

Focus Phenomena in Karitiana

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The language is spoken by approximately 350 people in the state of Rondonia, Brazil, and belongs to the Arikém family, Tupi stock.

The Tupi stock is formed by 10 language families. The most numerous family is Tupi-Guarani, that has 40 languages or dialects according to Jensen (1999). Many of these are mutually intelligible. The remaining 9 families in the Tupi stock have 20 languages.

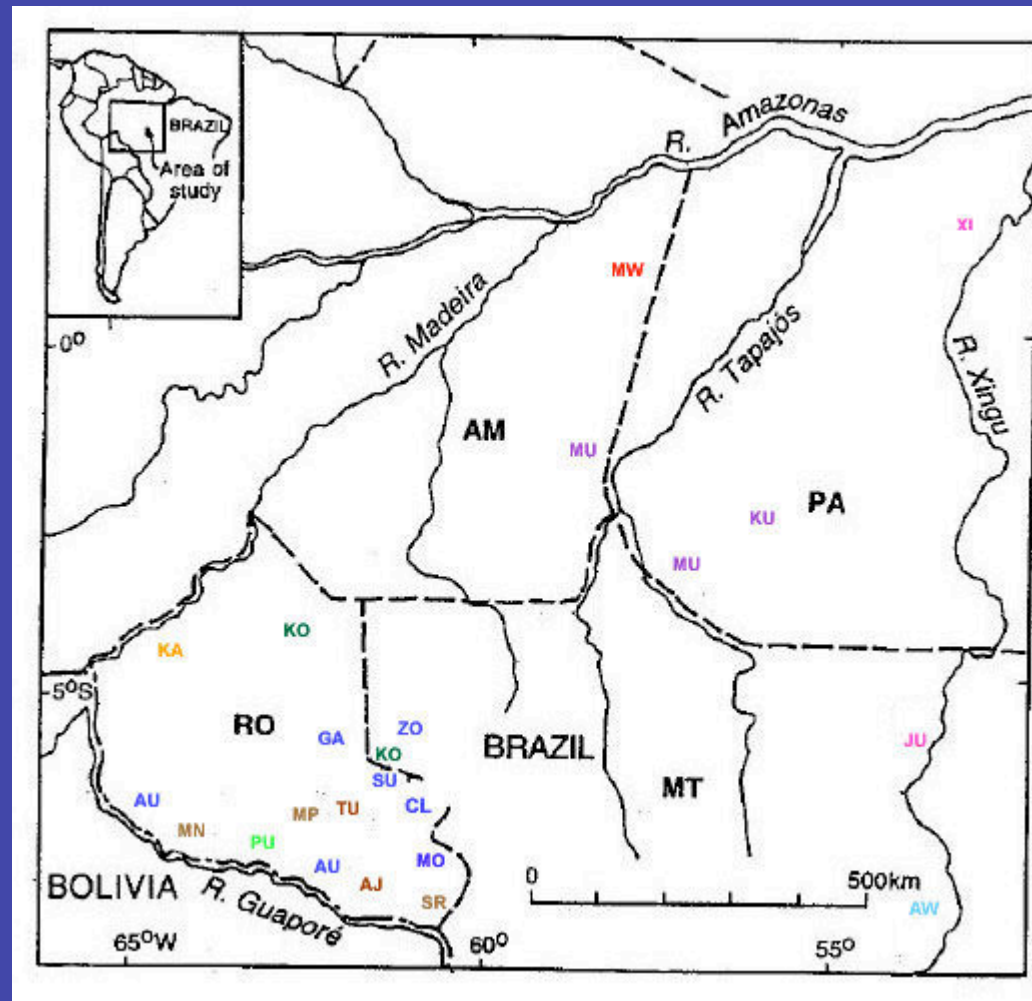
The Tupi Stock: 10 families

- Aweti: Aweti (AW)
- Arikém: Karitiana (KA)
- Juruna: Juruna (JU), Xipaya (XI)
- Mawé: Mawé (MW)
- Mondé: 6 languages or dialects
- Munduruku: Munduruku (MU), Kuruaya (KU)
- Puruborá: Puruborá (PU)
- Ramarama: Karo (KO)
- Tupari - 5 languages
- Tupi-Guarani: 40 languages or dialects

