

Comparative Constructions in Murui (Witotoan, Northwest Amazonia)

Katarzyna I. Wojtylak
Language and Culture Research Centre, James Cook University

This paper focuses on the forms and functions of various comparative constructions found in Murui, a Witotoan language of Northwest Amazonia (Colombia, Peru). It analyses different types of comparative construction, their forms, and semantics. This includes a set of special markers that express comparison, as well as those forms that are used in equative and similitive constructions.

1. Introduction

Murui (also called Bue, Huitoto, or Witoto) is spoken by about 2000 people that inhabit the areas along the banks of the Cara-Paraná River in Colombia, and Ampiyacu and Napo Rivers in Peru (OIMA, 2008) (see Map 1).¹



Map 1. Location of the Witoto-speaking groups in Northwest Amazonia (author's map)

¹Information on Murui was obtained during an immersion fieldwork of 12 months on the Cara-Paraná River in Colombia, conducted between July 2013 and April 2016 to collect data for the reference grammar of Murui (Wojtylak 2017). The corpus was assembled from recordings of narrative texts (that deal with the group's everyday activities, mythology, past memories, etc.) and spontaneous language production (following methods of the Basic Linguistic Theory approach, Dixon 2010a-b, 2012). It includes over 700 pages of analysed and glossed texts, as well as over 1200 pages of field notes. Thanks to the Murui people for their patience and to the participants of the workshop 'Comparative and Superlative Constructions: Typology and Diachrony' (Amsterdam, 16-17 June 2015), as well as Alexandra Aikhenvald and Yvonne Treis for their helpful comments on the material.

In the literature, the term ‘Witoto’ refers to a single language that belongs to the Witotoan language family (together with two other languages, Ocaina and Nonuya) (Echeverri, Fagua & Wojtylak forthcoming).² In fact, ‘Witoto’ is a collective umbrella term that encompasses four different ethnic groups that speak four mutually intelligible dialects: Murui, Mika, Minika, and Nipode (Wojtylak 2017). All these groups recognise their common ancestry but consider themselves to be separate social groups speaking different languages. In this paper, I refer to Murui as a language in the political sense although linguistically it is clearly one of the dialects. The Murui people (similarly to other Witotoan groups) have had intense contact with the western culture for over 100 years now, especially after the tragic consequences of the Rubber Boom period in the Amazon (Hardenburg 1912, Echeverri 1997, Pineda Camacho 2000). Fabre (2005) is a source of references on all the Witotoan languages.

The current sociolinguistic situation of the Murui people is characterised by a rapidly progressing language shift towards Spanish. The official records estimate the number of speakers of the Murui language at c. 2000, but, based on the author’s fieldwork, in reality, this number does not exceed 1000. The language is rapidly falling into disuse especially among younger speakers.

I start with a brief typological profile of the Murui language in section 2, focusing on word classes and their morphological and syntactic properties as relevant for the status and characteristics of comparative constructions. In section 3, I consider Murui comparative constructions focusing on their types and structure. This is followed by a discussion of Murui superlative strategies in section 4 and an analysis of the expression of equality and the similitive *-ze* in section 5. The last section offers a brief summary.

2. The Murui language

Murui is nominative-accusative, agglutinating, and predominantly suffixing. Murui favours verb-final constituent order (AOV, SV). Grammatical functions are expressed through case markers. Marking of core arguments is subject to differential case marking, that is related mainly to focus and topicality. Marking of oblique arguments (locative, ablative, instrumental, benefactive-causal, privative) is mandatory. There is only one cross-referencing position on the verb, the subject S/A. Murui has three open lexical word classes: nouns, verbs, and adjectives. There are ten semi-closed and closed word classes that include place and manner adverbs, time words, number words, quantifiers and intensifiers, pronouns, demonstratives, interrogative content words, connectives, adpositions, and interjections. A few adjectives (such as e.g. *mare* ‘good’) form a closed set of words (see Wojtylak 2017).³

²Some scholars consider the Witotoan languages to be related to the neighbouring Boran language family (see Aschmann’s work (1993) on ‘Proto-Witotoan’). Currently, Aschmann’s account is treated as a working hypothesis.

³In this paper, the following abbreviations have been used: A subject of transitive verb, ABL ablative, AN animate, ANA anaphoric, ATT attributive, AUDIT auditory, CERT certainty, CLF classifier, COLL collective, DR ‘derivational’, DES desiderative, ENDEAR endearment (term), EMPH emphatic, E oblique core argument, EVENT event (nominalisation), F feminine, G general, GR group, GEN genitive, HAB habitual, IMMAT immature, IMP imperative, KIN kinship, lit. literally, LK linker, LOC locative, LOCAL locative oni, M masculine, NEG negation, NEUT neutral classifier, NMLZ nominalization, NP noun phrase, N.S/A topical non-subject, NSP non-specific, O object of transitive verb, P-MARK parameter marker, PERF peripheral (argument), pl plural, PRED predicate, PR ‘pronominal’ classifier, PRIV privative, Q question word, QUANT quantifier, RAPID rapid action, REM remote, S subject of intransitive verb, sg singular, SMLF semelfactive, S-MARK standard marker, SP specific, Sp. Spanish loanword, UNCERT uncertainty, VCC verbless clause complement, VCS verbless copula subject, VS verbless subject, TH thematic affix.

Verbs and nouns are distinctly different in their morphosyntactic features. For instance, nouns occur primarily as heads of NPs that can further function as heads of intransitive predicates (for first and second person), as in (1), or as arguments of verbless clauses (for third person), as in (2):⁴

- (1) oo riño-di-kue_{PRED}
 2SG woman-CLF:DR.F-LK-1sg
 ‘I am your woman.’
- (2) bai-e_{VCS} jiko_{VCC}
 that-CLF:G dog
 ‘That is a dog (lit. that - dog).’

Intransitive and transitive verbs are fully inflected for verbal morphology (tense, aspect, mood, evidentiality, directionality, as well as pronominal subject marking). (3) shows the transitive verbal root *fa-* ‘hit’ followed by verbal morphology:

- (3) due-re-di-kue_{PRED} nai-ñaiño_A kue-na_O fa-t-e_{PRED}
 poor-ATT-LK-1sg ANA.SP-CLF:PR.F 1sg-N.S/A.TOP hit-LK-3
 ‘Poor me (lit. I am poor). She hit me.’

Murui adjectives can function as predicates of intransitive clauses, as in (4), or can be used as arguments in verbless clauses, as in (5). The semantic difference between (4) and (5) is related to temporality. In (4), the attribution is ‘temporal’ (non-time-stable reference)—the place is dirty or ugly because someone did not clean it in the right way. In (5), it is ‘timeless’ (time-stable reference)—the fruit cannot revert to becoming ‘not dirty, not ugly’. In both cases (4) and (5), *naino* ‘that (place)’ and *jeaki* ‘dirty, ugly (fruit)’ have to be referential, as indicated by the demonstrative *biki* ‘this (fruit)’.

