimar-mia-**pida**        kovidži                    di-kamia-ka  
 1pl-nephew-DIM        Rosimar-ONLY-PRES.REP    COVID                    3sgnf-be.sick-DECL  
 ‘Only our little nephew, Rosimar, is reportedly sick with COVID’

The syntactic functions of the noun *kovidži* and its substitutes are curious. We can recall, from §3.2.1, that the verb *-kamia* ‘fall ill’ is normally intransitive and thus cannot take a direct object. In (37) and similar examples, *kovidži* does not have the properties of a direct object: it cannot be the target of a passive, or referred to anaphorically with an object pronoun, or questioned with the content question marker *kwaka* ‘what?’. It does not appear to be obligatory. At present, we can only say that the argument structure of the verb ‘be sick’ has changed: it now occurs with an additional non-subject term.

### 3.4. EMERGENT NAME AVOIDANCE

Name avoidance is not a prominent feature of the Tariana (with the exception of a special taboo register, now all but forgotten: Aikhenvald, 2003, p. 619). Speakers, especially younger ones, refer to COVID-19 with the Portuguese loan (as shown in (35) and (37)). Older speakers

(in their late sixties and seventies) use circumlocutions. In (36), Olívia calls COVID-19 ‘a bad dangerous illness’. In (38), she calls it ‘what many people die of’ rather than its name.

(38) hanupe nawiki na-yami-nipe-nuku-mha nu-kamia nu-wa  
many people 3pl-die-NOM-TOP, NON, A/S-PRES, NONVIS 1sg-be.sick 1sg-enter  
‘I am starting to be sick with the (one which) many people die of’

A traditional way of referring to a start of disease used to be (4b), with the disease left unspecified.

In another stretch of conversation, a speaker refers to COVID-19 as ‘a bad dangerous illness’, again, without calling it by its name. She is using the reported evidential because she had received the information from someone else a few days prior.

(39) ikasupiaka-nuku diha hi ma:tsi-peri  
now-TOP, NON, A/S he this, ANIM bad-CL, COLL  
i-rena-ka-si-nuku di-kamia-pidaka  
INDEF-serious.illness-THEM-NOM-TOP, NON, A/S 3sgnf-be.sick-REC, P, REP  
‘Now he is said to be ill with this bad serious disease’

The same strategy of name avoidance was used to tell me about her recovery. In (40), the speaker uses the protective attenuative way of saying that she and her siblings have ‘almost’ overcome the disease. The ‘serious disease’ is marked with the topical non-subject case, since this has been the topic of our interaction for some time.

(40) ai-nuku wha i-rena-ka-si-tupe-nuku  
here-top.non.a/s we indef-serious.disease-THEM-NOM-DIM, PL-TOP, NON, A/S  
wa-yena-ya-tha-naka kwamhe  
1pl-surpass-APPROX-FRUST-PRES, VIS almost  
‘Here we have overcome/recovered from the little serious disease, more or less’

The use of the diminutive marker appears to be part of the attenuative register: the importance of the dangerous disease and our ‘surpassing’ it is downplayed, so as not to brag about one’s well-being attracting further potential dangers.

The emergent name avoidance with respect to COVID-19 is a corollary of what we saw in §4.3: a tendency to specify the fact that one is afflicted with this disease, and no other. Name avoidance allows the speaker to emphasize how bad the disease is, without being too specific, in accordance with their general reluctance to dwell on unpleasant events. Another reason could be traditional avoidance of obvious loan forms – a tendency still followed by most traditional speakers.

### 3.5. THE INCREASING INFLUENCE OF PORTUGUESE

The ways of speaking change as languages come in contact with each other. Speakers of Tariana are getting more and more exposure to Portuguese, especially through information brochures dealing with COVID-19 and the interaction with Brazilian medical personnel (it is not known whether any vaccination testing has been applied to anyone). As a consequence, Portuguese ways of talking about disease make their way into Tariana. In (41), a younger speaker of the language produced parallel sentences, in Portuguese (41a) and in Tariana (41b). The grammatical schema Acquisition with Agentive sufferer (E) is replicated in both languages.

