
Realis/irrealis as a basic grammatical distinction in Southern Arawakan languages

Swintha Danielsen and Lena Terhart



Electronic version

URL: <http://journals.openedition.org/rsp/897>
DOI: 10.4000/rsp.897
ISSN: 2610-4377

Publisher

Presses universitaires d'Orléans

Printed version

Date of publication: 1 September 2016
Number of pages: 97-120
ISSN: 1285-4093

Electronic reference

Swintha Danielsen and Lena Terhart, « Realis/irrealis as a basic grammatical distinction in Southern Arawakan languages », *Revue de Sémantique et Pragmatique* [Online], 38 | 2015, Online since 01 February 2016, connection on 11 April 2020. URL : <http://journals.openedition.org/rsp/897> ; DOI : <https://doi.org/10.4000/rsp.897>

This text was automatically generated on 11 April 2020.

Revue de Sémantique et Pragmatique

Realis/irrealis as a basic grammatical distinction in Southern Arawakan languages¹

Swintha Danielsen and Lena Terhart

1. Introduction

- ¹ It has been claimed that verbal categories like tense, aspect, and modality are expressed optionally in most Amazonian languages (Dixon & Aikhenvald 1999, 9). But there is one category that is expressed obligatorily on verbs in the Southern Arawakan languages described here. This category has been called *reality status* (RS) by Elliott (2000) and it shows a binary distinction between realis and irrealis. Realis is used with events that are real, actualized or occurring, irrealis with events that are not actualized or « purely within the realm of thought » (Mithun 1999, 173). Although the notion of irrealis has been rejected by several scholars (see Section 2 for a summary of the criticism), we propose that the distinction between realis and irrealis is *the* basic distinction made by the languages described here. And by encoding this notion, predicates additionally convey information about temporal reference, like tense and aspect do in other languages. We argue that Southern Arawakan languages are realitystatus-prominent in the same way that other languages are tense-prominent or aspect-prominent (compare Bhat 1999, 65, 134-135). The languages described in this paper are Mojeño (Trinitario, Ignaciano), Baure, Joaquiniano, Paunaka, and Terena. They are distributed over Bolivia, and Brazil (see Map 1). We include a comparison to the Kampan Arawakan language Nanti of Peru (also part of the larger South- and South-Western Arawakan branch as originally defined by Aikhenvald 1999, 67-68, but a different subgroup, see also Danielsen et al. 2011, 178), because it has been argued that this language has a prototypical RS system (cf. Michael 2014a).² Note that some of the presented data have only been collected or published lately, so that a comparative study could not have been produced any earlier. Terena is a Southern Arawakan language of Brazil and has been studied by Ekdahl & Grimes (1964) and Ekdahl & Butler

(1979), among others. The Mojeño languages, Baure, Joaquiniano, and Paunaka are from Bolivian Lowlands (see Map 1). The Mojeño languages Trinitario and Ignaciano differ in the presence of phonemic /o/. While Trinitario distinguishes between /a/ and /o/, in Ignaciano the vowels have merged into one phoneme /a/, with drastic consequences for the encoding of RS, as will be shown in Section 4. Another difference important for the topic dealt with in this paper is rhythmic vowel deletion, which is present in Trinitario (cf. Rose 2014a), but absent in Ignaciano. Ignaciano has been described by Olza Zubiri et al. (2004). Baure has been studied in detail (Danielsen 2007, see also Danielsen et al., 2008-2013), and we are here addressing mainly Old Baure, formerly also called « historical Baure », which is the Baure language as documented by the Jesuits in the middle of the 18th century (Magio 1880 [1749] and Asis Coparcari 1880 [1767]). It deviates from contemporary Baure in that it had an RS system, which was later lost.³ Joaquiniano is now extinct, but the last speakers have been recorded by the authors of this paper, and it can be argued that this language derives from Old Baure (cf. Danielsen 2013). Paunaka is currently under investigation (Terhart in prep., Danielsen et al. 2011-2013), and a grammar sketch can be found in Danielsen & Terhart (2014). Data from Baure, Joaquiniano and Paunaka all stem from the authors' own fieldwork, except where otherwise mentioned. In the following, we first address the discussion about RS as a grammatical category (Section 2), where the RS system of Nanti is briefly introduced as the canonical prototype case, from which we depart our study. In Section 3, the Southern Arawakan languages are compared to the prototype, where we mainly refer to the languages that still have an intact RS system : Terena, Trinitario, Paunaka, Old Baure. This is followed by a Section on three RS systems in different states of decay in Ignaciano, Joaquiniano, and contemporary Baure. In Section 5, we arrive at the conclusions.

2. *Reality status* (irrealis/realis basic distinction) under debate

- 2 Some linguists reject *irrealis* as a typologically relevant concept. An argument that has been picked up again and again was formulated in Bybee et al. (1994) and Bybee (1998), namely that *irrealis* is a construct too heterogeneous and multifunctional in the investigated languages to reveal typological validity as a grammatical category. It would appear in various construction types with various modal meanings and therefore lack psychological reality. In de Haan's (2010, 2012) typological investigations on *irrealis* categories, he concludes that there is no cross-linguistic uniformity, and that no core meaning of an *irrealis* prototype could be identified. In addition, it is criticized that *irrealis* is often optional. In affirmative clauses, it generally only appears in a few construction types, whereas the distinction between *realis* and *irrealis* is neutralized in negative clauses, because they are always marked by *irrealis*. The different languages make use of *irrealis* with very different semantic (e.g. temporal or modal) interpretations, so that what one language marks as *irrealis* may be *realis* marked in another language, and basically anything, this is the argument, can be marked by any of the two. As for the semantics and (un)predictability of the meaning/function, van der Auwera & Devos (2012, 1) argue, contradicting de Haan (2010), that only *almost* every category can be either expressed by *realis* or *irrealis*, but one category will never be expressed by *irrealis* : « main clause affirmative declarative referring to the present

» (van der Auwera & Devos 2012, 1). Thus, irrealis cannot be completely arbitrary. And Michael (2014a) has shown that there is at least one language, Nanti (South-Western Arawakan), that has an obligatory RS system working in every morphosyntactic environment of verbal inflection. He proposes to take the approach of canonical typology (cf. Michael 2014a) to account for differences among the languages, when doing comparison. Canonical typology is an advancement of the method of defining a prototype (cf. Corbett 2007),ⁱ where the focus for each category is not so much a general truth but a linguistic reality in individual languages. A canonical system is defined and taken as the point of departure. For a category to exist, this category does not need to be expressed in the same way in all languages. However, a canonical category should show up in any language. Michael (2014a) identifies several semantic parameters that are important for RS. They are listed in Table 1.

SEMANTIC PARAMETER	REALIS MARKING	IRREALIS MARKING
Temporal reference	non-future	future
Prospectiveness	-	purposive, prospective complement
Polarity	positive	negative
Hypotheticality	actual	hypothetical, (conditional), (counterfactual)
Factuality / Epistemic Modality	certainty	uncertainty
Speaker-Oriented Modality	-	imperative, polite directive / exhortative
Agent-Oriented Modality	-	obligation, need

Table 1: Semantic parameter values and reality status marking (adapted and adjusted from Michael 2014a, 252 and 266)

Realis marked predicates have generally non-future temporal reference and are found in affirmative clauses. Realis is non-hypothetical and reflects certainty. Irrealis, on the other hand, is found in expressions of future events, negative clauses, hypothetical statements and conveys uncertainty. Furthermore, irrealis is applied for speaker-oriented modality – imperative, exhortative –, and agent-oriented modality – obligation or necessity. All these characteristics are generally addressed when referring to irrealis marking, but some languages only cover part of these parameters. The Nanti system fulfils all criteria to be considered a prototypical or canonical system. Michael (2014a, 32) calls RS in Nanti a « binary inflectional category ». Realis is marked by a suffix on the verb stem at the outermost inflectional position, i.e. following any directional or aspectual suffixes. Irrealis is marked by two morphemes, a prefix directly preceding the verb stem and a suffix in the same position as the realis suffix. The actual

suffix differs according to verb stem class (two classes), see Table 2.