- (4) ‘temporal’
 nai-no_S eo jea-re-d-e_{PRED}
 ANA.SP-CLF:SP.PLACE very dirty.ugly-ATT-LK-3
 ‘That place is very dirty, ugly (lit. that place has a property of being dirty, ugly).’
- (5) ‘timeless’
 bi-ki_{VCS} jea-ki_{VCC}
 this-CLF:SMALL.ROUND dirty.ugly-CLF:ROUND
 ‘This fruit is dirty, ugly (lit. this fruit - dirty, ugly (fruit)).’

Murui verbs, adjectives, and nouns are different in their morphosyntactic attributes from other word classes, and in the structural positions available for them. For instance, adjectives cannot take many of the aspectual markers such as the semelfactive *-no*; verbs cannot co-occur with the inchoative ‘become’ *-nai*, *-tai*, and *-rui* markers; neither verbs nor adjectives can be marked with

⁴For phonetic symbols, the following conventions are used throughout this paper: <f> represents the voiceless bilabial fricative, <v> is the voiced bilabial fricative, <z> is the voiceless dental fricative, <r> is the flap, <ch> and <y> are the voiceless and voiced lamino-palatal affricates, and <j> is the voiceless glottal fricative.

nominal morphology (unless they take classifiers) (see Wojtylak 2018). The syntactic properties of Murui open word classes are given in Table 1 below.

Parameters	Verbs	Adjectives	Nouns
head of intransitive predicate	yes	yes	yes
head of transitive predicate	yes	no	no
head of NP	yes (when occur with classifiers)	yes (when occur with classifiers)	yes
modifier in NP	no	yes	yes
modifier to verbs	no	yes (when occur with attributive markers)	no

Table 1. Murui open word classes and their functional slots

Similar to other neighbouring languages spoken in the vicinity of the Vaupés linguistic area to the north, Murui has a large multiple classifier system with quite complex derivational functions.⁵ Murui classifiers are suffixes that can be defined as sets of morphemes which are used in various morphosyntactic contexts forming nouns (Wojtylak 2016). These contexts include: a) nouns (free and bound roots), b) verbs, c) adjectives, d) number words, e) pronouns, f) demonstratives, g) interrogative content words, and h) quantifiers. An example of the functions c) and f) is presented in (6):

- (6) bi-foro_{VCS} aiyo-foro_{VCC} ebi-foro_{VCC}
 this-CLF:FEATHER.SHAPED big-CLF:FEATHER.SHAPED nice-CLF:FEATHER.SHAPED
 ‘This palm leaf is big and beautiful (lit. this (feather shaped) - big (feather shaped) - nice (feather shaped)).’

Murui predicates are typically marked for third person with the pronominal S/A subject marker *-e*. Optionally, for highly animate referents, the nonsingular number of S/A arguments can be marked on the predicates by the bound pronominal subject marker *-maki*. Similarly, nouns can remain unmarked; plural, kinship plural, and collective number marking is optional. Although the nonsingularity of nouns is usually determined by context, number marking tends to be expressed when the nouns are pragmatically salient and/or have human referents (see Smith-Stark 1974). In (7), *jito* ‘son’ could refer to any number of sons:

- (7) jito_S uri i-t-e_{PRED} anane-ko-mo_{PERF}
 son calm exist-LK-3 maloca-CLF:COVER-LOC
 ‘Son(s) is (are) quiet in the communal roundhouse (Sp. *maloca*).’

Unlike other classifier systems in Amazonia (Aikhenvald 2003), Murui classifiers do not mark full agreement within an NP. Modifying elements, such as demonstratives, do not agree with the head

⁵Multiple classifier systems are an areal phenomenon characteristic to languages located in the vicinity of the Vaupés linguistic area, including Tariana, Baniwa, and Palikur (Arawak), Bora and Miraña (Boran), Yagua (the only surviving language of the Peba-Yagua family), and East Tucanoan languages (see e.g. Aikhenvald 2003, 2012, Petersen de Piñeros 2007, Ramirez 1997, Seifart 2007, Seifart and Payne 2007).

noun in classifiers, and are always marked with the general classifier *-e* (or *-je*) regardless of their semantics or number, e.g. *bie riño* ‘this woman’, *bie jofo* ‘this house’. Agreement in Murui is indicative of the distinction between an NP and a clause: classifiers obligatorily occur as agreement markers only in equational clauses. Example (8) is a full sentence in Murui—it consists of a verbless clause which contains two juxtaposed NPs, and the classifiers are ‘matched’. (8b) is an NP.

- (8a) $\tilde{n}ek\dot{i}$ -na_{NP} aare-na_{NP}
 chambira.palm-CLF:TREE tall-CLF:VERTICAL
 ‘(The) *chambira* tree is tall (lit. *chambira* (tree) - tall (tree)).’

- (8b) [bai-e $\tilde{n}ek\dot{i}$ -na]_{NP}
 that-CLF:G tall-CLF:TREE
 ‘that *chambira* (tree)’

Murui has no copula verb. There is a verb *i(te)* which translates as ‘exist, be, live’. It behaves as any other intransitive verb in the language, and can be used to express possession. In (9), *i(te)* marks a type of ownership:

- (9) kue-mo_{PERF} uru-ia_s i-t-e_{PRED}
 1sg-LOC child-CLF:G.PL exist-LK-3
 ‘I have children.’ (that is, I am responsible for them, they are not necessarily mine)

Murui has a classifier *-fe* meaning ‘side’, as in (10), that can also function as a linker of sorts followed by classifiers, as in (11). Murui number words also take *-fe*, as in (12):

- (10) ana-fe
 below-CLF:SIDE
 ‘downside, lowland’
- (11) foo-fe-be-ji
 inside-CLF:SIDE-CLF:LEAF-CLF:WATERY
 ‘on the inside of the water’
- (12) na-ga-fe-be-kuiro
 ANA.SP-QUANT-CLF:SIDE-CLF:LEAF-CLF:PEEL
 ‘ten (lit. all sides of leaf peels)’

Murui has no morphological derivations such as augmentative or diminutive. Such concepts are expressed in the language by means of classifiers, such as *-ki* ‘round (smaller)’ vs. *-gi* ‘oval (bigger)’.

3. Murui Comparative Constructions

Murui has a number of dedicated comparative constructions that are characterised by the occurrence of special forms of STANDARD MARKERS, as well as by their specific structure. All Murui comparative constructions will commonly include the structural elements outlined in Table 2.⁶

Element	Status
COMPAREE	pronoun, noun
STANDARD	pronoun, noun
PARAMETER	adjective, noun, verb
STANDARD MARKER (S-MARK)	noun (adverb/adverbial demonstrative followed by <i>-fe</i> (CLF:SIDE) and <i>-mo</i> (LOC))
PARAMETER MARKER (P-MARK)	intensifier <i>eo</i> ‘very’

Table 2. Syntactic status of elements of Murui comparative constructions

As mentioned in section 1, adjectives (followed by classifiers) can be used as an argument of a verbless clause, such as *ebikaiai* ‘beautiful (fingers)’ in (13), or as a head of an intransitive clause, such as *ebirede* ‘(they) are beautiful’ in (14). The semantic difference between (13-14) relates to the temporality of attribution (see also examples (4-5) in §2).