(41a) já peguei essa kovidži,  
already 1sg.caught this.fem.sg COVID  
já, já tou melhor já  
already, already 1sg.am better already  
'I already caught this COVID, I am already better'

(41b) adaki nhupa-sita-na, matsa, matsa-naka ikasu-nuku nhua  
fever 1sg+grab-RESULT-REM.P.VIS good good-PRES.VIS now-TOP.NON.A/S I  
  
adaki nu-na ma:tsi-pu di-ni-mhana, kwamhe matsa-naka  
fever 1sg-OBJ bad-AUG 3sgnf-do-REM.P.NONVIS almost good-PRES.VIS  
'I caught fever, good, I am now good, fever did a lot of damage to me, (I am) almost good'

The use of the Acquisition schema with an agentive sufferer (E) is reminiscent of (10), from Baniwa of Içana (a closely related language, not mutually intelligible with Tariana). In all likelihood, both Tariana in (41b) and Baniwa of Içana in (10) contain calques from Portuguese expression similar to English 'I caught fever'. The new speech practice of specifying the disease (discussed in §4.3) could also stem from influence of Brazilian discourse whereby a disease has to be stated, to which the speakers get more and more exposure in the times of a pandemic. In each of these instances, we are faced with emergent grammatical patterns (along the lines of Hopper 1987) – the seeds of new ways of saying things and new grammatical schemas accompanying the appearance of COVID-19.

### 3.6. COVID CHANGING THE TARIANA LANGUAGE: WHAT CAN WE CONCLUDE?

The newly emergent COVID-19 has sparked new ways of talking about it, not attested in prior ways of speaking about diseases and afflictions. Unlike any other disease, COVID-19 'appears' (rather than being spread or inflicted). In the descriptions of those who get sick with COVID-19, its name is specified, in the function of an additional non-subject argument

with the intransitive verb ‘be sick’. At the same time, some speakers avoid mentioning COVID-19 by name, referring to it as a serious illness, or something people die of, as an instance of emergent name avoidance. In talking about the onset of COVID-19, a new grammatical schema is emerging: one ‘runs across’ COVID-19 as one would accidentally encounter a snake in the jungle or an obstacle of any sort. Finally, the spread of COVID-19 coincides with the spread of calques from Portuguese, the main language of medical communication in an attempt to get a cure.

How stable are these innovations, and will they last? We can recall that Tariana is an endangered language. The extant speakers are fully fluent in the language; however, its transmission to the younger generation is problematic. At this point in time, it is hard to predict whether the new ways of talking about COVID-19 and the new emergent grammatical structures are there to stay.

#### 4. THE GRAMMAR OF WELL-BEING: TO SUMMARISE

We have identified eight grammatical schemas in talking about well-being, from the onset of disease to the disease setting in. Most of them have specific properties – setting them apart from superficially similar structures, as if shaping up a special ‘grammar of well-being’. The grammatical schemas appear to be distributed along the trajectories of well-being in its various stages. The semantics of grammatical structures correlates with attitudes and ways of thinking about things. As Enfield (2004, p. 3) put it, ‘we find grammatical constructions directly encoding cultural values of a given group of speakers’.

This is illustrated for Tariana, an Arawak language from north-west Amazonia. The ways in which the onset and the progress of disease is described correlates with the conceptualization of its reasons and underpinnings. The underlying agency of a powerful shaman behind the spread of an affliction correlates with the grammatical schema used. The disease and shamanic activities are ‘unseen’ (as reflected in the use of evidentials in the language). In Traditional Tariana, vagueness in disease terminologies may be associated with a reluctance to identify the exact ailment – an avoidance technique aimed at not invoking the unwanted evil by assigning it an unequivocal name, akin to name-taboo for diseases, described by Keesing and Fifi’i (1969).

New events and new situations require new ways of talking about new phenomena. The emergence of COVID-19 has triggered hitherto unseen patterns of talking about this sickness. The Tariana is undergoing rapid change in introducing new schemas and new ways of talking about this disease, along the lines of emergent grammar. In Tariana (and elsewhere), ways of speaking about diseases may change because of contact between

languages and people under the influence of mainstream cultures and national languages. But do the underlying concepts change at the same time?

Answering this, and many other questions, relevant to the grammar of the expressions of well-being is a way towards understanding what Ameka (2013, p. 225) referred to as ‘the reflexive relation between language, culture, and modes of thinking, and in particular the ways in which culture and cognition are encoded in grammar’.

## 5. ACKNOWLEDGEMENTS.

I am grateful to my Tariana family, especially Jovino, Olívia, Leo, and Rafael Brito for sharing their remarkable language with me. Special thanks go to R. M. W. Dixon for his incisive comments, to the anonymous referees, and to Brigitta Flick for careful proof-reading.