(Rodrigues 1986, 1999, Jensen 1999, Projeto Tupi Comparativo (Museu Emílio Goeldi, Brazil, 2006))

Tupi languages (excluding Tupi-Guarani):

Map adapted from Rodrigues 1999



Studies:

In the US:

Landin, David (1984). MA paper

Storto, Luciana (1999). PhD Dissertation

Everett, Caleb (2006). PhD Dissertation

In Brazil (Universidade de São Paulo)

Coutinho-Silva, Thiago. (2008). Master's Thesis

Sanchez, Luciana (2008). Master's Thesis

Marques, Andrea (2010). Master's Thesis

In Karitiana (Storto 1999, 2010), as in other Tupi languages (Brandon & Seki 1981, 1984, Seki & Brandon 2007), focus is syntactically marked through the dislocation of the focused phrase to the left periphery of the sentence in the following syntactic environments:

- Object Focus Constructions
(also marked by verb morphology)
- Wh-sentences and answers to wh-sentences
- Relative clauses
- Clefts and copular sentences

This presentation intends to:

- Show that in Karitiana focused constituents move to the left periphery of the clause
- Observe variation in constituent order found in Karitiana texts in light of the syntactic focus phenomena just mentioned
- Give an account of what is known at the present moment about constituent focus phenomena in the language

Overview of the language

Karitiana is a head-final language (Storto 1999), as most Tupi languages clearly are, displaying:

- Postpositions (NP-P order in the PP)
- Possessor-possessed order in the NP
- OV order inside the nominalized VP
- Embedded clause-subordinator order

NP-P:

São Paulo pip ‘ to São Paulo’

Possessor-possessed:

Maria ambi ‘ Maria’s house’

Object-verb:

Jepyry naakat [opok oky]-pa-t

club is enemy kill-nom-copular agreement

‘The club is an enemy-killer (instrument)’

Adverbial Embedded Clauses

[Boroja taso oky tykiri] Ø-naka-hyryp-Ø ãwã
snake man kill perfve 3-decl-cry-nfut child
'When the man killed the snake, the child cried (colloquial)'

[Taso boroja oky tykiri] Ø-naka-hyryp-Ø ãwã
man snake kill perfve 3-decl-cry-nfut child
'When the man killed the snake, the child cried (archaic)'

Constituent order varies a great deal, but a complementary distribution is syntactically obligatory (Storto 1999):

- Main clauses are never verb-final, with SVO and VS being the most common orders in declarative clauses.
- Embedded clauses are always verb-final (SOV or OSV for transitives and SV for intransitives).

SVO matrix clauses

Opok	yj-ta-oky-t	yjxa
Enemy	1pl-decl-kill-nfuture	us

‘The enemies killed us’

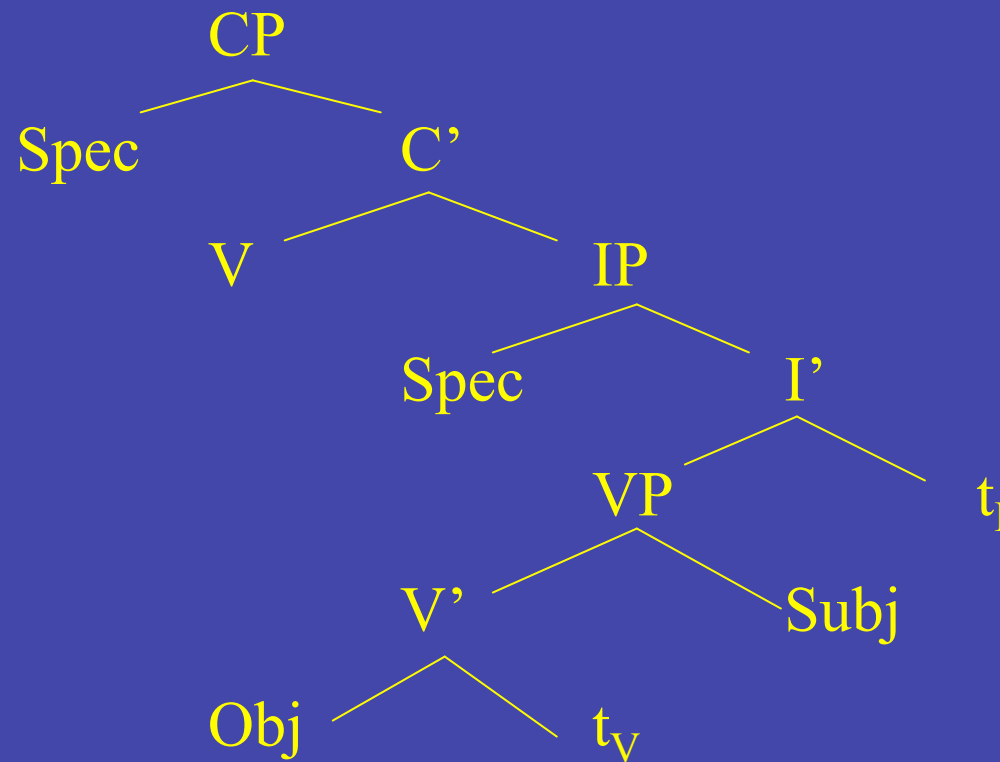
Yjxa	Ø-na-oky-t	opok
us	3-decl-kill-nfuture	enemy