- (13) oo-kai-ai_{VCS} ebi-kai-ai_{VCC} *verbless clause - ‘timeless’*
 2sg-CLF:STEM-PL nice-CLF:STEM-PL
 ‘Your (fingers) are beautiful (lit. your (fingers) - nice (fingers)).’ (e.g. they are long and straight)
- (14) oo-kai_{VCS} ebi-re-d-e_{PRED} *intransitive clause - ‘temporal’*
 2sg-CLF:STEM nice-ATT-LK-3
 ‘Your (fingers) are beautiful (lit. your (fingers) have a property of being nice).’
 (e.g. they are decorated with rings)

A similar two-fold division can be made for the comparative constructions. Those comparative constructions that involve verbless clauses with adjectives which have grammatical properties similar to nouns (and refer to ‘timeless’ attribution), as in (13), I will call ‘type 1’. Those that involve adjectives functioning as intransitive predicates (and refer to ‘temporal’ attribution), as in (14), I will call ‘type 2’. Constructions of those types are most commonly used for comparison. This is illustrated by the set of examples in (15) and (16) below. In (15), the adjective root *jano-* ‘small’ followed by a classifier functions as a verbless copula complement (see also section 4 on superlative strategies). (16), with the STANDARD *kue* ‘I’ and the S-MARK *baaifemo* ‘ahead (of)’, is a comparative construction of type 1.

- (15) nai-ñaiño_{VCS} (eo) jano-ñaiño_{VCC}
 ANA.SP-CLF:PR.F very small-CLF:PR.F
 ‘She is very small (lit. she - very small (female)).’

⁶For the terminology used throughout this paper see the introduction (Treis, this volume).

- (16) COMPAREE P-MARK PARAMETER STANDARD S-MARK
 nai-ñaiño_{VCS} (eo) jano-ñaiño_{VCC} [kue baai-fe-mo]_{NP:PERF}
 ANA.SP-CLF:PR.F very small-CLF:PR.F 1sg ahead-CLF:SIDE-LOC
 ‘She is smaller than I am (lit. she - very small (female), ahead of me).’

Murui has several means for expressing comparison. All are monoclausal, where the PARAMETER is stated only once; the STANDARD and the S-MARK of comparison are peripheral elements. The COMPAREE functions as either a verbless copula subject (VCS) or a subject of intransitive clause. Murui comparative constructions can be distinguished by:

- 1) forms of the S-MARK, which can be either: 1) an adverb or an adverbial demonstrative followed by *-fe-mo* (-CLF:SIDE-LOC), 2) *emodo-mo* ‘over’ (over-LOC), or 3) an argument followed by the locative *-mo*,
- 2) grammatical properties of the PARAMETER of comparison, which can be expressed either as an argument of a verbless clause (type 1) or a head an intransitive predicate (type 2).

There is a strong tendency for the PARAMETER to be an adjective; in addition, nouns and verbs can function as the PARAMETER as well. The optional P-MARK, *eo* ‘very, a lot’ is an intensifier. The comparative constructions with *-femo* (§3.1) are common; those with *emodomo* (§3.3) are used less often, and those that involve the locative *-mo* (§3.4) are rare in everyday discourse. Murui comparative constructions with *-femo* are illustrated in Tables 3-5. Each table displays the most common ordering of structural elements for a given comparative construction, as well as their usage in everyday conversations. Forms of the S-MARK *-femo* are shown in Table 6 in §3.2.

Type and meaning	COMPAREE	P-MARK	PARAMETER	STANDARD	S-MARK	USAGE
type 1 ‘timeless’	VCS	PARAMETER preceded by optional intensifier <i>eo</i> ‘very’	VCC	NP	oblique NP	common
type 2 ‘temporal’	S	PARAMETER preceded by optional intensifier <i>eo</i> ‘very’	intransitive predicate	NP	oblique NP	common

Table 3. Comparative constructions with S-MARK *-femo* and their usual structural slots (§3.1)

Type and meaning	COMPAREE	STANDARD	S-MARK	P-MARK	PARAMETER	USAGE
type 1 ‘timeless’	VCS	NP	oblique NP	PARAMETER preceded by optional intensifier <i>eo</i> ‘very’	VCC	occasional
type 2 ‘temporal’	S	NP	oblique NP	PARAMETER preceded by optional intensifier <i>eo</i> ‘very’	intransitive predicate	occasional

Table 4. Comparative constructions with the S-MARK *emodomo* and their usual structural slots (§3.3)

Type and meaning	STANDARD	COMPAREE	P-MARK	PARAMETER	USAGE
type 1 ‘timeless’	oblique NP	VCS	PARAMETER preceded by optional intensifier <i>eo</i> ‘very’	VCC	rare

Table 5. Comparative constructions with the S-MARK *-mo* and their usual structural slots (§3.4)

3.1 Comparatives with *-femo*

Comparative construction with the S-MARK *-femo* involve two construction types, those of type 1 and type 2. Those of type 1 involve verbless clause constructions, where the COMPAREE, STANDARD, and PARAMETER of comparison are nouns and refer to ‘timeless attribution’ of a referent, as in (17). Constructions of type 2 involve adjectives that function as heads of intransitive predicates (occasionally, also verbs and nouns), and refer to ‘temporal attribution’, as in (18). The STANDARD and the S-MARK always form an NP.

- (17) COMPAREE P-MARK PARAMETER STANDARD S-MARK
 [bi-e ïï-ma]_{VCS} eo aïyo-mïe_{VCC} [bi-mïe baai-fe-mo]_{NP:PERF}
 this-CLF:G man-CLF:DR.M very big-CLF:PR.M this-CLF:PR.M ahead-CLF:SIDE-LOC
 ‘This man is bigger than this man (lit. this man - very big man, ahead of this man).’

- (18) COMPAREE STANDARD S-MARK PARAMETER
 kue_s [oo ana-fe-mo]_{NP:PERF} ia-mïe-di-kue_{PRED}
 1sg 2sg below-CLF:SIDE-LOC short-CLF:PR.M-LK-1sg
 ‘I (male) am smaller than you (lit. I - you on the down side, am small).’

In (19), the PARAMETER of the comparative construction type 1 is a noun *uaikima* ‘old man’. (20) is its negated counterpart where the noun is used as a head of a negated intransitive predicate. Examples such as (20) are not common; usually the STANDARD and S-MARK are not expressed when the comparative constructions are negated.