### ABBREVIATIONS

1, 2, 3 first, second, third person; approx approximative; aug augmentative; caus causative; cl:coll classifier for collective referents; cl:pot classifier for pots; comit comitative; compl completive; compl.same.subject completive same subject suffix; counterexp counterexpectation marker; decl declarative; dim diminutive; dim.pl diminutive plural; fem feminine; foc.a/s focused subject; frust frustrative; impers impersonal; indef indefinite; loc locative; masc masculine; neg.exist negative existential; nom nominalization; nom.process process nominalization; nom.res result nominalization; obj object; only suffix meaning ‘only’; part.past past participle; paus pausal form; pl plural; pres.nonvis present non-visual; pres.rep present reported; pres.vis present visual; rec.p.nonvis recent past nonvisual; rec.p.rep recent past reported; rec.p.vis recent past visual; rel relativizer; rem.p.nonvis remote past nonvisual; rem.p.rep remote past reported; rem.p.vis remote past visual; result resultative; sg singular; sgnf singular nonfeminine; them thematic; top topic; top.non.a/s topical non-subject

### REFERENCES

- Aikhenvald, Alexandra Y. 1998. 'Warekena', pp. 215-439 of *Handbook of Amazonian Languages*, edited by D. C. Derbyshire and G. K. Pullum vol. 4. Berlin: Mouton de Gruyter.
- Aikhenvald, Alexandra Y. 2002. *Language contact in Amazonia*. Oxford: Oxford University Press.
- Aikhenvald, Alexandra Y. 2003. *A grammar of Tariana from north-west Amazonia*. Cambridge: Cambridge University Press.
- Aikhenvald, Alexandra Y. 2004. *Evidentiality*. Oxford: Oxford University Press.
- Aikhenvald, Alexandra Y. 2008. *The Manambu language of East Sepik, Papua New Guinea*. Oxford: Oxford University Press.

- Aikhenvald, Alexandra Y. 2013. 'Possession and ownership in cross-linguistic perspective', pp. 1-64 of A. Y. Aikhenvald and R. M. W. Dixon. eds. *Possession and ownership: a cross-linguistic typology*. Oxford: Oxford University Press.
- Aikhenvald, Alexandra Y. 2015. *The languages of the Amazon*. Oxford: Oxford University Press.
- Aikhenvald, Alexandra Y. 2018a. *Serial verbs*. Oxford: Oxford University Press.
- Aikhenvald, Alexandra Y. 2018b. 'Evidentiality: the framework', pp. 1-46 of *The Oxford Handbook of evidentiality*, edited by A. Y. Aikhenvald. Oxford: Oxford University Press.
- Aikhenvald, Alexandra Y. 2019. 'The grammar of well-being'. Multidisciplinary Symposium 'The language of well-being', Cairns, 23-4 April. (available on [www.academia.edu](http://www.academia.edu)).
- Aikhenvald, Alexandra Y. and the Brito family. 2002. *Dicionário Tariana-Português e Português-Tariana. Boletim do Museu Goeldi*. Belém.
- Aikhenvald, Alexandra Y. and R. M. W. Dixon 2020. 'Linguistic typology: setting the scene', pp. 1-35 of *The Cambridge Handbook of Linguistic Typology*, edited by A. Y. Aikhenvald and R. M. W. Dixon. Cambridge: Cambridge University Press.
- Allan, Keith and Kate Burridge. 2006. *Forbidden words. Taboo and the censoring of language*. Cambridge: Cambridge University Press.
- Ameka, Felix K. 2013. 'Possessive constructions in Likpe (S"kp"lé)', pp. 224-42 of *Possession and ownership: a cross-linguistic typology*, edited by Alexandra Y. Aikhenvald and R. M. W. Dixon. Oxford: Oxford University Press.
- Benczes, Réka and Kate Burridge. 2018. 'Speaking of disease and death', pp. 61-77 of *The Oxford Handbook of Taboo words and language*, edited by Keith Allan. Oxford: Oxford University Press.
- Bezerra, Zenilson A. 2005. *Gramática Kuripako*. Mimeographed. Missão Novas Tribos do Brasil.
- Bradshaw, Robert. 2007. *Fuyug grammar sketch*. SIL, Ukarumpa.
- Burridge, Kate and H. Manns. 2020. 'Iso', 'boomer remover' and 'quarantini': How corona virus is changing our language'. *Conversations*.
- Camargo, Eliane. 2020. 'O COVID-19 visto pelos caxinauás. Uma contribuição etnolingüística'. Ms.
- Carlin, Eithne B. 2004. *A grammar of Trio, a Cariban language from Suriname*. Frankfurt am Main: Peter Lang.
- Carlin, Eithne B. 2018. 'Evidentiality and the Cariban languages', pp. 315-32 of *The Oxford Handbook of evidentiality*, edited by Alexandra Y. Aikhenvald. Oxford: Oxford University Press.
- 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. 2010. *Basic linguistic theory*. Volume II. *Grammatical topics*. Oxford: Oxford University Press.
- Dixon, R. M. W. 2014. *Making new words: morphological derivation in English*. Oxford: Oxford University Press.
- Dixon, R. M. W. 2019. 'Being ill and getting ill in Dyirbal'. Multidisciplinary Symposium 'The language of well-being', Cairns, 23-4 April.
- Enfield, N. J. 2004. 'Ethnosyntax: introduction', pp. 3-30 of *Ethnosyntax*, ed. by N. J. Enfield. Oxford University Press.
- Heine, Bernd. 1993. *Auxiliaries. Cognitive forces and grammaticalization*. New York: Oxford University Press.
- Heine, Bernd. 1997. *Possession. Cognitive sources, forces, and grammaticalization*. Cambridge: Cambridge University Press.

