

ARGUMENTS FOR AND AGAINST VERB SECOND IN KARITIANA

ARGUMENTOS A FAVOR E CONTRA V2 EM KARITIANA

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ABSTRACT

This paper revisits the hypothesis that Karitiana is a verb second language in which the finite verb occupies a second structural position in the sentence (C). We show that, although embedded clauses are SOV, the finite verb in a transitive declarative sentence is in second position and the default order is SVO. Other sentential types are examined, including negated sentences, focus and discourse topic contexts, and poetic parallelisms, and the conclusion is that there is a phonological requirement in the language that makes a phonological phrase occur before the finite verb. Whereas the V2 phenomenon in Germanic languages is categorical, in Karitiana it is possible for sentences to be verb-initial besides the above-mentioned phonological requirement which, together with verb movement, is responsible for the verb second phenomenon in the language.

KEYWORDS: verb second, Karitiana, verb movement

RESUMO

Este artigo revisita a hipótese de que a língua Tupi Karitiana é uma língua V2, em que o verbo finito ocupa uma segunda posição estrutural da sentença (C). Mostramos que, apesar de a língua ser SOV nas encaixadas, o verbo finito em uma sentença transitiva declarativa ocorre na segunda posição estrutural da sentença e que em um contexto não marcado a ordem é SVO. Outros tipos sentenciais são examinados, inclusive sentenças negativas, contextos de foco e tópico do discurso, e paralelismos poéticos e conclui-se que há um requerimento fonológico na língua que exige que uma frase fonológica ocorra antes do verbo finito. Enquanto o fenômeno V2 em línguas Germânicas é categórico, em Karitiana é possível a ocorrência de sentenças verbo iniciais, apesar do requerimento supracitado que atua juntamente com o movimento do verbo para a segunda posição.

PALAVRAS CHAVE: V2, Karitiana, movimento verbal

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1. Introduction

Typological studies consider that constituent order is one of the criteria used by linguists to classify the languages of the world. However, languages in which the constituent order behaves differently in finite and non-finite clauses, such as in the so-called verb second (V2) Germanic languages and the Tupian language Karitiana studied here, posit challenges to this type of classification. Would they be, for instance, SOV languages, which is the basic constituent order in non-finite subordinate clauses or SVO, the default order in declarative sentences? Having this question as a starting point, I present a complete view of what I consider to be the V2 phenomenon as it occurs in Karitiana, hoping to contribute to the debate on the subject.

Another question that must be addressed is whether the similarities between Germanic V2 languages and the Tupian language Karitiana are due to the same linguistic phenomenon, called by generativist linguists The Verb Second Parameter, or not. This paper presents arguments in favor and against that hypothesis and a final discussion in which I argue that Karitiana is a V2 language in non-assertive sentences, although V2 in Karitiana is different than V2 in Germanic languages.

Since the debate is of interest to different approaches – functional typology and generative linguistics – we must make sure that all primitives used to analyze the data are made explicit in this paper. A first primitive that I consider to be basic is that languages are either OV or VO in their basic constituent order. By basic constituent order I do not understand the most common, default order of constituents in sentences, but the order in which verbs project their complements inside the verb phrase (VP). I consider it to be a universal that languages have verb phrases that are either VO or OV, in the same way that languages have PPs - prepositional (P Compl) or postpositional phrases (Compl P) - as projections of an adpositional head P that selects its complement either to its right or to its left (the Head Parameter, as proposed by generativists). That point is not controversial in and of itself (few linguists do not believe that the verb and its object form a constituent), but it should be taken into consideration when constituent order is discussed in typological studies because in non-finite clauses, arguably, the relative order between a verb and its complement may be the basic order of the verb phrase, whereas in finite sentences, in which tense, agreement and other functional material - such as aspect and mood - are present, the word order may change. For these reasons, I assume that whenever the verb and object are not contiguous to each other (for instance, OSV and VSO),

there has been change in the basic constituent order of the verb phrase. This surface or sentential constituent order is not to be confused with the basic or underlying word order (that holds inside the verb phrase). In this view, the only possible basic word orders for verb phrases projected by transitive verbs is SOV or SVO, assuming the subject may not be projected to the right of the verb-object phrase. Karitiana and Germanic languages with V2 are SOV languages in that respect.