- (19) COMPAREE P-MARK PARAMETER STANDARD S-MARK
 Jose_{VCS} eo uaïki-ma_{VCC} [Caro baai-fe-mo]_{NP:PERF}
 Jose very aged-CLF:DR.M Carlos ahead-CLF:SIDE-LOC
 ‘Jose is older than Carlos (lit. Jose - very aged (man), ahead of Carlos).’

- (20) COMPAREE PARAMETER STANDARD S-MARK
 Jose_s uaïki-ma-ñe-d-e_{PRED} [Caro baai-fe-mo]_{NP:PERF}
 Jose aged-CLF:DR.M-NEG-LK-3 Carlos ahead-CLF:SIDE-LOC
 ‘Jose is not older than Carlos (lit. Jose is not an aged (man), ahead of Carlos).’

The S-MARK of comparison is a noun formed from adverbial demonstratives (e.g. *baai* ‘ahead, over there’) or adverbs of place, such as *foo* ‘inside’ (see §3.2 on forms of S-MARK). S-MARK can have various forms whose meanings are related to distance, interiority, and vertical position, as in examples (21-22):

- (21) COMPAREE P-MARK PARAMETER STANDARD S-MARK
*nai-ñaiño*_{VCS} *eo* *jano-ñaiño*_{VCC} [*kue* *baai-fe-mo*]_{NP:ERF}
 ANA.SP-CLF:PR.F very small-CLF:PR.F 1sg ahead-CLF:SIDE-LOC
 ‘She is smaller than me (lit. she - very small, ahead of me).’
- (22) COMPAREE P-MARK PARAMETER STANDARD S-MARK
*nai-ñaiño*_{VCS} *eo* *jano-ñaiño*_{VCC} [*kue* *foo-fe-mo*]_{NP:PERF}
 ANA.SP-CLF:PR.F very small-CLF:PR.F 1sg inside-CLF:SIDE-LOC
 ‘She is smaller than me (lit. she - very small, me on the inside).’

Sometimes, in the constructions type 1, the PARAMETER can be postposed to the STANDARD. In (23), the STANDARD of comparison, the noun *aiyo-kae* ‘big (canoe)’ and the S-MARK *baaifemo* ‘ahead (of)’, are followed by the PARAMETER *aiyue* ‘big’ in the VCC function. The COMPAREE is the NP *aiyue raya* ‘big boat’. Such ordering of constituents in the sentence is always pragmatically conditioned and occurs when there is an extra emphasis on the STANDARD.

- (23) COMPAREE STANDARD S-MARK P-MARK PARAMETER
 [*aiyue* *ra-ya*]_{VCS} [*aiyo-kae* *baai-fe-mo*]_{NP:PERF} [*eo* *aiyue*]_{VCC}
 big.CLF:G thing-CLF:CRAFT big-CLF.REP:CANOE ahead-CLF:SIDE-LOC very big.CLF:G
 ‘Big boats are bigger than big (canoes) (lit. big boats - ahead of big (canoes) - very big).’

In comparative constructions type 2, adjectives, nouns, and verbs function as heads of an intransitive predicate. In (24), the PARAMETER of comparison is an intransitive predicate *mokorede* ‘green’ modified by the P-MARK *eo* ‘very’:

- (24) COMPAREE P-MARK PARAMETER STANDARD S-MARK
 [*bi-e* *kue-ra*]_s [*eo* *moko-re-d-e*]_{PRED} [*jiai-rue* *baai-fe-mo*]_{NP:PERF}
 this-CLF:G write-CLF:NEUT very green-ATT-LK-3 other-CLF:THINGS ahead-CLF:SIDE-LOC
 ‘This pen is greener than the other one (lit. this pen has a property of being very green, ahead of another).’

In (25), the PARAMETER *mare-ñaiño-di-kue* ‘I’m (a) beautiful (female)’ is a nominalised adjective *mare* ‘good, beautiful’ followed by the animate classifier *-ñaiño*, and it functions as a head of an intransitive predicate. The STANDARD of comparison is the third person pronoun followed by the S-MARK *baaifemo* ‘ahead (of)’:⁷

- (25) COMPAREE P-MARK PARAMETER STANDARD S-MARK
*kue*_s *eo* *mare-ñaiño-di-kue*_{PRED} [*bai-ñaiño* *baai-fe-mo*]_{NP:PERF}
 1sg very good.ATT-CLF:PR.F-LK-1sg⁸ that-CLF:PR.F ahead-CLF:SIDE-LOC
 ‘I am more beautiful than her (lit. I am very good, ahead of her).’

⁷‘Self-praising’, as in (25), is not a usual practise among the Murui. This has to do with the cultural aversion against individualisation, ‘me’ *kue* (1sg) vs. ‘we’ *kai* (1pl). The traditional Murui speakers always talk in pluralistic terms recognising the contributions of the people (i.e. *kai*), and never promoting an individual (i.e. *kue*).

⁸The adjective *mare* ‘good’ can also mean ‘beautiful’, especially when referring to persons.

Similar is (26), where the PARAMETER of comparison, the noun *ukube* ‘money’, functions as a predicate head followed by the STANDARD and the S-MARK:

- (26) COMPAREE P-MARK PARAMETER
 [bi-e feka-ra-ko naama = di]_s eo uku-be-re-d-e_{PRE}
 this-CLF:G divide-CLF:NEUT-CLF:COVER owner=S/A.TOP very plant-CLF:LEAF-ATT-LK-3
- STANDARD S-MARK
 [jai-mie baai-fe-mo]_{NP:PERF}
 other-CLF:PR.M ahead-CLF:SIDE-LOC
 ‘This store owner is richer than the other one (lit. this store owner has a lot of money, ahead of the other (male)).’

The following examples illustrate the intransitive verbal root *kio-* ‘see’ and the transitive *roko-* ‘cook’ in the PARAMETER function. In (28), the COMPAREE is a pronominal S/A subject marker *-kue* (1sg):

- (27) COMPAREE PARAMETER STANDARD S-MARK
 nai-ñaiño_s raize [kio-d-e]_{PRE} [kue baai-fe-mo]_{NP:PERF}
 ANA.SP-CLF:PR.F well.ATT see-LK-3 1sg ahead-CLF:SIDE-LOC
 ‘She sees better than I do (lit. she sees well, ahead of me).’

- (28) STANDARD S-MARK P-MARK PARAMETER/COMPAREE
 [[kue ei]_{NP} baai-fe-mo]_{PERF} eo sopa-na roko-di-kue_{PRE}
 1sg mother ahead-CLF:SIDE-LOC very soup.Sp-N.S/A.TOP cook-LK-1sg
 ‘I cooked more soup than my mother (lit. ahead of my mother, I cook a lot of soup).’

The COMPAREE and the STANDARD of comparison can be further modified by means of dependent clauses, as in (29). The non-singular reading of *baiko* ‘these (dogs)’ is contextual.