SEMANTIC PARAMETER	REALIS MARKING	IRREALIS MARKING
Temporal reference	non-future	future
Prospectiveness	-	purposive, prospective complement
Polarity	positive	negative
Hypotheticality	actual	hypothetical, (conditional), (counterfactual)
Factuality / Epistemic Modality	certainty	uncertainty
Speaker-Oriented Modality	-	imperative, polite directive / exhortative
Agent-Oriented Modality	-	obligation, need

Table 2: Nanti reality status basic allomorphs (adapted from Michael 2014a, 261)⁴

3 Examples of realis and irrealis clauses in Nanti are given in (1) a. and b.:

4 (1)

a.	ipiganahi ⁵ i=pig-an-ah-i 3sg.m=return-abl-reg- real 'He returned back away (from where he came).'	NANTI (Michael 2014a, 261)
b.	impiganahe i=N-pig-an-ah-e 3sg.m= irr -return-abl-reg- irr 'He will return back away (from where he came).'	

5 While negative constructions often include ambiguity regarding RS marking cross-linguistically, the binary character of the RS system is maintained in Nanti negative clauses, because there is a special negative irrealis in cases in which the positive counterpart of the clause would be irrealis. The difference between the two constructions can be studied in (2). In (2) a. the only parameter that triggers irrealis marking is the negative polarity. The verb is thus marked for irrealis and a negative particle based on *te* (glossed neg.real « realis negation ») is used. In (2) b., there are two parameters that trigger irrealis marking : future reference and negative polarity. This « doubly irrealis construction »⁶ is marked by using a different negative particle, based on *ha* (glossed neg.irr « irrealis negation »), but the verb is then marked as realis (Michael 2014a, 272, 2014b).

6 (2)

a.	tera improhe Nanti tera i=N-poroh-e neg.real 3sg.m= irr -clear.land- irr 'He is not clearing land.'	(Michael 2014b, 188)
b.	hara iporohi hara i=poroh-i neg.irr 3sg.m=clear.land- real 'He will not clear land.'	

- 7 While in some languages, habitual past may be irrealis marked, in Nanti, the habitual triggers realis marking. Michael (2014a, 284) argues that languages that encode habitual by so-called « irrealis » may encode a difference in temporal definiteness rather than RS. Given a system like the Nanti one exists, we can assume that there is a grammatical category of reality status. RS systems are in fact found world-wide – take e.g. Omotic languages of Ethiopia (van der Auwera & Devos 2012, 172), North-American native languages (Mithun 1999, 173-180), and a number of Australian and Oceanic languages (Elliott 2000). In some languages RS is best described as the basic distinction in the grammatical marking of verbs (Elliott 2000, Michael 2008, 2014a, 2014b), in spite of the difficulty of finding a semantic definition valid for all languages.

3. The reality status systems in Southern Arawakan languages

« Although reality status systems have not featured prominently in comparative work of Arawak TAM systems (see, e.g. Aikhenvald 1999 : 93-4), there are indications that they may be of considerable antiquity [in South- and South-Western Arawakan]. » (Michael 2014a, 278)⁷

- 8 In this section, we will examine the RS systems of five languages of the Southern Arawakan subgroup of the South- and South-Western Arawakan branch. We will make use of the canonical approach as proposed by Michael (2014a) and apply the semantic parameters given in Table 1 (Sections 3.1 through 3.7). First of all, we offer some general observations about realis and irrealis marking in the investigated languages. In Terena, Paunaka, Trinitario, Old Baure, and Joaquiniano, irrealis is marked on the verb obligatorily with an affix *a* according to verb classes: active verbs receive the suffix *-a*, stative verbs the prefix *a-*. In Terena, the prefix may also be *o-*, if the first vowel of the verb stem is *o* (Ek Dahl & Grimes 1964, 262) as a result of regressive vowel harmony. The same seems to hold for Joaquiniano. In Old Baure, the irrealis prefix only changes to *o-* before the attributive prefix *ko-* in regressive vowel harmony (cf. Magio 1880, 10); other verb stems containing *o* do not cause this effect (cf. Magio 1880, 9). The status of realis marking is less clear. Realis is associated with the final vowel *o* or *u* of active verb stems, which is reflected in the choice of Ek Dahl & Grimes (1964) and Butler (1978, 50) to gloss it as a separate realis marker in Terena. But there are arguments for not considering those vowels as markers of realis proper. The verb stems of stative verbs usually do not end in this vowel, so that only active verbs would be marked for realis. Rose (2014b, 227) argues for the *o* of Trinitario to be a default final vowel of active verb

stems, which is usually deleted if an irrealis suffix is added (as in (3)), but may be maintained under certain circumstances, when irrealis is shown in another location in the chain of verbal suffixes (as in (4)). This is a strong indication against the vowel constituting a « real » realis marker, as there would be a clash between marking of realis and irrealis in this case. The same seems to hold for Old Baure and Joaquiniano.

9 (3)

<p><i>piutegia!</i> <i>pi-ute-ko-a</i> 2sg-come-actv- irr 'Come!'</p>	<p>Trinitario (Rose 2014b, 227)</p>
---	-------------------------------------

10 (4)

<p><i>asapiikommatsero towina</i> <i>a-sapiiko-num-a-tse-ro towina</i> 2pl-smoke-first-irr-but-then first 'Smoke first.'</p>
--

11 Paunaka is also similar to Trinitario in this respect, but has at least two construction types in which a single vowel *a* is attached to the verb to mark irrealis and a single vowel *u* if the RS is realis, which provides a good argument for considering *-u* a realis marker in Paunaka, see example (5).

12 (5)

<p>kuina chinijanea takÿra, býrÿsÿi si chinijaneu kuina chi-ni-jane-a takÿra, býrÿsÿi si chi-ni-jane-u neg 3-eat-pl.nhum-irr chicken guava yes 3-eat-pl.nhum-real 'The chickens don't eat it, (but) guava, yes, they eat.'</p>	<p>PAUNAKA (our data)</p>
---	---------------------------

13 While the true character of *o* and *u* may be somewhere in-between a default vowel and a realis marker, probably with differences among the individual languages, we decided not to gloss *o* and *u* as realis in this paper, except for the cases in which it appears as an individual suffix, such as the Paunaka one in (5). We also do not include it in the analysis of the Trinitario stems of irrealis verbs in order to make examples more comparable and we do not separate the « active suffix » from the stem (e.g. we do not analyse *utek* 'come' into *ute-ko* 'come-actv'). The irrealis affix is generally attached directly following or preceding the verb stem, but certain suffixes may precede the irrealis suffix, as has been shown before (example (4)). The verb structure of Trinitario as summarized by Rose (2014b, 272-273) also suggests that RS precedes TAM marking, but there is not enough information to prove this as a true statement for the other languages. The presence of the irrealis affix may result in different surface forms of the stem, changing harmonically every vowel *o* into *a*, in this case as the more common

progressive vowel harmony. This happens in Terena (only active verbs, Ekdahl & Grimes 1964, 263), Old Baure and Joaquiniano (in a number of active verbs and in most verbal suffixes), and very marginally (only one verb) in Trinitario. Example (6) of Old Baure shows the verb *-yono* 'go' in its realis or default realization, and in (7) irrealis caused every vowel *o* of the verb to be replaced by *a* on the same verb, resulting in the form *-yana* 'go.irr'.