In my view, a reasonable way of accounting for changes of constituent order in linguistics is to assume that the constituent order in sentences may be a result of movement of arguments (topicalization, focalization, wh-movement), heads (verb movement) or other constituents (the verb phrase and PPs, for instance). Such processes are independently assumed by all linguists to explain the change in constituent order of topicalized, focalized, and wh-moved constituents. Also, word order differences have been identified in languages as a result of changes in mood, agreement and tense, as well as the presence of other functional material. This is formalized here in the following way: after the verb phrase is formed (the verb and its arguments, structured in such a way that the verb forms an intermediary constituent with its object, and the subject is linked to the left of that unit), functional heads may be added to it to form larger structures, such as clauses and sentences, creating new positions (such as Inflectional or Tense Phrases (carrying Tense and Agreement), and Complementizer or Focus Phrases) to which constituents may move for various reasons, such as Case, Wh-interrogation and Focus. For instance, in many languages, a content-question involves wh-movement to the left periphery of the sentence because that is a position in which new information (wh-focus) must occur. In Karitiana, there are different word orders formed when mood, tense and agreement are added to the verb phrase. For this reason, I will make reference to tree structures in my discussion of Karitiana data. Even though typologists do not use such structures in their accounts of constituent order variation, they will be able to understand our formal account of the Karitiana data because tree structures make our explanations explicit. Generativists that believe in different accounts of the data than the one presented here will be able to translate easily from our view to theirs as well. Our goal is to make the debate accessible to linguists of different frameworks, since the data and phenomena are of interest to all.

The paper presents a summary of background information on research on constituent order in Karitiana in section 2, discusses new arguments in favor of verb second in section 3, examines arguments against verb second in 4, and offers a brief discussion and concludes in section 5, hoping to contribute to the literature on verb-initial and verb-second languages.

2. Constituent Order in Karitiana

Karitiana is a Tupian language of the Arikém branch spoken today by 396 people in the state of Rondonia, Brazil (Rocha 2018). When trying to explain its constituent order in my PhD dissertation (Storto 1999) I was surprised to find that this poorly described Amazonian language had a lot in common with Germanic V2 languages, in that the language displays a complementary distribution in word order between declarative main clauses (finite) and subordinate clauses (non-finite). I claimed that this difference had to do with the presence of tense and agreement in the former and their absence in the latter. I still believe that claim to be correct, but as I know more about the language today than I did then, it is worth revisiting the discussion after incorporating new facts to the picture. Storto (2002) has shown that there are many sentential types (or moods) in Karitiana besides declarative clauses – assertive (also called assertative by Storto 2002 and ver-focus by Everett 2006), deontic, citative, and conditional - as well as non-declaratives such as questions, negated sentences (Storto 2018a), etc. I will include various sentential types in the constituent order discussion presented in this paper to give a more complete view of the role of V2 in the language. This is possible today because I have studied the encoding of information structure notions such as topic and focus in narratives (Storto 2014) because functional morphology such as aspect, mood, evidentiality and negation in Karitiana have been further investigated by myself (Storto 2011, Storto 2013, Storto 2017) and other researchers (Carvalho 2010, Muller 2017, Ferreira 2017, Alexandre 2016). Also, Storto (2018b, to appear) has investigated content structure and verbal art in 2 Karitiana narratives and noticed that parallelisms may be an artistic resource used in narratives which explains some of the variation in word order found in Storto (2014). In face of these new findings, it is now necessary to revisit the hypothesis that Karitiana is a verb second language, adding new data to the discussion.

3. Arguments in Favor of Verb Second in Karitiana

3.1. Background and analysis

Storto (1998) argued that Karitiana is a verb second language in which the finite verb (meaning in this case the verb inflected for tense and agreement) must be in a second structural position in matrix declarative clauses², whereas the nonfinite verb occurs in embedded verb-final clauses. Besides this factor, the parallel between Karitiana and Germanic V2 languages was that in both there is a requirement that the preverbal position be filled if not by an argument, at least by an adjunct (adverb or PP). Below I review the evidence presented by Storto (1998, 1999 and 2014), propose a new analysis of V2 and add new data to show that sentential types (mood) and pragmatics plays an important role in defining word order possibilities in the language.