- Hopper, Paul J. 1987. Emergent grammar. *Berkeley Linguistics Society. Proceedings of the Thirteenth Annual Meeting. General Session and Parasession of Grammar and Cognition*:139-57.
- Keesing, R.M. and J. Fifi'i. 1969. 'Kwaio word tabooing in its cultural context'. *Journal of The Polynesian Society* 78: 154-77.
- Khullar, Dhruv. 2014. 'The trouble with medicine's metaphors'. [www.theatlantic.com/health/archive/2014/08](http://www.theatlantic.com/health/archive/2014/08).
- Klumpp, Deloris. 1995. *Vocabulario Piapoco-Español*. Santafé de Bogotá: Asociación Instituto Lingüístico de Verano.
- Lewis, Gilbert. 1974. 'Gnau anatomy and vocabulary for illnesses'. *Oceania XLV*: 50-78.
- Lewis, Gilbert. 1976. A View of Sickness in New Guinea. *Social Anthropology and Medicine*, edited by J. B. Loudon. London, Academic Press: 49-104.
- Li, Charles N. and Sandra A. Thompson. 1980. *Mandarin Chinese. A functional reference grammar*. Berkeley: University of California Press.
- Luo, Yongxian. 2013. 'Possessive constructions in Mandarin Chinese', pp. 186-207 of *Possession and ownership: a cross-linguistic typology*, edited by Alexandra Y. Aikhenvald and R. M. W. Dixon. Oxford: Oxford University Press.
- Mihás, Elena. 2017. *Alto Perenee-Español-English. A trilingual illustrated thematic dictionary of Alto Perené (Arawak) of Peru*. Munich: Lincom Europa.
- Montgomery, Scott L. 1996. *The scientific voice*. The Guilford Press.
- Moura, Heronides and Fábio Lopes da Silva. 2021. 'O vírus nos ronda: metáforas sobre vírus e sobre corrupção'. *Porto das letras* 7.1.
- Pankhurst, Helen. 1992. *Gender, development and identity: an Ethiopian study*. London: Zed Books.
- Ramirez, Henri. 1997. *A Fala Tukano dos Yepâ-masa*. Tomo II. *Dicionário*. Manaus: Inspeção Salesiana Missionária da Amazônia CEDEM.
- Ramirez, Henri. 2001. *Dicionário Baniwa-Português*. Manaus: Universidade do Amazonas.
- Reisfield, Gary M. and George R. Wilson. 2004. 'Use of metaphor in the discourse on cancer'. *Journal of Clinical Oncology* 22, 19: 4024-27.
- Rivière, Pierre. 1994. 'WYSINWYG in Amazonia', *Journal of the Anthropological Society of Oxford* 25: 255-262.
- Shibatani, Masayoshi. 1996. 'Applicatives and benefactives: A cognitive account'. In M. Shibatani, & S. A. Thompson (Eds.), *Grammatical constructions: Their form and meaning* (pp. 157-194). Oxford: Clarendon Press.
- Shmeleva, Elena. 2020. 'Contagious neologisms' (Zarazitelnye neologizmy). *Kommersant, Nauka*, p. 44, April 2020.
- Sonntag, Susan. 1978. *Illness and metaphor*. Farrar, Straus and Giroux.
- Sonntag, Susan. 1989. *Aids and its metaphors*. Farrar, Straus and Giroux.
- Sun, Jackson T.-S. 2018. 'Evidentials and person', pp. 47-64 of *The Oxford Handbook of evidentiality*, edited by Alexandra Y. Aikhenvald. Oxford: Oxford University Press
- Viveiros de Castro, Eduardo. B. 2004. 'Exchanging perspectives: The transformation of objects into subjects in Amerindian ontologies', *Common Knowledge* 10: 463-484.
- Wojtylak, Katarzyna I. 2018. 'How did this grow in you? About the expression of disease in Murui (Witotoan)'. Talk at LCRC discussion forum.