14 (6)

niyono vapaire	
ni- yono vapaire	OLD BAURE (Magio 1880, 2)
1sg-go river	
'I go to the river.'	

15 (7)

<i>niyana caquiboco niyica simuri.</i>
<i>ni-yana kakiwoko ni-yik-a</i>
<i>simori</i> 1sg-go. irr woods 1sg-pierce-irr pig
'I will go to the woods in order to shoot a pig (with an arrow).'

16 The conditions of vowel harmony in Old Baure seem to be complex. For example, while some verbs change their stem vowel *o* into *a* in the irrealis, cf. (7) and (8), others only change some of the vowels into *a* (9). The different effects are here not related to active versus stative semantics, but presumably rather to length of the verb stem.

17 (8)

noocho; naacha	
ni-ocho ni- acha	OLD BAURE (Asis Coparcari 1880, 67)
1sg-load 1sg- load.irr	
'I load(ed); I will load'	

18 (9)

<i>nodiocho; nadiocha</i>
<i>ni-odiocho ni-adiocha</i>
1sg-ask 1sg- ask.irr
'I ask(ed), I will ask'

19 Strikingly, Old Baure used to have irrealis forms (vowel harmony?) for every suffix including the vowel *o*, also the ones outside the stem (compare also Trinitario in at least one case in Rose 2014b, 230), see one example in (10) :

20 (10)

<p>buichococapico; yebuichacacapica</p> <p>wuicho-kok-a-piko ye-wuich-a-kaka-pika</p> <p>1pl.beat-rcpc-lk-adl 2pl-beat-irr-rcpc.irr-adl.irr</p> <p>‘we are coming to beat up each other; you will come to beat up each other’</p>	<p>OLD BAURE (Asis Coparcari 1880, 98)</p>
--	---

21 In some contexts, RS marking may be neutralized for some reasons : one reason is the presence of a final vowel *a*, so that the marking by the suffix *-a* may remain unnoticed. In such situations, Trinitario resolves the ambiguity (which is even provoked by any stem final vowel, except for *o*) by attaching the prefix *a-* instead, so that the form is clearly marked for irrealis (Rose 2014b, 228). In Terena, there are ambiguous forms, when the relational suffix *-ea* is attached to the verb stem. The suffix deletes the preceding vowel, which usually marks the verb as either irrealis or default (realis) (cf. Ekdahl & Butler 1979, 122 ff., also pointed out in Elliott 2000, 62). This ambiguity in Terena is not resolved. However, there is no ambiguity, if there is an additional verbal suffix preceding the relational marker, as in (11) b. and c., because in this case the relational marker deletes the final vowel of the preceding suffix instead.

22 (11)

<p>a.</p>	<p><i>pih-ea</i> Terena (Ekdahl & Grimes, 263)</p> <p>go-rel</p> <p>‘he went from there’ OR: ‘let him go from there’</p>
<p>b.</p>	<p><i>pihó-p-ea</i></p> <p>go-dir-rel</p> <p>‘he went from there to where he had come from’</p>
<p>c.</p>	<p><i>pih-á-p-ea</i></p> <p>go-irr-dir-rel</p> <p>‘let him go from there to where he had come from’</p>

23 In Paunaka and Mojeño (and possibly in Joaquiniano, but there are only some indications in semi-speakers’ data), in addition to the verbal irrealis marking, there is non-verbal irrealis marking by the suffix *-ina*, applied on various types of non-verbal predicates in the same contexts that trigger irrealis marking on verbal predicates. Non-verbal irrealis is exemplified here by a nominal predicate of a negative existential construction in Paunaka in (12), and an adjectival predicate of Trinitario in (13).

24 (12)

pero kuinauku eka ýneina bitýpi pero kuina-uku eka ýne- ina bi-týpi but neg-also dem water- irr.nv 1pl-ben 'but there was no water for us, either'	PAUNAKA (our data)
---	---------------------------

25 (13)

wo winaraji- na . neg bad- irr.nv 'he is not bad'	TRINITARIO (Rose 2015a, 15)
---	------------------------------------

26 In Old Baure, the nominalizer has a realis form *-no* as well as an irrealis *-na*, which may be related to the non-verbal irrealis in Paunaka and Trinitario. The situation is blurred, however, since the adjectivizer occurring in many nonverbal predicates in Old Baure (and Joaquiniano) is also *-na*, so that we cannot make any claims about irrealis marking on non-verbal predicates here. In the following, we will consider the semantic parameters relevant to RS systems that were identified by Michael (2014a, b), see Table 1, for Southern Arawakan languages. We will only consider verbs at the moment.

3.1. Temporal reference

27 Since the languages we are investigating here do not commonly mark tense as a basic verbal category, we only find very few tense markers at all. Mojeño and Terena have a special future marker. In Paunaka, Old Baure, and Joaquiniano, all future events are encoded as irrealis, and there is no other future marker, see examples (7)-(10) above from Old Baure. Irrealis marking also occurs with relative future (Michael (2014a, b) uses the term « prospective ») in a past setting, as argued for Nanti. One example of Joaquiniano is given below :

28 (14)

nepnajeye ach kachapo ne yuki-ye. no-epn-a-jeye ach kach-a-po ne yuki-ye 3pl-die- irr -distr and go- irr -pfv/rlx there fire-loc 'The people where all dying and would go into the fire (of hell) (God saw it, and he didn't want that)'	Joaquiniano (GRN data)
---	------------------------

29 The future markers of Terena and Trinitario intervene with irrealis marking. For Trinitario, Rose (2014b, 230) states that the irrealis marker alone is used to express « expected future events », while future events that are presented as certain show the only future marker such as in (15). It may be the case, however, that irrealis is only used with future reference in subordinate constructions. More research is necessary here. Future tense can combine with the irrealis prefix in negative constructions only (Rose, p.c.), where we can argue that irrealis marking is due to negative polarity, see

(16). In Terena, the future marker is attached to the realis verb for « definite assertions about the future », see example (17)a, and irrealis alone is used for « assertions that a particular action could happen as well as indefinite predictions that it may happen » (Ekdahl & Grimes 1964, 262), in which case the irrealis marking may not be related to temporal reference, but to marking of uncertainty (epistemic modality). The future marker can also show up on an irrealis marked verb, if the speaker is uncertain that the event comes true but still needs to make a future reference (Butler 1978, 8), see (17)b. In Terena, we are actually dealing with a relative future marker that may refer to a relative future set in the past (cf. Butler 1978, 16). The same is true for Trinitario (Rose, p.c.)

30 (15)

pentiokyorewore p-entioko- yore -wore 2sg-get.lost- fut -again 'you will get lost again'	TRINITARIO (Rose 2014c, 73)
---	------------------------------------

31 (16)

wo pajikpoyre wo pi- a -jikpo- yore neg 2sg- irr -answer- fut 'you are not going to answer'	TRINITARIO (Rose 2014b, 229)
--	-------------------------------------

32 (17)

a. <i>ikeróko-vo-ti-mo</i> 2sg.fall-rflx-cont- fut 'you will fall'	TERENA (Butler 1978, 8)
b. <i>ikeráka-pu-mo</i> 2sg.fall. irr -rflx- fut 'you may / can fall'	

33 If a positive declarative predicate is not marked by irrealis or future, temporal reference is either past or present. Thus, information about the temporal setting of a clause is conveyed by RS or future marking in combination with the general context in which the clause is embedded. In addition to future, Terena also has a suffix -Vvo to mark proximate aspect. This suffix only combines with irrealis RS (Ekdahl & Butler 1979, 107).