In (1a) we have the default word order in declarative transitive sentences: (Adverb) SVO. An adverb cannot occur between the subject and the verb in this word order as in (1b), which is marked by an asterisk for being ungrammatical, but it can occur sentence-finally (1d) and between the verb and the object (1c):

- 1a. Mynda taso Ø-na-m-potpora-j ese
 slowly man 3-DECL-CAUS-boil-FUT water
 'The man will boil the water slowly'
- 1b. *Taso mynda nampotporaj ese
1c. Taso nampotporaj mynda ese
1d. Taso nampotporaj ese mynda

In (2a) an SOV embedded clause is presented inside square brackets³, where it is possible to see that the bare verb occupies the final position and the adverb must be clause-initial (being ungrammatical in other orders) such as (2b)-(2d):

- 2a. Y-py-sondyp-yn yn [mynda y-sypy'et him okej]-ty
 1-ASSERT-know-NFUT I [slowly 1-uncle meat cut]- OBL
 'I know.that my uncle cut(s) the meat slowly'

² Storto (1989) analyzed declarative clauses, marked by the na(ka)- and ta(ka)- allomorphs as realis and Storto 1999 calls it declarative. The first allomorph is used when the agreement is a third person zero morpheme and the latter when the agreement prefix is phonologically overt (first and second persons).

³ Here the embedded clause is the oblique argument of the main verb. Karitiana has no verbs that select clausal complements; psychological verbs like know, see, love, etc, are intransitive (Rocha 2011) and if an object is expressed it is marked as oblique.

- 2b. *[ysypy'et mynda him okeĩ]
- 2c. *[ysypy'et him mynda okeĩ]
- 2d. *[ysypy'et him okeĩ mynda]

In an intransitive declarative sentence, the default word order is Adverb VS:

- 3a. Omenda Ø-naka-hyryĩ-Ø Gokyp
at.noon 3-DECL-sing-NFUT Gokyp
'Gokyp sang at noon'

Storto (1998) mentioned that verb-initial word orders in (3b) and (3c) are possible only in a specific pragmatic context: as echo comments (repetitions by hearers) of a default sentence such as (3a). Also, SVAdv in (3d) is a possible order if the subject is focused as the answer to a subject wh-question such as "Who sang at noon?":

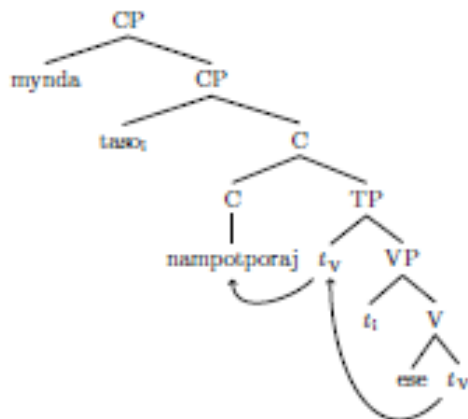
- 3b. ?Nakahyryĩ Gokyp omenda
- 3c. ?Nakahyryĩ omenda Gokyp
- 3d. Gokyp nakahyryĩ omenda
- 3e. *Gokyp omenda nakahyryĩ

As seen before in transitive sentences, it is ungrammatical for the adverb to occur between the subject and the verb (3e).

The interpretation given in Storto (1999) to these adverb positions and word order variation was that the verb moves to the second structural position (Complementizer) of the matrix clause to acquire tense and agreement inflection and some constituent – S, O or Adverb – moves to the specifier of the complementizer phrase (Spec,CP). This explains why adverbs cannot appear between a subject in Spec, CP and the verb in C.

In this paper we will assume that arguments (S and O) and wh-phrases are the only elements which may move to the Spec,CP position, and that all adverbs adjoin to maximal projections (CP, TP or VP), what accounts for the variable adverb order seen in matrix clauses. Embedded clauses as (2) have no verb movement to a second position because there is no tense and agreement in such clauses and just one position is possible for adverbs – adjoined to the left of the embedded clause. In this paper we will propose an analysis in which subjects, objects and focused elements may occupy Spec, CP but adjuncts (including adverbs, clauses and PPs) always adjoin to CP:

Figure 1 Mynda taso namotporaj esse (Example 1)



Even for those who do not believe in verb and constituent movement the data is very clear in one point: there is a correlation between verb-initial and verb-second word orders and the presence of agreement and tense in Karitiana matrix clauses. Besides, the verb-final word order is limited to embedded sentences, all of which are non-finite forms with bare verbs in Karitiana. This is, arguably, exactly what happens in Germanic (Vikner 1995, Holmberg 2015) V2 phenomena. Karitiana is even better than Germanic languages as an example of verb movement because it is not only the verb that moves, but aspectual and evidential auxiliaries move together with the verb to the second position and form a complex head in the syntax (arguably via successive cyclic head movement of the verb to Asp, T and C) as in (4) (5) and (7). This was proposed in Storto 1999 and maintained in a study of tense and aspect interactions (Storto 2013).