‘We killed the enemy’

Complementary distribution in word order relates to verb movement to a second position, as in Germanic V-2

- Matrix verbs are always inflected for person agreement and tense.
- Embedded verbs are never inflected for agreement or tense. In fact, verbs are always bare in embedded sentences.

Storto (1999) argues that Karitiana is a verb raising language, whereas Landin (1984) and Everett (2006) state that the language is SVO and has no agreement.



Storto 1999: V to I to C movement is obligatory in Karitiana matrix clauses because tense must be in C, as in Germanic languages

Ergativity: The absolutive argument - the subject of an intransitive verb and the object of a transitive verb - agrees with the verb (case not mkd.):

Yn a-ta-oky-j an 'I will hurt you' (SVO)

An y-ta-oky-j yn 'You will hurt me' (SVO)

Y-ta-opiso-t yn 'I listened' (VS)

A-ta-opiso-t an 'You listened' (VS)

Gloss: pers.agr-declarative-ROOT-tense

Arguments for an analysis of person agreement (Storto 1999), *contra* a pronominal analysis by Landin (1984) and Everett (2006):

- Agreement and tense are triggered by verb movement
- As the verb moves, it forms a compound unit with all functional items in the sentence (aspect, negation, evidentials)
- Agreement changes in matrix object focus constructions
- Although this system of agreement derives historically from cliticized pronouns, person morphemes on the matrix verb can't be pronouns synchronically, because free NPs and pronouns co-occur in matrix clauses and in embedded clauses this does not happen. The fact that agreement morphology derives historically from pronouns is widely assumed cross-linguistically (Givón 1976)

Agreement in declaratives

Yn naahoj õwã	'I laughed at the child'
An naahoj wã	'You laughed at the child'
I naahoj õwã	'He laughed at the child'
Yta naahoj õwã	'We (excl.) laughed at the child'
Yjxa naahoj õwã	'We laughed at the child'
Ajxa naahoj õwã	'You laughed at the child'
I naahoj õwã	'They laughed at the child'
Ytaahyt yn	'I drank'
Ataahyt an	'You drank'
Naahyt i / taso	'He/the man drank'
Ytaahyt yta	'We (excl.) drank'
Yjtaahyt yjxa	'We drank'
Ajtaahyt ajxa	'You drank'
Naahyt i / taso	'They/ the men drank'

Agreement in assertatives

Ypyrahojon õwã

‘The child laughed at me’

Apyrahojon õwã

‘The child laughed at you’

Pyrahojon õwã

‘The child laughed at her’

Ytapyrahojon õwã

‘The child laughed at us (excl.)’