- (29) COMPAREE P-MARK PARAMETER
 [bi-e jiko [beno-mo i-t-e]_s eo aime-tai-t-e_{PRE}
 this-CLF:G dog HERE.CLF:SP.PLACE-LOC exist-LK-3 very hungry-BECOME₂-LK-3
- STANDARD S-MARK
 [bai-ko baai-fe-mo]_{NP:PERF}
 that-CLF.REP:DOG ahead-CLF:SIDE-LOC
 ‘This dog that is here is more hungry than that dog (over there) (lit. this dog that is here became very hungry, ahead of that (dog)).’

3.2 The standard marker *-femo*

In comparative constructions with *-femo* (see §3.1), the S-MARK of comparison is a noun formed with either the adverbial demonstrative *baai* ‘ahead, over there’ or a restricted set of place adverbs. They are always followed by the word class changing *-fe* and the locative case marker *-mo*. The forms of S-MARKS are outlined in Table 6. By far, the most common form of the S-MARK *-femo* is

baaifemo ‘ahead (of)’ expressing relative superiority ‘more’, and its ‘negative’ equivalent *foofemo* ‘on the inside (of)’ used for expression of relative inferiority ‘less’.

The meanings of the *-femo* forms relate to distance (‘ahead’), interiority (‘inside’ and ‘outside’), and vertical position (‘low’ and ‘high’).⁹ Such semantic division of the S-MARK indicates the importance of object’s physical properties in terms of their shape and position in space in Murui. For instance, nouns formed with the classifier *-bogi* for ‘big ball-like objects’ are referred to with the S-MARK *jino-femo* ‘wider (lit. on the outside)’ when compared with *-dozi* ‘thin stick’ (see Diagram 1 further this section).

MARK	Gloss	Literal meaning	Reading
<i>baai-fe-mo</i>	ahead-CLF:SIDE-LOC	‘ahead (of), on the ahead side (of)’ ¹⁰	‘more’
<i>foo-fe-mo</i>	inside-CLF:SIDE-LOC	‘on the inside (of)’	‘less, slimmer’
<i>aa-fe-mo</i>	above-CLF:SIDE-LOC	‘on the top side (of)’	‘higher’
<i>ana-fe-mo</i>	below-CLF:SIDE-LOC	‘on the down side (of)’	‘lower’
<i>jino-fe-mo</i>	outside-CLF:SIDE-LOC	‘on the outside (of)’	‘wider’

Table 6. Forms of the S-MARK *-femo* in Murui comparative constructions

Nowadays, all five forms of the S-MARK are almost exclusively used by older speakers of the language. Among younger speakers, *baaifemo* ‘ahead (of)’, and, to an extent, *foofemo* ‘on the inside (of)’, are robustly productive; other forms are falling out of use.

The roots of the S-MARK are not unique to comparative constructions, and elsewhere in the language they can be used as demonstratives and adverbs with locational meanings: They are independent forms which cannot be case-marked unless they take the classifier *-fe* (see Wojtylak 2017 for details). Examples of this are given in (30-35). Nouns formed with *-fe* can be followed by other (physical property) classifiers, as in (33).

(30) **baai** = dino i-t-e_{PRED}
 ahead=AT.CLF:SP.PLACE exist-LK-3
 ‘(A person) is over there (lit. ahead of you in that place).’

(31) **baai-fe** i-ñe-d-e_{PRED}
 ahead-CLF:SIDE exist-NEG-LK-3
 ‘(It) does not have an end (lit. the point ahead doesn’t exist).’

(32) uzu-ma_s kaïma-re **foo** bi-t-e_{PRED}
 grandparent-CLF:DR.M happy-ATT inside come-LK-3
 ‘The grandfather happily came inside.’

(33) **foo-fe-be-niai**
 inside-CLF:SIDE-CLF:LEAF-COLL
 ‘interior side (of leaves, of paper sheets, etc.)’

⁹The S-MARK *foofemo* ‘on the inside (of)’ has a form of *jo-fo-fe-mo* (with the unanalysable element *jo-*) in Minika (another variety of Witoto). The form *jo-* is possibly related to the 1sg pronoun *kue* (cf. *xõ* in Ocaina and *jo’é* in Nonuya). All Witotoan languages have the classifier *-fo* ‘hole-like, cavity’ which is related to the adverb *foo* ‘inside’.

¹⁰Throughout this paper, I chose to translate *baaifemo* (lit. on the ahead side) as ‘ahead (of)’.

- (34) [ana-fe dīne-na] aa ñuita!_{PRED}
 below-CLF:SIDE AT.CLF:NSP-ABL above push.IMP
 ‘Push from (the side) below upwards!’

- (35) jino jaai-ño-kai!_{PRED}
 outside go-IMP-RAPID
 ‘Go quickly outside!’

The semantics of the S-MARK forms allow a division between two parallel types of comparative constructions: those that express superiority, and those which convey the notions of inferiority, as illustrated in Diagram 1 below.¹¹ The S-MARKS expressing superiority make more distinctions than those expressing inferiority.¹²

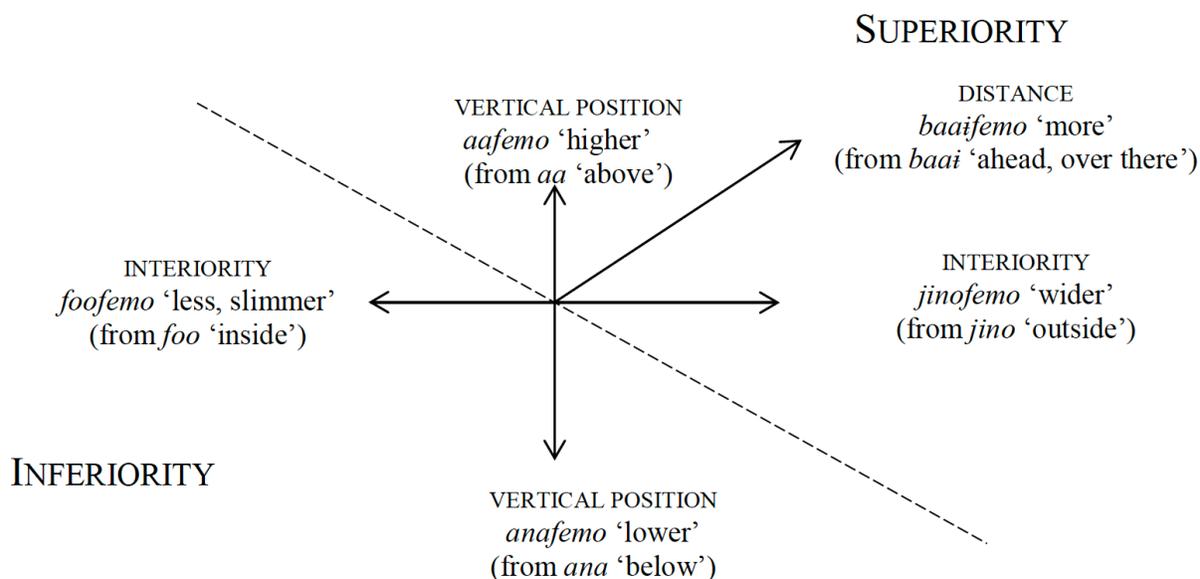


Diagram 1. Semantics of the S-MARK *-femo* in Murui comparative constructions

I. COMPARISON OF SUPERIORITY – comparison of superiority in Murui relates to the notions of vertical position (‘higher’ < ‘above’), distance (‘more’ < ‘ahead, over there’), and interiority (or measurement: ‘wider’ < ‘outside’). The most prevalent S-MARK referring to superiority involves distance, and is formed with the adverbial demonstrative *baai* ‘ahead, over there’ followed by *-fe* and the locative *-mo*. In the speech of Murui elders, *baaifemo* marks only those types of comparison that refer to distance; among younger speakers, it is also used for expressing interiority and vertical position. Throughout the paper, I give various examples of comparative constructions with *baaifemo*, including comparison of property, as in (21, 25), quality, as in (27), and quantity, as in (28).