34 (18)

nicá'avo ûti nic- a -Vvo ûti eat- irr -prox 1pl 'we are about to eat'	TERENA (Ekdahl & Butler 1979, 107)
--	---

35 Paunaka also has a suffix *-bÿti* to mark proximate aspect. It is generally used with irrealis RS (19), but may be used with realis, if the event has just recently begun (20) :

36 (19)

nÿrÿtÿkabÿti chikÿ nijinepuÿ nÿ-rÿtÿk- a -bÿti chi-kÿ ni-jinepuÿ 1sg-tie- irr -prox 3-inside 1sg-daughter 'I will just tie my daughter's belly up (as a post-pregnancy treatment)'	PAUNAKA (our data)
---	---------------------------

37 (20)

repente kuina tinika tiyitikububÿti repente kuina ti-nik- a ti- yitikubu -bÿti maybe neg 3-eat- irr 3-cook-prox 'maybe he has not eaten, yet, she only started cooking'

38 In all of the compared languages, constructions with a complement verb of 'want' seem to apply irrealis marking on the complement verb, see examples of Trinitario and Joaquiniano in (21) and (22), respectively. In Trinitario, the complement may also be future marked. The choice of the speaker, according to Rose (p.c.) seems to depend on the certainty: if the realization of the event expressed by the complement is more certain, there is a tendency to use the future marker instead of the irrealis marker.

39 (21)

nwoo'o nakmetsi te togieru ni-woo'o ni- a -kmetsi te togieru 1sg-want 1sg- irr -cook prep firewood 'I want to cook on fire'	TRINITARIO (Rose 2014c, 73)
--	------------------------------------

40 (22)

ke'ino swana ke'ino swan- a want rain- irr 'It wants to rain.'	Joaquiniano (our data)
---	------------------------

41 More details on the complement constructions with ‘want’ in Joaquiniano, are given in 4.

3.2. Polarity

42 All languages of the survey except for Old Baure (and possibly Joaquiniano) employ irrealis to mark a negated realis. This is exemplified by a negated stative verb of Paunaka in (23) and a negated active verb of Trinitario in (24).

43 (23)

a.	<i>tikutiu</i> <i>ti-kutiu</i> 3-ill ‘(S)he is ill.’	Paunaka (our data)
b.	<i>kuina takutiu</i> <i>kuina ti-a-kutiu</i> neg 3- irr -ill ‘(S)he is not ill.’	

44 (24)

wo nechajicha wo n-ech- a -jicha neg 1sg-remember- irr -well ‘I don’t remember well.’	TRINITARIO (Rose 2014b, 233)
--	-------------------------------------

45 In Old Baure, the negative realis (standard negation) is simply a negative particle preceding the realis form of the verb. If the negative particle co-occurs with the irrealis marked verb, then the reference is to future events (25).

46 (25)

camo renico; camo renica kamo re- niko kamo re- nik-a neg 3sg.m-eat neg 3sg.m-eat- irr ‘he doesn’t / didn’t eat; he won’t eat’	OLD BAURE (Asis Coparcari 1880, 81)
--	--

47 Thus, we can note that Old Baure is not ambiguous for irrealis with respect to polarity, since it does not use it as default marking in negated clauses. The system of Joaquiniano is less clear due to the scarce set of data and the fragile state of the language. Terena and Trinitario exhibit a doubly irrealis construction for negated irrealis. In Terena, similar to Nanti in this respect, there are two different negative particles : realis

negation *ako* and irrealis negation *hyoko/hhoko/hyokò'o*, the verb in negative irrealis contexts then occurs in its realis form, see the following examples :

48 (26)

Terena (Ekdahl and Grimes 1964, 268)			
a.	yutóšo-a write-3.O 'he wrote it'	b.	yutaš-à-a write- irr -3.O 'when he will write it'
c.	ako yutáš-a-a neg.real write- irr -3.O 'he didn't write it'	d.	hyokò'o yutošò-a neg.irr write-3.O 'when / if he doesn't write it'

49 In Trinitario, the negation particle is the same for negated realis and irrealis (compare (27) to (24) above), but we find an additional irrealis prefix for negative irrealis *ku-*, and the verb stem then ends in default *-o*. The negative irrealis marker is used for prohibitives (27) as well as other negative irrealis contexts (28) :

50 (27)

wo pkupikonu wo pi- ku -piko-nu neg 2sg- irr.neg -be.afraid-1sg 'don't be scared by me'	Trinitario (Rose 2014b, 235)
--	------------------------------

51 (28)

pyjocha to tapajo puejchu nakusiopo. py-joch-a to tapajo puejchu na- ku -siopo 2sg-shut-irr art door in.order.to 3pl- irr.neg -enter 'Shut the door so as not to let them enter.'
--

3.3. Hypotheticality

52 As it seems, irrealis is used in hypothetical constructions in all Southern Arawakan languages, one example of a counterfactual clause is given in (29).

53 (29)

i tiyunaini kuiraua echyümÿne chichechapuÿ i ti-yun-a-ini kuirau- ina echyümÿne chi-chechapuÿ and 3-go- irr -frust care- irr.nv dem-dim 3-son 'and she would have gone to look after her (sister's) child'	Paunaka (our data)
---	--------------------

54 However, most of the examples of hypothetical constructions are found in (counterfactual) conditionals. In conditional clauses, Paunaka marks both, theapodosis and protasis verbs for irrealis. In counterfactual conditionals, there is an additional frustrative marker, as found in (29). In Terena, it seems that the verb in the protasis clause is irrealis and in the apodosis clause realis, regardless of the type of conditional (simple, hypothetical, and counterfactual). The hypothetical and counterfactual conditionals additionally employ a suffix -ni, which is attached to introductory elements (conjunctions?) of both clauses (Butler (1978, 7), however, this is independent of the RS marking of the verb. The Trinitario patterns are quite complex and differ for each type. Protasis predicates of simple conditionals are realis with an additional hypothetical marker -puka. The predicate of the apodosis can be realis or irrealis for reasons independent of the construction. The predicate of the protasisclause of hypothetical and counterfactual conditionals is irrealis. Counterfactual predicates additionally carry an associative marker -ri'i and -ini, which is related to the Paunaka frustrative in (29), but glossed as past by Rose (2015b). The apodosis predicate of hypothetical conditionals mostly has the future suffix, but sometimes it is marked irrealis instead. The apodosis predicate of counterfactual conditionals carries an irrealis and a past marker (Rose 2015b). In Old Baure, irrealis occurs in various hypothetical constructions, like the following two :

55 (30) Old Baure (Magio 1880, 25)

	maimaca niti		mascima
a.	ma-imak-a niti	b.	ma-shim-a
	neg-sleep-irr 1sg		neg-arrive-irr
	'lest I sleep'		'lest he arrived?'

56 (31)

camo recadino; camo racadino	
kamo re-ka-jino kamo r-a-ka-jino	
neg 3sg.m-attr-see neg 3sg.m-irr-attr-see	OLD BAURE (Asis Coparcari 1880, 83)
'it wasn't seen' 'it seems it wasn't seen'	

57 In (30), we may speculate that the irrealis marking is triggered by the negation of the predicates. However, as we have seen in (25), negated clauses in Old Baure can take both realis and irrealis marking. While in (25), the negated predicate is marked by irrealis for future reference, in (31), irrealis in the second construction expresses a hypothetical assumption. The protasis verb of simple conditional clauses in Old Baure may possibly be both realis or irrealis and the apodosis always irrealis, but the data is hard to interpret. In counterfactual conditionals, both verbs are irrealis and the frustrative marker -ni occurs optionally (de Asis Coparcari 1880, 68-69).

3.4. Factuality/Epistemic modality

58 Paunaka, Terena, and Old Baure have markers that express uncertainty or ‘maybe’. They seem to be independent of RS marking. In Paunaka, for example, the uncertainty marker =kena was combined with realis verbs, when a speaker was asked to tell the story of a picture book that we gave him, see (32). He saw that there was some action going on at the moment of telling, thus realis, but he was not certain whether he interpreted it rightly, thus =kena.