It is clear since Storto (1999) that the head Aspect is present in embedded clauses without tense, so embedded clauses are interpreted as Aspectual Phrases (AspP), and we consider tense and agreement as present in a head higher than Asp, such as T (Tense), and mood and evidentials as morphemes present in even higher heads (perhaps Complementizer, where Focus and Force – mood and evidentials -morphology occur).

Storto (2014) examined information structure in narratives and has shown (Table 1:177) that most of the rare verb-initial word orders (7 out of 240) in transitive declarative sentences were preceded by an adjunct, confirming the V2 tendency. It was reported that the same happened in many VS intransitive declaratives. For instance, some common examples of verb-initial declarative sentences taken from narratives are (4) and (5), in which the subordinate

adverbial clause *morãsong* appears in first position; this type of adverbial clause functions as a discourse conjunction that relates a sentence to the previous sentence (see Storto, to appear for the complete narrative). The same is true of (6), in which two subordinate adverbial clauses are used before a verb-initial matrix sentence:

4. [Masong] napymbowak saryt ity taso (AdvClause V Evid Obl S)

Morã-song	Ø-na-pymbowak	saryt-Ø	i-ty	taso
WH-for	3-DECL-desire.to.kill	EVID.IND-NFUT	he-OBL	man

‘Because of this, the man had a killing desire directed towards him’

5. [Masong] namboryt saryt i ambi sopakat (AdvClause V Evid S PP)

Morã-song	Ø-na-mboryt	saryt-Ø	i	ambi	sopaka-t
wh-for	3-DECL-leave	EVID.IND-NFUT	he	house	central.beam-ADV

‘Then, they say he left through the central beam of the house/roof’

6. [I pikywyt tykiri], [iatakipayyt tykiri] napytyng saryt iokyty taso
 (AdvClause V Evid Obl S)

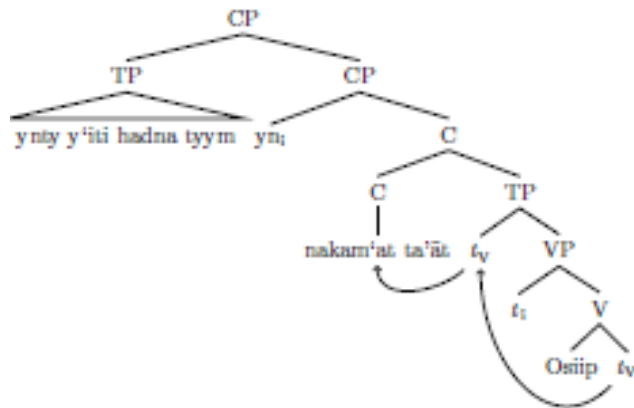
I=pikyp-yt	tykiri	i=atakipay-yt	tykiri
he-incandescent-OBL	when	he-sustain-OBL	when

Ø-na-pyting	saryt	i=oky-ty	taso
3-DECL-want	EVID.IND	he-hurt-OBL	man

‘When his heat was unsustainable, they say the men wanted to kill him’

One obvious difference between Germanic languages and Karitiana is that in the latter verb-initial orders in declarative sentences are possible in certain pragmatic contexts, as seen in narratives (Storto, to appear). This was not made explicit in Storto 1998, 1999 or 2014, although the latter mentions that verb-initial declaratives (VOS, VSO and VS) are often preceded by an adjunct (an adverb or a PP). This paper shows more data on information structure (topic and focus) and proposes a structure for adjuncts occurring in pre-verbal position to indicate that two different types of constituents may occur in sentence-initial position before a declarative verb: arguments and adjuncts:

Figure 2. Tree structure with a clause as adjunct (example 7)



In (7) and (8) an excerpt from a narrative entitled *Osiip* (the male initiation ritual analyzed by Storto 2014) shows two cases of adverbial clauses preceding SVO sentences. In these cases, it is clear that such clauses are pre-sentential and do not involve movement to a pre-verbal position (such as Spec,CP), since the subject already occupies that position.