¹¹‘Superiority’ and ‘inferiority’ are understood here in terms of the position in space, rather than expressing ‘more’ and ‘less’. That way, the forms of the S-MARK mark ‘higher degree of a property’, which can be either superior or inferior. For instance, when the inferiority S-MARK *foofemo* ‘on the inside (of)’ occurs with the adjective ‘small’, it expresses ‘higher degree of smallness’, rather than simply ‘less small, lower degree of smallness’.

¹²This is somewhat different from Yalaku (Aikhenvald, this volume). In addition to biclausal constructions, Yalaku also uses a strategy involving directional verbs. While there is only one verb used to express superiority (‘go up’), expression of inferiority involves two distinct verbs (‘go down’ and ‘go down slope’).

- (41) COMPAREE STANDARD S-MARK PARAMETER
 pila-ji = di_s [mechera **foo-fe-mo**]_{NP:PERF} jano-re-d-e_{PRED}
 battery.Sp-CLF:SMALL.ROUND=S/A.TOP lighter.Sp inside-CLF:SIDE-LOC small-ATT-LK-3
 ‘The battery is smaller than the lighter (lit. the battery, the lighter on the inside, is small).’
- (42) [nai-e dio-kaɪ]_s raize aa
 ANA.SP-CLF:G tobacco-CLF:STEM well.SIMIL above
 raai-d-e_{PRED} [pila = di **foo-fe-mo**]_{NP:PERF} mee-ni-d-e = za_{PRED}
 sit-LK-3 battery.Sp=S/A.TOP inside-CLF:SIDE-LOC heavy-NEG.ATT-LK-3=UNCERT
 ‘The cigarette is less steady than the battery as (the cigarette) is not heavy (lit. the cigarette sits well up there; the battery on the inside; (the cigarette) is not heavy).’

When referring to objects located in space expressing ‘y less than x’ meanings, Murui elders tend to use the S-MARK *anafemo* for ‘lower’, as exemplified in (43). This is unlike young Murui speakers, who employ *foofemo* ‘inside (of)’ at all times.

- (43) COMPAREE PARAMETER STANDARD S-MARK
 kue_s ia-ñaiño-di-kue_{PRED} [Sandriela **ana-fe-mo**]_{NP:PERF}
 1sg short-CLF:PR.F-LK-1sg Sandriela below-CLF:SIDE-LOC
 ‘I am shorter than Sandriela (lit. I am short, Sandriela on the down side).’

3.3 Comparatives with *emodomo*

Another type of Murui comparative constructions involves the S-MARK *emodomo*, and is used for comparison of superiority (see Wojtylak forthcoming on the grammaticalization of the body part term ‘back, spine’ into a marker of comparative constructions). Unlike the comparatives involving S-MARK *-femo* (see §3.1-2), comparatives marked with *emodomo* are not used often. Similarly to comparative constructions involving *-femo*, comparatives with *emodomo* are monoclausal, and distinguish between clauses with ‘temporal’ and ‘timeless’ semantics. In such constructions, the COMPAREE and STANDARD are expressed by adjectives, verbs, and nouns that function as heads of intransitive predicates. The S-MARK of comparison *emodomo* is best interpreted as ‘over, on top, above’; it is formed with the noun *emodo* ‘back’ (cf. (47)) followed by the locative *-mo*. The P-MARK *eo* ‘very, a lot’ is optional. This is illustrated in (44-45) below:

- (44) COMPAREE STANDARD S-MARK PARAMETER
 [bai-e anane-ko]_s [bi-e emodo-mo]_{NP:PERF} maraiñe-d-e_{PRED}
 that-CLF:G maloca-CLF:COVER this-CLF:G over-LOC good.ATT.NEG-LK-3
 ‘That *maloca* is not better than this one (lit. that *maloca*, over this (one), is not good).’
- (45) COMPAREE STANDARD S-MARK PARAMETER
 [bi-e raai-ra-ko]_{VCS} [oni bi-e emodo-mo]_{NP:PERF} aiyue_{VCC}
 this-CLF:G sit-CLF:NEUT-CLF:COVER LOCAL this-CLF:G over-LOC big.CLF:G
 ‘This seat is bigger than this seat here (lit. this seat, over this one here, big).’

- (54) [bi-e uru-iai-mona]_{NP:PERF} da-za_s gui-aka-ñe-d-e_{PRED}
 this-CLF:G child-CLF:G.PL-ABL one-CLF:IMMATURE eat-DES-NEG-LK-3
 eo ñra-re-d-e_{PRED}
 very sick-ATT-LK-3
 ‘Of those children, one doesn’t want to eat. (He’s) sick.’

The use of such constructions in Murui might have been influenced by the Spanish superlative constructions involving *de* ‘of, from, about’, as in a sentence *ella es la mas linda de todas* ‘she is most beautiful of all’ or *de todos los niños, uno no quiere comer* ‘of all the children, he is the only one who doesn’t eat’, as in (54).

II. MODIFICATION OF A NOUN TO INDICATE A SET OF REFERENTS – Murui comparative constructions with the S-MARK *baaifemo* can have superlative readings; in such instances, the STANDARD is specified as a large set of referents against which the COMPAREE is compared, as in (55-56). They are used by young speakers and are reminiscent of Spanish superlative constructions, where the STANDARD is expressed by a noun referring to as a set of referents, as in *el abuelo más viejo de todos* ‘the oldest elder of everybody’. In such constructions in Murui, the COMPAREE is always marked for number (note that elsewhere Murui has optional number marking on the NP, see §2). Examples are given in (55-56) below:

- (55) COMPAREE P-MARK PARAMETER STANDARD
 kue_s eo mare-ñaiño-di-kue_{PRED} [ua nana ri-ño-niai
 1sg very good.ATT-CLF:PR.F-LK-1sg really ALL woman-CLF:DR.F-COLL

S-MARK

baai-fe-mo]_{NP:PERF}
 ahead-CLF:SIDE-LOC

‘I am the most beautiful out of all women (lit. I am very good, ahead of all the women).’