59 (32)

timukukena ti-muku=kena 3-sleep=uncert ‘it is probably sleeping’, or : ‘I think that it is sleeping’	PAUNAKA (our data)
---	---------------------------

60 According to Rose (2014b, 230), irrealis is used to mark uncertainty in Trinitario. Certainty was also involved in the future reference of Terena, as shown above : irrealis marking is taken for a rather uncertain future. Irrealis is frequent in questions in Old Baure according to Asis Coparcari (1880, 72), but it may ultimately depend on the kind of question in all languages, and we do not have enough data for comparison.

3.5. Speaker-Oriented Modality : imperative, polite directive/ exhortative

61 All languages of our sample mark imperatives with irrealis, see (33) and (34).

62 (33)

pea! pi-e-a 2sg-drink-irr ‘Drink!’	PAUNAKA (our data)
---	---------------------------

63 (34)

pijingani manchi! pi-jing-a-ni manchi 2sg-look-irr-1sg child ‘Look at me, child!’	Joaquiniano (our data)
--	------------------------

64 For prohibitives and negative imperatives or apprehensives, there are two possibilities in Old Baure: the prohibitive is marked by a special prefix se- and the realis form of the verb is used (35) with no further person marking.⁸ Alternatively, the realis verb occurs

with no person marking, no negative particle, and an adlative and prohibitive suffix -piko (which is only adlative in contemporary Baure), connected by the linking suffix homophonous to the irrealis suffix -a, see (36). This presumed prohibitive construction would need more investigation, which is not possible with our data set of the 18th century.

65 (35)

<i>senico</i> <i>se-niko</i> proh-eat 'Don't eat!'	OLD BAURE (Asis Coparcari 1880, 82)
---	--

66 (36)

<i>nicapico; nicapiquere</i> <i>nik-a-piko nik-a-piko-re</i> eat-lk-adl/proh eat-lk-adl/proh-3sg.m 'don't eat; don't eat it' ⁹	OLD BAURE (Magio 1880, 31)
--	-----------------------------------

67 Old Baure had, in addition to irrealis marking, an optative suffix -ni, which was attached to irrealis verb stems, see (37).

68 (37)

<i>ninicani</i> <i>ni-nik-a-ni</i> 1sg-eat- irr -opt 'I want to eat / hopefully I will eat.'	OLD BAURE (Magio 1880, 10)
--	-----------------------------------

69 In Paunaka, the suffix -yuni combines with irrealis to mark optatives.

3.6. A gent-Oriented Modality : obligation, necessity

70 Not much data is available on the expression of obligation in the Southern Arawakan languages of our sample. In Paunaka, there are a few constructions with a Spanish loan phrase *tiene que* 'it has to' which are followed by irrealis marked verbs. In Trinitario, obligation is rather expressed by the future marker. Joaquiniano seems to have used irrealis with an obligative interpretation as well, possibly similar to the imperative (see example (34)). In Terena obligative and optative are expressed by periphrastic constructions in which the complement takes the referential suffix -ea, which is mutually exclusive with the irrealis suffix -a (Ekdahl & Butler 1979, 120). According to Ekdahl & Grimes (1964, 264), vowel harmony may signal irrealis status of the referential verb, generally when certain suffixes are attached (cf. (11) above), but the examples given by Ekdahl & Butler (1979, 120) do not show irrealis disambiguation in

combination with this modality. The expression of obligation in Old Baure is difficult to interpret. At least, in negative obligative clauses, it uses standard negation with the realis form, see the following example:

71 (38)

<i>camo epeticore</i> <i>kamo epitioko-re</i> neg pity-3sg.m 'one shouldn't / mustn't feel sorry for him'	OLD BAURE (Magio 1880, 11)
--	-----------------------------------

3.7. Summing up the reality status systems in the investigated languages

The forms of the RS system in the investigated languages are similar, even though not all forms are found in all languages; see the list in Table 3. All languages depart from the prototypical system of Nanti in that realis is defined negatively by the absence of irrealis marking. Although there is some association of a final vowel *o* or *u* of active verbs with realis marking, the form:meaning correspondence is not 100% since this vowel does not show up in stative verbs, and can be interpreted as a default vowel rather than a marker of realis in many cases, as discussed in section 3 above. Nanti, on the other hand, has a clear correspondence between a realis marker and realis marked verbs.

SEMANTIC PARAMETER	REALIS MARKING	IRREALIS MARKING
Temporal reference	non-future	future
Prospectiveness	-	purposive, prospective complement
Polarity	positive	negative
Hypotheticality	actual	hypothetical, (conditional), (counterfactual)
Factuality / Epistemic Modality	certainty	uncertainty
Speaker-Oriented Modality	-	imperative, polite directive / exhortative
Agent-Oriented Modality	-	obligation, need

Table 3: Reality status markers in Terena, Trinitario, Paunaka, Joaquiniano, and Old Baure

72 Semantically, the irrealis marking is similar in most of the investigated languages, referring to generally unrealized events, applied in the negative (ambiguous in Paunaka), for hypothetical and uncertain statements, for imperative, hortative and the notion of obligation and necessity. To some respect, the RS systems seem to coincide with the argued canonical category, as found in Nanti. Michael (2014b, 283) argues that the system of Terena is almost like the canonical one. We can note one important deviation from the prototype: future is conceptualized as either certain (realis) or hypothesized (irrealis), so that both markings are possible. The existence of a separate

future marker also has consequences for the RS system of Trinitario, where many constructions that use irrealis in the other languages are expressed by means of the future marker. Another major difference concerns the parameter of polarity: in Old Baure, negation does not trigger automatically irrealis marking, as it seems, and in Paunaka RS is not distinguished in negation, whereas in the other languages there are different constructions for realis and irrealis negation. Summarizing the semantics of the RS system in the languages compared in this paper, we can present the following Table 3 :

SEMANTIC PARAMETER	REALIS MARKING	IRREALIS MARKING
Temporal reference	non-future	future
Prospectiveness	-	purposive, prospective complement
Polarity	positive	negative
Hypotheticality	actual	hypothetical, (conditional), (counterfactual)
Factuality / Epistemic Modality	certainty	uncertainty
Speaker-Oriented Modality	-	imperative, polite directive / exhortative
Agent-Oriented Modality	-	obligation, need

Table 4 : Semantic parameter values and reality status marking in Terena, Trinitario, Paunaka, Joaquiniano, and Old Baure

4. Reality status systems in decay : Joaquiniano, Ignaciano, Baure

73 Even though we argue that the proto-language(s) of Southern Arawakan languages had a RS system, some of the languages of Southern Arawakan show only part of this original system for different reasons. Joaquiniano, has directly evolved from Old Baure, so that we suppose that there used to be a RS system, similar to what has been described of the ancestor language. Many construction types clearly show that there is still a RS system, for which reason we have included Joaquiniano data in the sections above. However, since the language was at the point of extinction at the moment of documentation, some constructions show inconsistencies, and in some contexts it is not clear if the forms are correct and a new rule should be concluded or if they are simply grammatically incorrect. This is, for example, the case with the statement in (40), which was given by a semi-speaker. In contrast to (39), collected from the last speaker by Jarillo Taborga (2005), where the perfect particle *vire* marks a past event and co-occurs naturally with realis marking on the verb, the verb in (40) is given in the irrealis form. This was interpreted here as incorrect (see also the redundant possessive pronoun the semi-speaker adds to the possessed noun).