Yjpyrahojon õwã

‘The child laughed at us’

Ajpyrahojon õwã

‘The child laughed at you’

Pyrahojon õwã

‘The child laughed at them’

Ypyrahydñ yn

‘I drank’

Apyrahydñ an

‘You drank’

Pyrahydñ i / taso

‘She/the man drank’

Ytapyrahydñ yta

‘We (excl.) drank’

Yjpyrahydñ yjxa

‘We drank’

Ajpyrahydñ ajxa

‘You drank’

Pyrahydñ i / taso

‘They/the men drank’

Agreement in imperatives

A-pyt'y-Ø
2s-eat-imp

'eat (intr.)'

A-tar-a
2s-go-imp

'go (intr.)'

I-mpok-a
3-dry-imp

'dry it (tr.)'

I-or-a
3-catch-imp

'catch it (tr.)'

I-m'y
3-caus-do

osiipo 'Do the Osiipo (ritual)!'
ritual

Functions of Mood Morphology

Assertatives: Occurs in affirmative answers to polar questions (Landin 1984); common in the beginning and ending of narratives; used to express a strong opinion. Everett (2006) calls it a verb-focus construction; he claims the verb moves to a pre-core position inside the sentence in such sentences (2008).

Non-declaratives: Occurs when a character in a narrative uses direct speech. Differs from declaratives in that no mood prefix is present and the third person agreement marker is *i-* instead of zero:

Dikisy	i-oky-t	y-man!	
Spider	3-kill-nfut	1-husband	SVO

‘ A spider killed my husband!’

1. Syntactically Marked Focus Phenomena

Movement of NPs to the left-periphery in:

- Object Focus Constructions (verb morphology)
- Wh-questions and answers
- Relatives
- Clefts and copular sentences

Non-declarative object focus construction: agreement with subject of transitive verb (Storto 1999)

João y-ti-ahoj-Ø yn-o
 João 1-OFC-laugh-nfut I-emphatic
 ‘I laughed AT JOHN’

João a-ti-ahoj-Ø an-o, Ø-naka-’a ta’ã-t taso
 João 2-OFC- you- 3-decl-say dir.evid-nfut man
 laugh-nfut emph.
 ‘“-You laughed AT JOHN”, the man said’

’Ep i-ti-pasagngã-t ãonso
 tree 3-OFC-count-nfut woman
 ‘The woman counted TREES’

’Ep i-ti-pasagngã-t i
 tree 3-OFC-count-nfut he/she/they
 ‘He/she/they counted TREES’

Declarative object focus construction: only possible with third person subjects and has fixed subject agreement (Storto 1999, 2008, 2010)

João	Ø-a-ta-ahoj-Ø	i
João	3-DOFC-decl-laugh-nfut	he/she/them
‘He/she/they laughed AT JOHN’		
(Answer to Moramon taso tiahoj (hỹ)?		‘At whom did the man laugh?’)

João	Ø-a-ta-ahoj-Ø	ĩonso
João	3-DOFC-decl-laugh-nfut	woman
‘The woman laughed AT JOHN’		

Relative Clauses: internal head moves to left periphery of the clause (Storto 1999, to appear)

Yn Ø-na-aka-t i-so'oot-Ø [taso ðwã mi]-ty

I decl-cop-nfut 3-see-cop.agr man child hit-obl

‘I saw the man that has hit the child’

Yn Ø-na-aka-t i-so'oot-Ø [ðwã taso ti-mi]-ty

I decl-cop-nfut 3-see-cop.agr child man OFC-hit-obl

‘I saw the child that the man has hit’

Morã y-sokõ~ĩ
Wh 1-tie.up
‘Who tied me up?’

Morã y-ahoj (yn-o)?
Wh- 1-laugh I-emphatic
‘Who laughed at me?’

Morã y-mi (yn-o)?
Wh- 1-hit I-emphatic
‘Who hit me?’

Morã i-mi taso?
Wh- 3-hit man
‘Who hit the man?’

Cleft Sentences (Storto 1999, 2010)

Cleft with subject moved from object position of transitive verb (nonfut tense):

Erery	(Ø-na-aka-t)	keerep	˜jonso	ti-i-amangã-t
cotton	3-decl-cop-nfut	in.the.old.days	woman	OFC-part-plant-cop.agr

‘It was cotton that the women planted in the old days’

Cleft with subject moved from object position of transitive verb (future tense):

Manoel	Ø-na-aka-j	˜jonso	ti-i-ahoj-Ø
cotton	3-decl-cop-fut	woman	OFC-part-laugh.at-cop.agr

‘It is at Manoel that the women will laugh’

Object wh-question with verb ‘to kill’:

Morã-mon taso ti-i-oky-t?
Wh-cop man OFC-part-kill-cop.agr
‘What is it that the man killed?’