- (56) COMPAREE STANDARD S-MARK P-MARK PARAMETER
 Kata_{VCS} [jiai-ñainuai baaife-mo]_{NP:PERF} eo aiyo-ñaiño_{VCC}
 Kata other-CLF:PR.F.PL ahead-CLF:SIDE-LOC very big-CLF:PR.F
 ‘Kata is the biggest of all (lit. Kata, over other females, very big (female)).’

5. Comparison of equality and similitive meanings

In prototypical equative and similitive constructions two entities (the COMPAREE and the STANDARD) are ascribed to the PARAMETER to the same or similar extent. Murui equative and similitive constructions are discussed in turn.

5.1 Equative constructions

Murui equative constructions are expressed by verbless and (extended) intransitive clauses, where the STANDARD is followed by either the postposition *izoi* ‘similar’, as in (57), or the verbal root *izoi-* followed by verbal morphology, as in (58). The intensifier *eo* ‘very’ is often present.

- (57) *nai-ñaiño_{VCS} eo mare-ñaiño_{VCC} [kue izoi]*
 ANA.SP-CLF:PR.F very good.ATT-CLF:PR.F 1sg similar
 ‘She is as beautiful as me (lit. she - very good, similar to me).’

- (58) *[kue niña]_S ria-ño_E izoi-d-e_{PRED}*
 1sg child.Sp.F nonWitoto-CLF:DR.F similar-LK-3
 ‘My child is like a white woman (lit. my child is similar to a white woman).’

Verbless clauses and intransitive clauses can co-occur. This is illustrated in (59):

- (59) *[bi-e jo-fo]_{VCS} aiyue_{VCC} [jiai-e jo-fo]_E izoi-d-e_{PRED}*
 this-CLF:G house-CLF:CAVITY big.CLF:G other-CLF:G house-CLF:CAVITY similar-LK-3
 ‘This house is as big as the other house (lit. this house - big house, similar to the other house).’

The context can play an important role in interpretation of *izoi(de)* ‘be similar’. The verb is homophonous with the intransitive verb *i-t-e* (exist-LK-3) ‘exist, be, live’ marked with the remote habitual *-zoi*, as in (60). From the synchronic perspective, *izoi-* and *i-* are not related.

- (60) *[kue moo mikori]_S iyai-ma-na_E i-zoi-d-e_{PRED}*
 1sg father deceased chief-CLF:DR.M-N.S/A.TOP exist-REM.HAB-LK-3
 ‘My deceased father used to be a leader.’

Ordering of elements in equative constructions is similar to that of comparative constructions. In Murui, there is a certain flexibility in constituents orders, where the position of the oblique argument can be subject to change (i.e. focus). In (61), the STANDARD is proposed to the PARAMETER:

- (61) *nai-ñaiño_S [kue izoi]_E raize ro-t-e_{PRED}*
 ANA.SP-CLF:PR.F 1sg similar well.SIMIL sing-LK-3
 ‘She sings as well as me (lit. she, similar to me, sings well).’

Murui has also a number of lexical verbs which express transformative-like meanings: *jaai(de)* ‘go, become (in shamanic practices)’, *janai(de)* ‘behave in a similar fashion’, and *i(te)* ‘exist’ (as in (60) above). They are most frequently used in the context of physical and spiritual transformations. The object of transformation is always obligatorily marked with the topical non-subject marker *-na*. This is illustrated in (62-63):

- (62) uzu-ma_A janayari-na_O jaai-d-e_{PRED}
 grandfather-CLF:DR.M jaguar-N.S/A.TOP go-LK-3
 ‘The grandfather became a jaguar.’ (meaning: the grandfather transformed into a jaguar)
- (63) Alexis_A iyai-ma-na_O janai-d-e_{PRED}
 Alexis chief-CLF:DR.M-N.S/A behave.similar-LK-3
 ‘Alexis behaves like a chief.’ (meaning: Alexis behaves like a chief, but he is not a leader)

5.2 Similitive *-ze* with ‘equal size’ meanings

Murui has a category which expresses the notion of ‘Y like/as X in terms of object’s size’. The occurrence of the similitive *-ze* is limited to nouns, demonstratives, the question word *ni-e* (Q2-CLF:G) ‘which (one)’, and the connective *ie*. For example, *ananeko* ‘maloca (traditional communal roundhouse)’ marked with *-ze* means ‘an object Y being like/as a *maloca*, having the size of a *maloca*’.¹⁶ Examples are given in (64-65):

- (64) ua **nokae-ze** bai-re-d-e_{PRED} kue-mona_{NP:PERF}
 really canoe-SIMIL.EQUAL.SIZE find.be.visible-ATT-LK-3 1sg-ABL
 ‘As for me, it seems like a canoe (in terms of size).’
- (65) [kai uai]_O kue-no_{PRED} [ana bi-e ra-be-nigi-ze]
 1pl word write-SMLF below this-CLF:G thing-CLF:LEAF-CLF:LONG.THICK-SIMIL.EQUAL.SIZE
 ‘Write down our language (lit. words) like this thick book (in terms of size) down here.’

The Murui similitive ‘equal size’ marker occurs with all types of nouns, regardless of their animacy. For instance, *Katarina-ze* refers to an object size in terms of the size of *Katarina* (whether big, small, etc.). The similitive cannot be followed by nominal morphology, such as case or number. It can, however, head intransitive predicates. In (66), a speaker was comparing the size of a tree with the size of a house.

- (66) [bi-e ame-na]_S jo-fo-ze-ñe-d-e = di_{PRED}
 this-CLF:G wood-CLF:TREE house-CLF:CAVITY-SIMIL.EQUAL.SIZE-NEG-LK-3=CERT
 ‘This tree is not like a house.’

Elsewhere in the grammar, the readings of *-ze* are clearly similitive, and do not involve ‘equal size’ meanings. This is the case with demonstratives, such as in *bai-e-ze* (that-CLF:G-SIMIL) ‘like that’, *aki-e-ze* (AUDIT-CLF:G-SIMIL) ‘like that (as heard)’, the question word *ni-e-ze* (Q2-CLF:G-SIMIL) ‘how’, and the connective *ie-ze* (CONN-SIMIL) ‘like that’. Additionally, two independent manner adverbs – *raize* ‘well, correctly’, as in (67), and *feekuize* ‘slowly’ – contain the formative *-ze*. Examples are given in (67-69):

¹⁶Murui similitive marker is comparable to the similitive in the Cariban languages. In Trio (a Cariban group the Witotoan people were in contact with), the similitive *-me* has adverbial functions; it is a ‘depictive’ marker, and a marker of ‘secondary predication’. It also has grammaticalised aspectual meanings (Carlin, 2007:328).

(67) **raize** **ñai-no!**_{PREL}
 well.SIMIL speak-IMP
 ‘Speak well!’

(68) **ni-e-ze** **i-ti-o?**_{PREL}
 Q2-CLF:G-SIMIL exist-LK-2sg
 ‘How are you (lit. how do you exist)?’