74 (39)

vire repno te crayono. vire r-epno te karayono perf 3sg.m-die art white.man 'the white man already died / is dead'	JOAQUINIANO (Jarillo Taborga 2005, 3)
--	--

75 (40)

vire repna ndiye nawnone. vire r-epn-a ndiye ni-awnone perf 3sg.m-die- irr 1sg.poss 1sg-husband 'my husband already died / is dead'	Joaquiniano (our data)
--	------------------------

76 It is likewise unclear if the conditional clause in (41), where the apodosis clause shows a realis verb, should be taken as grammatically correct. Note that the other languages use either irrealis or future in this context (see section 3.3). Does this now mean that realis marks the certainty of the consequence?

77 (41)

ngacha, népeno. ni=kach- a ni=épeno 1sg=go- irr 1sg=die 'If I go, I die.'	Joaquiniano (our data)
--	------------------------

78 In another conditional clause, the verb in the protasis is given in realis and the apodosis in irrealis in example (42). It is possible that the unknown particle pa¹⁰ indicates the condition in the apodosis here, however, we cannot generalize

79 only from a few examples about RS marking in complex constructions.

80 (42)

acho neriki pa pki'in te anye, sambukni. acho neriki pa pi-ki'in te ani-ye sambuk-ni and now cond? 2sg-want art sky-loc listen.irr-1sg 'and now if you want to go to heaven, you have to obey me.'	Joaquiniano (GRN data)
---	------------------------

81 In 'want'-constructions, we most often find irrealis on the complement verb (like in (22) above). However, in some examples at least, the complement occurs in the realis form (43). It is possible that the use of realis is due to higher control over the realization of the event as was stated for Trinitario. It could also simply be a sign of language decay.

82 (43)

<p>Te osnónube qui innuten caarbóchu. te osno-nuve ki'inu te n-karo-chu art child-pl want art 3pl-study-compl 'the children want to study'</p>	<p>JOAQUINIANO (Jarillo Taborga 2005, 14)</p>
--	--

83 Given a number of other grammatical inconsistencies in Joaquiniano, we state that the language was already in decay when documented, and the RS system is also apt to be in decay under these conditions. We thus also have to be more careful when making any generalizations on the basis of these data. In Ignaciano, the vowels /a/ and /o/ of Old Mojeño, the variety described by Marbán (1701), merged into one phoneme /a/, one consequence being that the audible distinction between realis and irrealis was lost. Olza Zubiri et al. (2004, 831) speak about « some cases » in which a prefix *á-* is used in imperatives, either to make it more polite (Olza Zubiri et al. 2004, 831) or to give the order more emphasis (ibid, 832), however, this seems not to be obligatory. The prefix also occurs on some Ignaciano conditionals (Rose, p.c.), but does not seem to show up in other cases where we would expect irrealis marking, such as negative clauses. There are some remnants of the doubly irrealis marker *ku-* (spelled *cu-* in Olza Zubiri et al. 2004), which has been interpreted as a prohibitive prefix by Olza Zubiri et al (2004, 132 ff.), but it also occurs on negated verbs of conditional constructions, like the one in (44). Ignaciano has a non-verbal irrealis suffix *-ina* that appears on negated nominal predicates, and optionally on the object of an imperative construction (45) and in optative constructions including a non-verbal complement (Olza Zubiri et al. 2004, 107, 240).

84 (44)

<p><i>te píteca piti, vainucuyana</i> te pi-teka piti vai nu-ku-yana prep 2sg-come 2sg neg 1sg-irr.neg-go 'if you come, I don't go'</p>	<p>IGNACIANO (Olza Zubiri et al. 2004, 745)</p>
--	--

85 (45)

<p><i>pépiyasinava pipenaina</i> pi-epiyaka-ina-va pi-pena-ina 2sg-make-ben-rflx 2sg-house-irr.nv 'build your own house'</p>	<p>IGNACIANO (Olza Zubiri et al. 2004, 107)</p>
--	--

86 We can therefore summarize that Ignaciano has lost parts of the RS system, keeping only the contexts in which imperative, negated irrealis, or non-verbal irrealis are marked. The most advanced case is that of contemporary Baure, which has totally lost the RS system. In modern Baure, RS is not marked as a basic verbal category, but a kind of irrealis marker, the new suffix *-sha*, is applied to conditionals, hypothetical statements and polite requests. The vowel *-a* of the former irrealis system survived only

in the fixed forms of some suffixes, such as *-pa* 'intl' (and *-sha* 'irr' presumably), and in a few phrases, where it is synchronically interpreted as metathesis (cf. Danielsen 2007, 74-75), even though these are probably cases of lexicalized suffixes *-a* 'irr', see (46) and (47) :

87 (46)

<p><i>ngachap.</i> <i>ni=kach-pa</i> originally : <i>ni=kach-a-pa</i> 1sg=go-intl 1sg=go-irr-punct.irr 'I will go (Good-bye).'</p>	<p>BAURE (our data)</p>
---	-------------------------

88 (47)

<p><i>nimokap, enevere rom ngach.</i> <i>ni=imok-pa enevere rom ni=kach</i> 1sg=sleep-intl next.day soon 1sg=go 'I go to sleep, tomorrow I will go then.'</p>
--

89 Compare the verb *nimokap* (47) 'I go to sleep' to *roemokapa* in Joaquiniano (48), which may support that contemporary Baure metathesis stems from an original irrealis construction :

90 (48)

<p><i>vire rkacha roemokapa.</i> <i>vire r-kach-a ro-imok-a-pa</i> perf 3sg.m-go-irr 3sg.m-sleep-irr-intl 'he is already going to sleep'</p>	<p>Joaquiniano (our data)</p>
---	-------------------------------

91 One reason for the loss of the RS system in Baure may be seen in possible phonological ambiguity of forms at least in some dialects of Baure that had a final default vowel *a* in active verbs, similar to Ignaciano (and Joaquiniano to some extent). Further ambiguities and confusion may have arisen from the homophonous linking suffix *-a* occurring in many contexts (compounding in verbs and nouns in contemporary Baure and in nominalization in addition, in Old Baure).

5. Conclusions

92 Reality status can be a binary inflectional category in languages, as was shown with the majority of Southern Arawakan languages. Since the encoding of reality status is so widespread and similar in this branch of the Arawakan language family, it may be concluded that this category already existed in the proto-language. As for the semantics of the system, there are only minor differences among those languages,

which are mostly due to the existence of a separate future marker. All in all, the RS system can be taken as a mostly canonical category in Southern Arawakan, as was claimed for the South-Western Arawakan language Nanti (Michael 2014a). The formal realization in the here investigated Southern Arawakan languages, though, is different from that in the Kampan Arawakan. The morphemes do not only differ phonologically, but the status of *o* or *u* is that of a default vowel more than that of a realis morpheme. The Southern Arawakan languages thus mark only irrealis morphologically and realis is defined negatively by the absence of an irrealis marker. The ambiguity of negative irrealis clauses seems to have been resolved at least in some languages (Terena negative irrealis particle, Trinitario negative irrealis prefix). We can also see how a RS system can change and specialize, as in Ignaciano. The contemporary Baure language presents a case where the reality status system was completely lost, which is worthwhile for comparison. A topic that awaits future research is the interaction of RS with other categories expressed overtly in some languages. We have seen that the presence of a future marker may have a drastic influence on the system, so that we find future marking, where we would expect irrealis marking by comparison with the other languages. The ambiguity that goes along with negated irrealis is another topic that may narrow the scope of irrealis. We can imagine that other categories that encode some kind of unrealness have an influence on the RS system, among them frustratives, markers of (un)certainity, counterfactuals, prohibitives, and desideratives.