Cleft answer to wh-question with verb ‘to kill’:

Pikom (Ø-na-aka-t) taso ti-i-oky-t
monkey 3-decl-cop-nfut man OFC-part-kill-cop.agr.
‘It is the monkey that the man killed’

OFC used as answer to wh-question with verb ‘to kill’:

Pikom a-ta-oky-t taso
monkey OFC-decl-kill-nfut man
‘The man killed THE MONKEY’

Wh-cleft of an intransitive subject

Morã	i-aka-j	i-pon?
wh-	3-cop-fut	part-shoot
‘Who is it that will shoot?’		

Answer: Taso naakaj ipon ‘The man is going to shoot’

Cleft of a nominalized transitive verb with an incorporated object:

Tepa	Ø-na-aka-t	[[byrytik	sokõĩ]-pa]-t
vine	3-decl-cop-nfut	torch	tie.up-nomlZR-cop.agr.
‘Vines are the binders of torches’			

Copular Sentences: intransitive verbs head complement of the copula (Storto 2008, 2010)

Copular sentence with nominal predicator

'Ep	Ø-na-aka-t	[jepỹrỹ]-t
tree/wood	3-decl-cop-nfut	club-cop.agr.
'The club is a piece of wood'		

Copular sentence with adjectival predicator

Taso	Ø-na-aka-t	i-se'a-t
man	3-decl-cop-nfut	part-good-cop.agr.
'The man is good/good-looking'		

Copular sentence with intransitive verb as predicator

Taso	Ø-na-aka-t	i-kat-Ø
man	3-decl-cop-nfut	part-sleep-cop.agr.
'The man is sleeping/slept'		

Copular sentence (nonfuture tense, 1st. and 2nd.person subjects)

Yn/an	Ø-na-aka-t	i-kat-Ø
I/you	3-decl-cop-nfut	part-sleep-cop.agr.
‘I/you slept’		

Ungrammaticality of copular sentences with transitive verbs

*Taso	Ø-na-aka-t	i-’y-t	(ta-ti’y)
man	3-decl-cop-nfut	part-eat-cop.agr.	3anaph-food
‘The man ate (his food)’			

Passivized transitive verb ‘to eat’ in copular construction

Taso	Ø-na-aka-t	i-a-’y-t
man	3-decl-cop-nfut	part-pass-eat-cop.agr.
‘The man was eaten’		

Wh-cleft of an intransitive subject

Morã	i-aka-j	i-pon?
wh-	3-cop-fut	part-shoot
‘Who is it that will shoot?’		

Answer: Taso naakaj ipon

‘The man is going to shoot’

Wh-cleft of an intransitive subject

Morãmon	i-pon?
wh-cop	part-shoot
‘Who has shot?’	

Answer: Taso naakat ipon

‘The man has shot’

Rocha (2010) has tested 152 verbs and shows that only intransitive verbs may occur as the head of the complement in a copular sentence. This includes:

Plain intransitives (run, cry, arrive, go, die, fall, dry, etc)

Intransitive verbs with oblique arguments (think, love, etc)

Passivized transitive verbs (36 verbs)

Conclusion:

1. There is a left periphery focus position in Karitiana to which wh-phrases move, and where focused phrases in general move in focus object constructions, relatives, clefts and copular sentences

2. The association of this position with focus semantics can be demonstrated beyond reasonable doubt because Karitiana is a language in which the focused phrase must be sentence-initial in relatives and in answers to wh-questions (focus, cleft and copular sentences)