(69) **mare** **mei** **kai** **bi-e-ze** **i-ya**_{PREL}
 good.ATT so 1pl this-CLF:G-SIMIL exist-EVENT.NMLZ
 ‘(It’s) good to live like that.’ (not in terms of size, but the way of life)

One exception is the demonstrative *die-* ‘that’. *Die-* is unusual in that it is obligatorily marked with *-ze* relating to ‘equal size’. As such, *dieze* can be interpreted as ‘that much’, and when used, it is always accompanied by a gesture indicating size. In (70), *dieze* refers to the size of the store:

(70) [bai-mie ra-niaĩ]_o [tieda **die-ze**]_{PERF} joone!_{PREL}
 that-CLF:PR.M thing-COLL store.Sp THAT.CLF:G-SIMIL.EQUAL.SIZE put.TH.IMP
 ‘Pile up his things like a store (size of things that are usually piled up in stores).’

The simulative *-ze* might possibly be related to the postposition *izoi* ‘similar’ (§5.1). Among Murui speaker, there is a certain interchangeability of the expressions in (71a-b). Both are interpreted as ‘this is the story’, and are customarily used to end narrations.

(71) a. aki-e-ze i-t-e
 AUDIT-CLF:G-SIMIL exist-LK-3

 b. aki-e izoi i-t-e
 AUDIT-CLF:G similar exist-LK-3

6. Summary

This paper focused on comparative construction in Murui, a Witotoan language spoken in Northwest Amazonia. All Murui comparative constructions are similar in structure: they involve an overtly expressed standard marker which contains the locative *-mo*. The meanings of the standard marker refer to distance, interiority, and vertical position, and distinguish between superiority and inferiority. None of the structural elements of Murui comparative constructions have ‘special’ forms; all constituents have additional roles in the grammar. Murui has no dedicated superlative. Superlative readings are contextual, and are achieved by employing adjectives, nouns, and verbs preceded by the intensifier *eo* ‘very’, and modifying nouns to indicate a set of referents. Expressing equality involves *izoi-* ‘(be) similar’. The notion of ‘Y like/as X in terms of object’s size’ is expressed with the simulative *-ze* on nouns and on the demonstrative *die-* ‘that’; elsewhere, the simulative *-ze* has no ‘equal size’ readings.

References

- Aikhenvald, Alexandra Y. 2003. *Classifiers: A Typology of Noun Categorization Devices*. New York: Oxford University Press.
- Aikhenvald, Alexandra Y. 2012. *The Languages of the Amazon*. New York: Oxford University Press.
- Aikhenvald Alexandra Y. This volume. Comparison, contrast and similarity in Yalaku.
- Aschmann, R. P. 1993. *Proto Witotoan*. Arlington: SIL & the University of Texas.
- Carlin, E. B. 2007. The borrowing of Cariban functional categories into Mawayana (Arawak). In A. Y. Aikhenvald and R. M. W. Dixon (eds.), *Grammars in Contact: A Cross-linguistic Typology* (Vol. 4), pp. 313-332. Oxford University Press: Oxford, UK.
- Dixon, R. M. W. 2010a. *Basic Linguistic Theory*. Volume 1. *Methodology*. Oxford: Oxford University Press.
- Dixon, R. M. W. 2010b. *Basic Linguistic Theory*. Volume 2. *Grammatical Topics*. Oxford: Oxford University Press.
- Dixon, R. M. W. 2012. *Basic Linguistic Theory*. Volume 3. *Further Grammatical Topics*. Oxford: Oxford University Press.
- Echeverri, Juan Alvaro. 1997. *The People of the Center of the World. A Study in Culture, History and Orality in the Colombian Amazon*. PhD dissertation. New York: New School for Social Research.
- Echeverri, Juan Alvaro, Doris Fagua, and Katarzyna I. Wojtylak. Forthcoming. The Witotoan language family. In P. Epps and L. Michael (eds.), *International Handbook of Amazonian Languages*. Berlin: Mouton de Gruyter.
- Fabre, Alain. 2005 (updated 2016). *Diccionario etnolingüístico y guía bibliográfica de los pueblos indígenas sudamericanos: Witoto-Bora*. Available at <http://www.ling.fi/Entradas%20diccionario/Dic=WitotoBora.pdf>
- Hardenburg, W. E. 1912. *The Putumayo: The Devil's Paradise. Travels in the Peruvian Amazon Region and an Account of the Atrocities Committed upon the Indians therein*. London: T. Fisher Unwin.
- OIMA. 2008. *Plan de vida del Pueblo Murui: Jurisdicción Organización Indígena Murui del Amazonas (OIMA)*. Colombia: Union Europea, Fundación ZIO-A'I, CISP.
- Pineda Camacho, Roberto. 2000. *Holocausto en el Amazonas: una historia social de la Casa Arana*. Santafé de Bogotá: Planeta Colombiana Editorial.
- Petersen de Piñeros, Gabriele. 2007. Nominal classification in Uitoto. *International Journal of American Linguistics*, 73, 389–409.
- Ramirez, H. (1997). *A Fala Tukano dos Ye'pa-Masa* (Vol. 1). Manaus: Inspeitoria Salesiana Missionária da Amazônia CEDEM.
- Seifart, Frank. 2007. The prehistory of nominal classification in Witotoan languages. *International Journal of American Linguistics*, 73(4), 411-445.
- Seifart, Frank and Payne, Doris L. 2007. Nominal classification in the North West Amazon: Issues in areal diffusion and typological characterization. *International Journal of American Linguistics*, 74(4), 381-387.
- Smith-Stark, T. C. 1974. The plurality split. *Papers from the Annual Regional Meeting of the Chicago Linguistic Society*, 10, 657–671.
- Vuillermet, Marine. This volume. Comparative, similitative and simulative expressions in Ese Ejja.
- Wojtylak, Katarzyna I. 2016. Classifiers as derivational markers in Murui (Northwest Amazonia). In Pavol Štekauer, Livia Körtvélyessy and Salvador Valera (eds.), *Word-Formation Across Languages*, pp. 393-425. Newcastle-upon-Tyne: Cambridge Scholars Publishing.
- Wojtylak, Katarzyna I. 2017. *A Reference Grammar of Murui (Bue), a Witotoan Language of Northwest Amazonia*. PhD dissertation. Cairns: James Cook University.
- Wojtylak, Katarzyna I. 2018. The form and function of nominalizations in Murui (Witotoan). *STUF – Sprachtypologie und Universalienforschung*, 71(1), 19-45 (Special issue *Nominalization: A view from North West Amazonia*, edited by S. E. Overall and K. I. Wojtylak).
- Wojtylak, Katarzyna I. Forthcoming. Grammaticalization of body part terms in Murui, a Witotoan language of Northwest Amazonia. In Iwona Kraksa-Szlenk (ed.). Amsterdam, Philadelphia: John Benjamins.