Glosses and abbreviations :

93 - affixation; = cliticization; 3.O = third person object; abl = ablative; adl = adlative; art = article; attr = attributive; ben = benefactive; compl = complementizer; cond = conditional; cont = continuous; dem = demonstrative; dim = diminutive; dir = directional; distr = distributive; frust = frustrative; fut = future; hort = hortative;; intl = intentional; irr = irrealis; irr.nv = non-verbal irrealis; lk = linker; loc = locative; m = masculine; N = noun; neg = negative; opt = optative; perf = perfect; pfv = perfective; pl = plural; pl.nhum = nonhuman plural; POS = part of speech; poss = possessive; prep = preposition; proh = prohibitive; prox = proximate; punct = punctual; rcp = reciprocal; real =realis; reg = regressive; rel = relational; rflx = reflexive; RS = reality status; sg = singular; uncert = uncertainty; V = verb

Map 1 : Arawakan languages (adapted and adjusted from Danielsen et al. 2011; please ignore confidence levels that were marked for a broader investigation on grammatical characteristics and constructions)

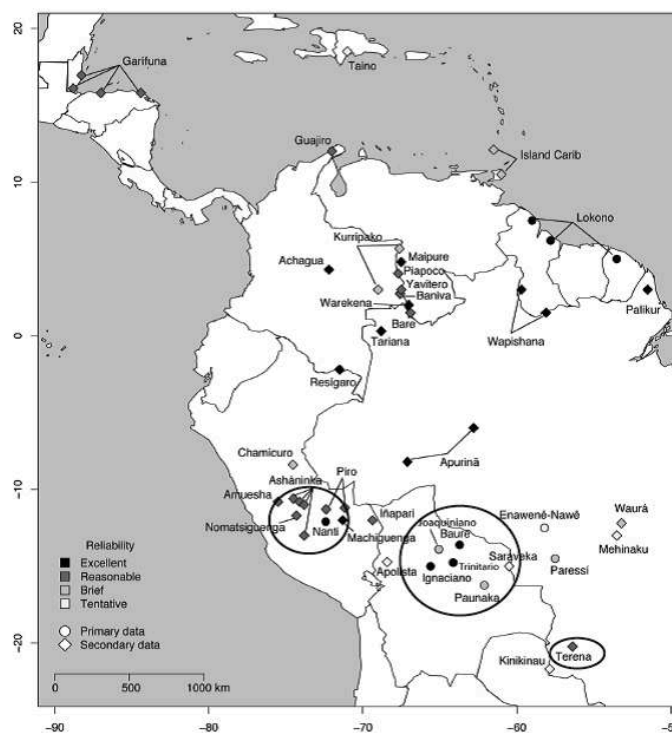
BIBLIOGRAPHY

Aikhenvald, A.Y. (1999), « The Arawak language family », in Dixon & Aikhenvald (eds.), 65-106.

- Adam, L. & Leclerc, C. (1880), *Arte de la lengua de los Indios Baures de la provincia de los Moxos, conforme al manuscrito original del Padre Antonio Magio, de la Compañía de Jesus*, Paris : Maisonneuve y Cia, Libreros Editores.
- Asis Coparcari, F. de. (1880 [1767]), « Gramática de la lengua de los indios Baures de la provincia de Mojos », in Adam & Leclerc (eds.), 55-109.
- Bhat, D.N.S. (1999), *The prominence of tense, aspect and mood*. Amsterdam / Philadelphia : John Benjamins.
- Brown, D. & Chumakina, M. (2013), « What there might be and what there is : an introduction to Canonical Typology », in Brown, D., Chumakina, M. & Corbett, G.G. (eds.), *Canonical Morphology and syntax*. Oxford : Oxford University Press, 1-19.
- Butler, N.E. (1978), *Modo, Extensão Temporal, Tempo Verbal e Relevância Contrastiva na Língua Terena*. SIL. Revised version 2007.
- Bybee, J. (1998), « 'Irrealis' as a grammatical category ». *Anthropological Linguistics*, 40(2) : 257-271.
- Bybee, J, Perkins, R., & Pagliuca, W. (1994), *The Evolution of Grammar : Tense, Aspect, and Modality in the Languages of the World*. Chicago : The University of Chicago Press.
- Corbett, G.G. (2007), *Canonical typology, suppletion, and possible words*. At : <http://epubs.surrey.ac.uk/1313/1/fulltext.pdf>
- Danielsen, S. (2007), *Baure : An Arawak Language of Bolivia*. Indigenous Languages of Latin America (ILLA) 6. Leiden : CNWS.
- Danielsen, S. (2013), « Evaluating historical data (wordlists) in the case of Bolivian extinct languages », in Alexander-Bakkerus, A. & Zwaartjes, O. (eds.), *Historical reconstruction of American languages*. STUF - Language Typology and Universals / Sprachtypologie und Universalienforschung, 66(3). Bremen : Akademie Verlag, 272-298.
- Danielsen, S., Dunn, M., & Muysken, P. (2011), « The role of contact in the spreading of Arawakan languages », in Hill, J. & Hornborg, A. (eds.), *Ethnicity in Ancient Amazonia : Reconstructing past identities from archaeology, linguistics, and ethnohistory*. Boulder, CO : University Press of Colorado, 173-195.
- Danielsen, S., Admiraal, F., Riedel, F., & Terhart, L. (2008-2013), Baure language archive (The Language Archive, DobeS), at : <https://corpus1.mpi.nl/ds/asv/?0&openpath=node:885634>
- Danielsen, S & Terhart, L. (2014), « Paunaka », in Muysken, P. & Crevels, M. (eds.), *Las lenguas de Bolivia*, Vol. 3. La Paz : Plural Editores, 221-258.
- Danielsen, S., Terhart, L., & Villalta, F. (2011-2013), Paunaka language archive (ELAR, SOAS), at : <http://elar.soas.ac.uk/deposit/0104>.
- de Haan, F. (2010), « Building a semantic map : top-down versus bottom-up approaches ». *Linguistic Discovery*, 8(1) : 102-117.
- de Haan, F. (2012), « Irrealis : Fact or fiction? » *Language Sciences*, 32 : 107-130.
- Dixon, R.M.W. & Aikhenvald, A.Y. (1999), « Introduction », in Dixon & Aikhenvald (eds.), 1-21.
- Dixon, R.M.W. & Aikhenvald, A.Y. (eds.) (1999), *The Amazonian languages*. Cambridge : Cambridge University Press.
- Ekdahl, M. & Grimes, J.E. (1964), « Terena verb inflection ». *International Journal of American Linguistics*, 30 : 261-268.

- Ekdahl, M. & Butler, N.E. (1979), *Aprenda terena I*. Brasília : Summer Institute of Linguistics.
- Elliott, J.R. (2000), « Realis and Irrealis : Forms and concepts of the grammaticalisation of reality ». *Linguistic Typology*, 4 : 55-90.
- GRN data : Joaquiniano recordings obtained from the former website of <http://globalrecordings.net/en/language/1676>, file name C22580A, transcribed by authors.
- Jarillo Taborga, O. (2005), *Lengua Joaquiniano-Baure. En cooperación de Concepción Mercado Bayo, Hugo Vargas Lima Lobo, Rubén Saddy Sosa Michelin*. San Joaquin : Revista « Agua Dulce ».
- Magio, P.A. (1880 [1749]), « Gramática de la lengua de los indios Baures de la provincia de Mojos », in Adam & Leclerc (eds.), 1-53.
- Marbán, P. (1701), *Arte de la lengua Moxa, con su Vocabulario, y Cathecismo*. Lima.
- Michael, L.D. (2008), *Nanti evidential practice : Language, knowledge, and social action in an Amazonian society*. PhD thesis, University of Texas at Austin, Ms.
- Michael, L. (2014a), « The Nanti reality status system : Implications for the typological validity of the realis/irrealis contrast ». *Linguistic Typology*, 18(2), 251-288.
- Michael, L. (2014b), « Negation in Nanti », in Michael & Granadillo, 184-215.
- Michael, L. & Granadillo, T. (2014), *Negation in Arawak*. Leiden : Brill.
- Mithun, M. (1999), *The languages of Native North America*. New York : Cambridge University Press.
- Olza Zubiri, J., Nuni de Chapi, C., & Tube, J. (2004), *Gramática Moja Ignaciana*. Cochabamba : Editorial Verbo Divino.
- Rose, F. (2014a). « When vowel deletion blurs reduplication in Mojeño Trinitario », in *Reduplication in South-American languages*, Goodwin Gómez, G. & van der Voort, H. (eds), Leiden : Brill, 375-399.
- Rose, F. (2014b), « Negation and irrealis in Mojeño Trinitario », in Michael, L. & Granadillo, T. (eds.). Leiden : Brill, 216-240.
- Rose, F. (2014c), « Mojeño Trinitario », in Crevels, M. & Muysken, P. (eds.), *Las lenguas de Bolivia*, Vol. 3. La Paz : Plural Editores, 59-97.
- Rose, F. (2015a). « Non-verbal predication and lexical classes in Mojeño Trinitario ». [Unpublished manuscript].
- Rose, F. (2015b). « Mojeño Trinitario conditionals ». [Unpublished manuscript].
- Terhart, L. (in preparation), *A grammar of Paunaka (Arawakan)*, PhD thesis, University of Leipzig.