3. Possible answers to wh-sentences:

Monoclausal sentences

SVO declarative sentences

OVS declarative object-focus sentences

OVS non-declarative object-focus sentences

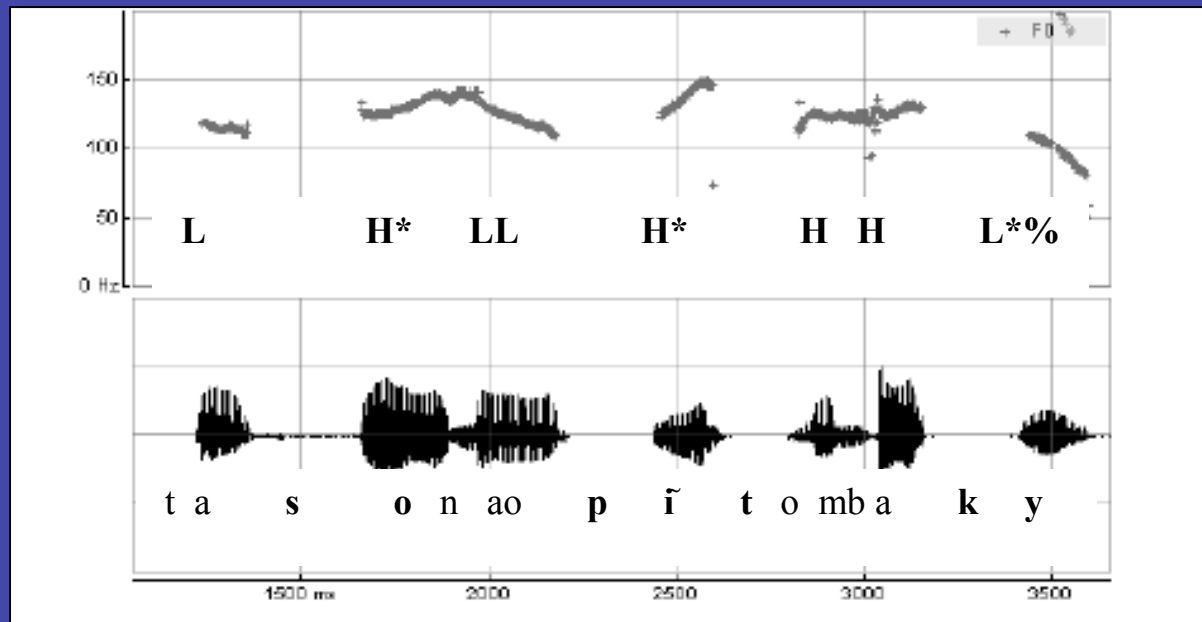
Biclausal sentences (SVO with clausal complements):

Cleft sentences: S copula [OV], O copula [SV]

Copular sentences: S copula [V]

2. Constituent focus and prosody

SVO declarative: The man cut the jaguar



(Storto & Demolin 2005)

Storto (1999), Storto & Demolin (2005)

The pitch accent system of Karitiana uses both stress (duration or intensity) and pitch in a predictable pattern. Stress falls on the last syllable of the root or on the rightmost heavy syllable. Some affixes are inherently stressed, but most aren't.

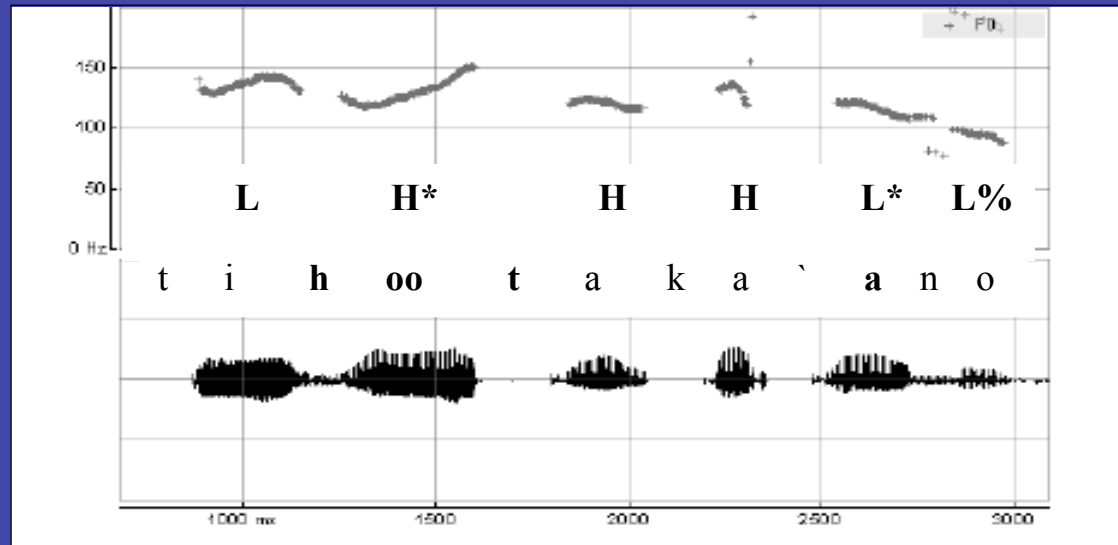
All utterances have a boundary L tone at the end (except affirmative imperatives, that have a H tone instead). All stressed syllables bring a H tone to the computation of the pitch pattern of the word.