7. [Yn-ty y-'iti hadna tyym] yn Ø-naka-m-'a-t ta-'ã-t Osiip
 I-OBL 1-father speech COMPL I 3-DECL-caus-do- NFUT EVID.IND-NFUT Osiip

‘With my father’s speech (directed) to me, I did the Osiip’

8. [A-tykiri] yn Ø-na-oky pymbyra-t kinda
 that-when I 3- DECL-kill a.little-NFUT thing

‘Because of this, I kill a little bit (hunt) of stuff (game)’

We will see below that these adjunction facts may be used as an argument against V2 in Karitiana, because in examples such as (7) and (8) the verb is in third position in the sentence. Still, we consider that adjuncts may always adjoin to the left of a matrix sentence and that V2 can be defined as movement of the verb to the second highest head position in the sentence, that is, the complementizer position (C) plus a phonological requirement that the left edge of the verb position be aligned with a phonological phrase. This may occur when the first position (Spec, CP) is empty as in (4) to (6) with an adjunct in CP or when it is filled as in (7) and (8).

3.2. An analysis of V2 in declarative sentences and V1 in assertive sentences

Storto (1998, 1999) hypothesized that the first position of declarative sentences is the specifier of a phrase projected by a functional head (IP - headed by I - or CP - headed by C) to which the verb moved and adjoined. The evidence for that hypothesis comes from the fact that no adverb can occur between the subject and the verb in SVO and SV declarative sentences (examples (1) and (3)). We have seen that, if adverbs adjoin to the left of any maximal projection, this is explained.

Storto (2014) gives many examples of phrases moving to be focused in Karitiana. She argues that the place to which wh-phrases go in the beginning of the sentence (Spec,CP) is the place of new information in the language. There are many examples of wh-questions and answers taken from natural speech in section 2.1 of Storto (2014), as seen here in (3d) with an intransitive subject in answer to a wh-question appearing in first position in a declarative sentence. Storto (2014) also shows that there is a special verb prefix (a-) marking declarative object focus sentences:

9. Sojxa Ø-a-ta-ompong-Ø Osiip
wild.boar 3-DOFC-DECL-stun-NFUT Osiip
'Osiip stuns the WILD BOAR(S)

Note that in focus sentences the phrase that is focused may be a non argument - an adverb as the answer to a wh-question in (10), and a VP used as an oblique argument of the main verb in (11) - and it occurs in the initial position of the sentence:

10. Tikat aka a-tat-i an-o yj-akan an-o?⁴
when cop 2-go-FUT you-EMPH 1pl-village you- EMPH (TOP)
'As for yourself, when is it that you will go to our village?'

- Dibm y-taka-tat-i yn
Tomorrow 1-decl-go-fut I
'I will go tomorrow'

⁴ This repetition of the subject at the end is described in Storto 2014 as topic shift in the discourse.

11. Iokyty napyting

i=oky-ty

3=kill-OBL

‘To kill him is what they wanted to do’

Ø-na-pyting-Ø

3-DECL-want-NFUT

Declarative sentences are marked in Karitiana with the prefix *na(ka)/ta(ka)-* (Storto 1999, 2002). Ferreira (2017), which is a dissertation on mood and modality in Karitiana, agrees with Storto in this respect, although some morphemes described as mood by Storto (2002) are reanalyzed by Ferreira as modality (specifically, the deontic and conditional morphemes), because he argues that they cooccur with the declarative mood, which Storto 2002 analyzed as a habitual morpheme that is, in part, homophonous with the declarative prefix). Storto (2018a) gives independent evidence for Ferreira’s analysis that deontic and conditional are not mood markers, because they cooccur with negation and the other types of mood morphology does not.

Below we show the default word order patterns in all sentential types (declarative, assertive, citative, deontic, conditional and imperative), affirmative and negative, taken from Storto (2018a). Notice that in transitive sentences declaratives have an SVO default word order, whereas assertives have a default VSO word order:

12. Affirmative declarative sentences

a. Yn a-ta-ahee-t an (SVO)
I 2s-DECL-fan-NFUT you
‘I fanned you’ (SVO)

b. Y-ta-oty-j yn (VS)
1s-DECL-bathe-FUT I
‘I will bathe’

13. Negative declarative sentences

Y-otam padni yn (VS)
1s-arrive NEG I
‘I did not arrive’

Yn i-atik<i> padni gopisop (SVO)
I 3-throw NEG garbage
‘I did not throw the garbage’