van der Auwera, J. & Devos, M. (2012), « Irrealis in positive imperatives and in prohibitives », *Language Sciences*, 34(2). (online pdf at : <http://trove.nla.gov.au/work/161923407?>)



versionId=176475784)

NOTES

1. This article is an enhancement of the paper presented by Danielsen at the CHRONOS 11 conference in Pisa, 2014. All major points of the original presentation were discussed with the co-author, re-arranged, and refined. We would like to thank Françoise Rose, who commented on an earlier version of this paper and provided us with a lot of extra information and examples of Mojeño Trinitario.
2. The ISO 639-3 codes and Glottocodes of the languages in this paper are: Trinitario (trn; trin1274), Ignaciano (ign; igna1246), Baure (brg; baur1254), Joaquiniano (brg; joaq1235), Paunaka (pnk; paun1241), Terena (trn; tere1279), Nanti (cox; nant1250), cf. <http://www.ethnologue.com> and <http://glottolog.org>.
3. The system was not recognized as such by the Jesuit linguists. Magio and Asis Coparcari call the irrealis « future », although they notice that « future » marking also appears outside of contexts with future reference. While the authors did not work according to modern standards in linguistics, the grammatical descriptions by these Jesuits, each about 40 pages, are very rich of isolated examples and a detailed analysis of paradigms. There are, however, fewer examples with larger contexts, such as full clauses. For more details on these grammarsketches see Danielsen (2013).
4. N refers to an underlying nasal that may be realized differently in the context.
5. We generally give examples in a four-line style, except for the cases in which there was no full-form line in the cited text (some Terena and Trinitario examples). Glosses are adapted to the standard of this paper to ease comparison.
6. One reviewer remarks that the construction should not be called « doubly irrealisconstruction », because morphologically double marking of irrealis is avoided. Semantically, however, there

are two parameters that trigger irrealis marking in this case, for which reason we believe that the term introduced by Michael (2008, 2014a, b) is justified.

7. Even though in the original Michael writes « Southern Arawak », he is not referring to our subgroup here, but to the superordinate group that was called « Southern and South-Western Arawak » in Aikhenvald 1999, as apparent from the text.

8. This prefix has not survived in contemporary Baure.

9. From a contemporary perspective, the translations would rather be 'come to eat' and 'come to eat it', but there are so many examples with the prohibitive translation in the historical data, so that it looks as if the suffix -piko had some additional meaning that was later lost. One possibility could be that the examples were cut out of otherwise marked negative contexts.

10. For contemporary Baure, we read: « The particle *pa* closely resembles the intentional suffix -*pa* '[intl]'. In very few examples in my data *pa* functions as a free particle. It directly precedes the verb, just like the other two imperative particles. The particle *pa* was only found being used with 1SG and 2SG subjects in direct speech. » (Danielsen 2007, 292).

i. i Based on the canonical typology concept developed by Corbett (cf. also <http://www.surrey.ac.uk/englishandlanguages/research/smg/canonicaltypology/>): « Doing Canonical Typology - Key concepts of the canonical method are: (i) the *base*; (ii) *criteria*; and (iii) the *canonical ideal* (or *canon*). The base defines the broad space of particular linguistic phenomenon to be described by the typologist. It is defined in such a way that it will include a wide variety of instances, some of which may be considered to be quite far from the ideal example of the particular category of investigation. [...] The canonical method allows the typologist to account for the set of possible instances in languages, by employing sets of criteria to describe how well they approximate to the ideal instance of the particular category. » (Brown & Chumakina 2013, 3)

ABSTRACTS

Realis/irrealis as a basic grammatical distinction in Southern Arawakan Languages It is generally claimed that verbal categories like tense, aspect, and modality are expressed optionally in most Amazonian languages. However, what is expressed obligatorily in Southern Arawakan languages of Amazonia, is the category of reality status, namely a binary distinction between realis and irrealis. In spite of former rejections of the general validity of the grammatical category of irrealis by several scholars, we propose that the distinction between realis and irrealis is the basic distinction made by the languages described here. And by encoding this notion, predicates additionally convey information about temporal reference, like tense and aspect do in other languages. We argue that Southern Arawakan languages are reality-status-prominent in the same way that other languages are tense-prominent or aspect-prominent. This paper takes the paper by Michael (2014b) on the reality status system of Nanti (Arawakan) as the point of departure. Michael claims this system to present a canonical case of realis/irrealis marking, so that we take his proposed semantic characteristics of the system for comparing them to other Southern Arawakan languages of Peru, Bolivia, and Brazil. It will be shown that the here-described systems are in many respects similar to the canonical reality status system, but there are some important semantic as well as formal differences. The article bases to a great part on recently collected data by the authors.

Realis/irrealis comme distinction élémentaire dans les langues arawak méridionales Il est généralement affirmé que le marquage des catégories verbales comme le temps, l'aspect et la modalité sont optionnels dans la plupart des langues de l'Amazonie. En revanche, les langues arawak méridionales d'Amazonie marquent obligatoirement la catégorie relative à l'état de réalité (reality status), à savoir une opposition binaire entre realis et irrealis. Malgré la controverse sur la validité de la théorisation d'une catégorie grammaticale de l'irrealis par plusieurs linguistes, nous proposons que la distinction entre realis et irrealis soit la distinction fondamentale dans les langues décrites ici. En intégrant cette notion, les prédicats transmettent également l'information sur la référence temporelle, ce que d'autres langues font à l'aide du temps ou de l'aspect. Nous soutenons que les langues arawak méridionales centralisent l'état de réalité (reality-status-prominent) de la même façon que d'autres langues centralisent le temps ou l'aspect. Cette étude s'appuie sur l'article de Michael (2014a) sur le système de reality status en nanti (arawak). Michael affirme que ce système présente un cas canonique de marquage realis/irrealis. Dès lors, nous prenons les caractéristiques sémantiques proposées pour les comparer avec d'autres langues arawak méridionales du Pérou, de Bolivie et du Brésil. Nous montrerons que les systèmes décrits ici sont à bien des égards similaires au système du reality status canonique, mis à part quelques différences notables – aussi bien sémantiques que formelles. L'article repose en grande partie sur des données récemment recueillies par les auteurs.

INDEX

Mots-clés: realis/irrealis, langues arawak méridionales, état de réalité, marquage grammatical

Keywords: realis/irrealis, Southern arawakan languages, reality-status, grammatical category

AUTHORS

LENA TERHART

University of Leipzig