Association of tones to syllables go from right to left, starting with the boundary tone (and delinking a H tone if the last syllable is stressed)

A tone spreads until it reaches a stressed syllable. After the spreading of a boundary L, the delinked H associates to the next syllable and spreads. After that, a default L is inserted in the next tone domain. Loss of stress may occur in certain prosodic environments larger than the word.

Content question: Where do you live?

WH- V S: Here wh- and V form a prosodic unit larger than the word in which the V loses its stress and becomes part of the same tone domain as the wh-word



(Storto & Demolin 2005)

Everett (2008) has analyzed the F0 curves of different types of sentences in Karitiana, and concludes that:

- Declarative SVO sentences (copular sentences included), as well as focus OVS sentences have a fairly flat pitch contour that results from word stress patterns. Passive and assertive (verb-focus for Everett 2006) sentences as well.
- Wh-sentences have a rising pitch on the wh-word (morã, tikat)
- Broad predicate focus is placed on the verb and the NP that follows it in declarative clauses (no acoustic evidence is given)
- Syntactically, the left periphery position in which focused constituents occur is called the “pre-core slot” by Everett (in Van Valin’s role and reference grammar framework, a clause internal position before the core – verb and arguments)

Everett (2008) and Storto (2010) differ with respect to his claim that the predicate and following NP has broad focus. Storto claims that the object of an SVO or the subject of an intransitive VS sentence (the unmarked word orders) are more prominent acoustically than the verb. However, since no acoustic data is available to substantiate either claim at the moment, the issue remains inconclusive.

Everett (2008) agrees with Storto (1999) that the left periphery focus position is clause internal, since there is no necessary pause between the moved focused phrase and the rest of the sentence. Storto (1999) considers that position to be Spec, CP (generative framework).

3. Constituent Order variation in texts

The syntactic movement associated with focus certainly explains most of the object-initial orders found in Karitiana texts, but we do find some OSV sentences that are not in the object focus construction when the object is quantified by *myry'in* 'only':

[Gok	myry' in]	yn	na-amang	andyk-i	(yn)
manioc	only	I	decl-plant	aspect-fut	I

'(As for myself), I will be planting only manioc'

The position to which the object moves when quantified by 'only' must be different from the position to which wh-focused constituents move in clefts, wh-questions and object focus constructions, because the OFC morphology is not triggered when the object is quantified.

This seems to be an SVO sentence in which the object has moved to the left periphery.

It is still to be determined what the motivation for the movement is: is it something about quantification in general or is it something to do with contrastive focus?

Quantifiers and the left-periphery

'only'

[Gok myry' in] yn na-amang andyk-i (yn)
manioc only I decl-plant aspect-fut I
'(As for myself), I will be planting only manioc'

Quantification of the object: SVO(S) → OSV(S)

[myjym myry' in] yn na-popi-t ta'at (yn)
three only I decl-kill-nfut dir.evid. I
'(As for myself), I killed only three (monkeys)'

Quantification of object: SVO(S) → OSV(S) with NP deleted in O

'every' [NP copula subordinator]

[Taso aka-tyym] na-soko' i-t eremby
[man cop-subordinator] decl-tie.up-nfut hammock
'[Every man] tied up the hammock'

Taso na-soko' i-t [eremby aka-tyym]
man decl-tie.up-nfut [hammock cop-subordinator]
'The man tied up [every hammock]'

Both sentences are SVO. If quantifier clause is fronted, we get [NP akatyym] VO or [NP akatyym] VS. Here we also fail to get the OFC.