14. Intransitive sentence with assertive mood

- a. Affirmative Assertive Sentence
Ø-Pyr-a-m-'a-dn y-'ete'et' yj-boo-p (VS PP)
3-ASSERT-PASS-CAUS-do-NFUT 1-nephew 1pl-gone-LOC
'(It is how) it was done, my nephew, with our dead'
- b. Negative Assertative Sentence
I-a-m-'a (padni)y-'ete'et' yj-boo-p (VS PP)
3-PASS-CAUS-do NEG 1-nephew 1pl-gone-LOC
'(It is how) it was not done, my nephew, with our dead'

15. Transitive sentences with assertive mood

- a. Ø-Pyr-oky-dn taso pat (VSO)
3-ASSERT-kill-NFUT man macaw
'The man killed the macaw'
- b. i-oky padni taso pat (VSO)
3-kill NEG man macaw
'The man did not kill the macaw'

Differently from assertive sentences, which are invariably verb-initial, citative, conditional, and deontic sentences seem to have the same word orders as declaratives, in that the verb tends to be in second position, especially when they are transitive, but also with intransitives which have adjuncts (such as (16-17) and (19a)). However, as seen before for declaratives, verb-initial clauses are possible in Karitiana even in such sentential types, as in (19b), taken from a narrative:

16. Affirmative citative mood

[Ta-soojo tat<a>]t iri-kāra-ĵ Botyĵ (OBL VS)
3ANAPH-wife go-OBL CIT-think-FUT
'Botyĵ thought that his wife left him'

17. Negative citative mood

[Ta-soojo tat<a>]t i-kārã (padni) Botyĵ (OBL VS)
3ANAPH-wife go-OBL 3-thinkNEG
'Botyĵ did not think that his wife left him'

18. Conditional (counterfactual, according to Ferreira 2017) modality

- a. Yn ðy-sokð'i-t eremby [a-otam-<a>m] (SVO)
 I COND-tieup-NFUT hammock 2-arrive-PERFECTIVE
 'I would have tied up the hammock had you arrived'
- b. Yn ðy-sokð'i padni eremby [a-otam-<a>m] (SVO)
 I COND-tie.up NEG hammock 2-arrive-PERFECTIVE
 'I would not have tied up the hammock had you arrived'

19. Deontic modality

- a. pongyp ø-na-pyn-taraka-t (Adj V)
 quiet 3-DECL-DEON-walk-NFUT
 'The person must become QUIET/walk toward QUIETNESS'
- b. I-pyn-oty padni Osiip tepy-ty (V OBL)
 3-DEON-bathe NEG Osiip vine-OBL
 'One must not bathe in Osiip vine'

Following the usual pattern for non-assertive sentences, imperatives are subject-initial when transitive and verb-initial when intransitive. The affirmative imperative mood comes with a high boundary tone at the end of the sentence and, perhaps for this reason, it is the only mood morpheme that is suffixal. Negative imperatives display a L boundary tone instead (Storto & Demolin 2005):

20. Imperatives

- a. A-tat-a! (LHH) b. A-tat-y! (HLL)
 2s-go-IMP.AFF 2s-go-IMP.NEG
 'Go!' 'Don't go!'
- c. An y-mi-Ø (H HL)
 you 1s-beat-IMP.NEG
 'Do not beat me!'
- d. An y-m-sembok-y (H HHLL)
 you 1s-CAUS-wet-IMP.NEG
 'Do not get me wet!'

Other constructions reported in the literature in which the verb occupies a second position after the subject are copular sentences (Storto 2010, Rocha 2016) and, according to C. Everett (2006), declarative sentences (transitive and intransitive), which he calls non-

participant/participant voice instead of declarative mood. Everett considers SV as the default word order in intransitive sentences in Karitiana for two reasons: (1) he considers agreement prefixes to be pronouns, and intransitive sentences are prefixed by subject agreement; (2) he has worked with speakers who are younger than Storto's consultants and thus more influenced by Portuguese, an SV(O) language. To him, both transitive and intransitive sentences are SV, and the sentence-initial position is a discourse topic position.

Finally, Storto (2010) points out that copular declarative sentences are becoming more and more common as a way of expressing intransitive predication in the language. Storto has argued that this is a way of transforming an intransitive VS sentence into an SVO sentence, in which the object is the small clause headed by an intransitive verb. Rocha (2016) argues that the small clause seems to be an adjunct. In both analysis the word order in copular sentences is SV.