There is also a different structure, in which the clause behaves as an adverbial subordinate clause. The fronted quantifier clause has a third person pronoun as its subject and it refers to the subject or object of the matrix.

Ta-aka-tyym na-soko'i-t eremby taso
3subj.anaf-cop-sub decl-tie.up.nfut hammock man

'Every man tied up the hammock'

[Literally: Man_i tied up the hammock when it_i be complete]

I-aka-tyym na-soko'i-t eremby taso
3-cop-sub decl-tie.up.nfut hammock man

'The man tied up every hammock'

[Literally: Man tied up the hammock_j when it_j be complete]

Ta-tat takit taso na-oky-t sojxa
3subj.anaf before man decl-kill-nfut pig

'The man_i killed the pig_j before he_i /*_j left' (man, not pig)

Itat takit taso naokyt sojxa

'The man killed the pig before he left (pig, not man)

Observations about the left periphery and quantification

Both in quantification with ‘only’ and with ‘every’, the fronted phrase fails to trigger the object focus construction (OFC) morphology. The question is why?

It could be because quantification movement to the left periphery is different than focus movement, that is, movement to another position.

It could also be that all quantified phrases are in fact clauses. The clausal analysis of ‘every’ is clear, because of its internal structure, with a copula and a subordinator, but it is not clear for ‘only’: Myry (alone) + ’ in (small) ?

Matrix Clauses

Considerable word order variation can be found in dialogues and in narratives. 66 sentences in dialogues (45 complete) and 296 sentences in a ritual narrative (195 complete) have been analyzed:

Dialogues: 19 transitive sentences

SVO: 9 declarative, 2 copular

OSV: 5 OFC (2 wh- and 2 answers to wh-)

OV: 1 OFC (wh-) and 2 non-OFC (nmzd. VPs)

The non-OFC declarative sentence with OSV order has an object quantified by 'only'.

Dialogues: 26 complete intransitive sentences

VS:	6	adjunct-wh
	7	polar questions
	4	answers to adjunct-wh, preceded by adjunct
	3	1 default, 2 followed by adjunct PP
	3	negative
SV:	1	repetition by hearer of speaker's VS sentence
	1	answer to subject-wh
SV Obl:	1	SV followed by 'horo', a tag question mkr.

Narrative (“Osiipo”): 195 complete sentences

Narrative: 92 complete transitive sentences (O and V at least)

SVO	56	most unmarked, 15 copula, 1 neg. imperative, 1 aff. imperative, 1 negative
VO	16	2 imperative, 14 habitual,
OSV	2	1 object quantified by ‘only’, 1 declarative (parallelism)
OVS	9	8 declarative OFC, 1 habitual with an ideophone as the object
OV	2	preceded by pitat ‘really’
VOS	2	always preceded by an adjunct
VSO	5	often preceded by an adjunct, or the subject has a different referent than the subject of the previous sentence; 1 assertative

Narrative (“Osiipo”): 195 complete sentences

Narrative: 103 intransitive sentences

VS	81	unmarked, 12 negative passive
SV	22	2 passive, 1 imperative, 1 emphatic subject, 2 subject with ‘only’, 5 followed by a PP or Adverb

Embedded Clauses:

Embedded clauses may be adverbial, complement or relative clauses. There is a clear difference between adverbial and relative clauses: the former may vary between SOV and OSV word-order without making use of verb morphology, whereas the latter have to use the OFC if the object is relativized.

Complement clauses may behave as adverbial or as relatives (Storto 1999, to appear).

It is still to be determined what factors other than colloquial versus archaic style explains the SOV and OSV word orders in adverbial clauses.

Summing up

Karitiana is a language in which focused constituents move to the left periphery of the sentence both in matrix and in relative clauses. This explains a lot of what is found in terms of word-order variation, but there are other left-periphery movements associated with quantification that still have to be better described and understood.

Work on prosody is still incipient in the language, and the results so far are inconclusive.

A preliminary analysis of texts confirms that SVO and VS are the default word orders, but verb-initial and SV word-orders still must be explained.

The End

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