4. Arguments Against Verb Second in Karitiana

It must be mentioned that, although there is undoubtedly a verb second position (arguably C) associated with focus (including wh-questions and answers in which the noun phrase in first position is focused, that is, new information) in the language, there is also the default SVO order, in which focus does not play a role. This raises the question whether the subject and verb are in the same position in both types of SVO sentences - default and subject Focus sentences - or whether they are in TP and CP, respectively. If this were the case, the finite verb would not always be in the same position (C), and our analysis of verb second would be challenged.

In our view, default SVO could be explained by the same obligatory verb movement to C (according to which tense and agreement must be realized in C in the language, in the presence or absence of an active Focus feature) plus a phonological requirement that the left edge of C be aligned with the right edge of a phonological phrase. Being higher than the object, the subject of a transitive verb would be the natural phrase to move to Spec,CP position to satisfy the phonological requirement that a constituent must precede the verb. The object can only go to that position in a declarative sentence, crossing the subject, if a special focus construction is used, as in (9). Storto (1999) describes that a special object fronting construction also occurs in the following non-declarative environments in which an object moves to the left periphery of the clause: object relative clauses, wh-questions and non-declarative object focus

sentences (Storto 1999, 2014). Note that the phonological requirement may be met by the adjunction of an adverb or adverbial clause to CP in VS sentences. In SVO sentences, when an adverb or clause adjoins to CP, however, the phonological requirement is met by movement of the subject to Spec,CP, and the adjunct is in its default sentence-initial syntactic position. The latter may be regarded as an argument against verb second in Karitiana, because in this case two constituents will precede the verb.

It is also legitimate to ask, as Holmberg (2015) did, that if Karitiana has verb-initial finite clauses, what is the point of classifying it as a verb second language? The answer is that the language is verb second in out of the blue transitive declarative clauses and it has a tendency of being verb second in all other matrix clauses except assertives, which are always verb-initial. Storto (2003) mentions that verb-initial orders in transitive sentences are used as echo-comments of a declarative sentence, that is, in a pragmatically marked environment. In the ritual narrative *Osiip*, a description of the male initiation ceremony, verb-initial constituent orders (VOS and VSO) seldom occur in transitive declarative sentences (6 out of 79 sentences in a narrative), and when they do occur there is always an adjunct – an adverb or a postpositional phrase - before the verb (Storto 2014). Also, subjects of intransitive verbs are often sentence-final in narratives because that seems to be the position of discourse topics (Storto 2014) and because there is a poetic parallelism operating in such environments aligning, in the discourse, aligning the structure of assertive (often the mood of first sentence in a narrative) and declarative clauses (Storto 2018b). Parallelisms involve repetition with a change and affect blocks of sentences, as can be seen in the first three sentences of the narrative “*Gokyp* (the sun)” (Storto, to appear). In (21) an assertive VS sentence is used and the following sentence (22) repeats the VS word order with the same subject and the indirect evidential, although it is a declarative with an adjunct in sentence-initial position and it has a different verb. Sentence (23) maintains the choice of declarative mood and the indirect evidential, the same subject and the VS word order, but it changes the verb and adds an imperfective aspect:

21. Pyry'a sarytyn keerep Gokyp

Ø-Pyry-'a	saryt-yn	keerep	Gokyp
3-ASSERT-exist	EVID.IND-NFUT	in.the.old.days	Gokyp

'They say that Gokyp existed in the old days'

22. Ōwā horot taka'oot saryt Gokyp

Ōwā	horot	Ø-taka-'oot	saryt-Ø	Gokyp
child	as	3-DECL-begin.to.exist	EVID.IND-NFUT	Gokyp

'They say that Gokyp began to exist as a child'

23. Taaka andyk saryt Gokyp

Ø-ta-aka	andyk	saryt-Ø	Gokyp
3-DECL-COP	IPFV.AUX	EVID.IND-NFUT	Gokyp

'They say that Gokyp was living'

In the excerpt from the male initiation narrative “Osiip”, we have a good example of some pragmatic factors determining word order variation. When mentioning the kinds of wasps that the boy undergoing the ritual must take (let himself be attacked by), the storyteller starts with a transitive sentence with a null subject (24) in VO words order; then, a passive sentence in the VS word order is used (25), in which there is a parallelism between the object of (24) and the subject of (25) in that they occur in the same postverbal position and both refer to kinds of wasps. In (26) an SV sentence (a copular sentence in which the copula has been erased) is used in which the subject is contrastively focused, creating a parallelism in comparison with (25) in which there is a change in word order. In (27) we have an SVO declarative with a direct evidential in which the subject is a repetition of the subject in (26), and both are head-initial:

24. Ø-na-m-'y okoo-t gop sōw-ōrā
3-DECL-CAUS-take REPET-NFUT wasp red-intens
'One takes again red wasps'

25. I-a'obm oko gop miem
3-PASS-pierce REPET wasp miem
'Wasp *miem* is not to be pierced again'

26. Gop sow-ōrā (Ø-na-aka-t) i-a-'obm okoo-t
Wasp red-INTENS 3-DECL-cop-NFUT PART-PASS-pierce REPET-ADVR
'RED WASPS are to be pierced again'

27. Gop sow-ōrā y-ta-oky'it ta'ā-t yn
Wasp red-INTENS 1-DECL-faint EVID.DIR-NFUT I
'Red wasps made me faint'

The unmarked order in declaratives is SVO, either because this is the position to which the ergative subject must move or because of language contact with Portuguese, the second language of all Karitiana speakers. The unmarked order in declarative intransitive sentences, however, is VS. This may be due to case factors, as such subjects are not ergative, but absolutive, to argument structure factors, or to pragmatic or discourse factors (as in 21-23). The subject of an intransitive verb only appears pre-verbally when it is focused or emphasized (Storto 2014). An adjunct, when present in VS sentences, occurs preverbally, arguably to fulfill the phonological verb second requirement that the first position be phonologically overt. Because of this, I believe it is legitimate to propose that intransitive non-assertive sentences also have an operating phonological requirement of be verb second.

5. Discussion and conclusion

One analytical difference between Germanic V2 and Karitiana mentioned in Storto 1998 is that it is not possible to say in Karitiana that the second position is an empty complementizer position to which the verb moves in matrix clauses only because in embedded clauses complementizers are overt. This is so, because in Karitiana there are no overt complementizers at all in embedded clauses. Embedded clauses were analyzed by us as truncated clauses in which, besides the VP, the only other phrase that could be projected is a head-final aspectual phrase (AspP). Aspect is a head that may occur both in main and embedded clauses, but C seems to be crucially absent in embedded clauses. Since subordinate clauses never have tense, agreement, mood or complementizers, it was argued that the analysis that they are Aspectual Phrases was the simplest and most accurate. C in matrix clauses is the locus of mood and focus features, and the finite verb must move to C in all Karitiana clauses. In that respect, the language is verb initial or verb second, depending on whether there is a constituent before the verb.

We believe that there is a universal that a head may project its complement, forming a constituent with it (Vs project VPs, Ps project PPs) and a parameter that this projection may be either to the right or to the left of each head. This relative order is a parameter that typologists should take into consideration in order to classify languages and not the surface constituent order of sentences, which depends on many other factors (information structure, sentential type, case on NPs, etc). To say that Karitiana is an SVO language in face of the description of

constituent order variation given here does not explain why Karitiana is more similar to Germanic V2 languages in many respects than it is to many other Tupian languages.

Nonetheless, second position auxiliaries do exist in Tupian languages such as Cinta-Larga and Gavião (Moore 1984). In Mekéns, there is a focus morpheme *te* in second position which could be a cognate with the declarative morpheme in Karitiana (*ta(ka)*). All of these potential sources of the verb second phenomenon in Karitiana should be further investigated.

Karitiana is a V2 language in non-assertive clauses and V1 in assertives. Other Tupian languages have auxiliaries in second position. This is the data that must be compared with Germanic languages in order to enlarge the descriptive database on verb second phenomena. V1 word orders are possible in Karitiana, however, in certain pragmatic contexts in which the subject does not move to Spec,CP but stays in situ to create parallelisms in the narrative.

There has been much debate in generative linguistics whether V2 in Germanic is a result of head movement of the verb (Vikner 1995) or verb phrase fronting (Holmberg 2015). In Karitiana, head movement seems to be the correct analysis, because it is not only the verb that moves to second position, but many other functional heads such as aspect, negation, and evidentials, which form a complex unit with the verb (similar to a compound but obtained via successive cyclic movement). I consider that this unit is not formed in the lexicon but in the syntax via head movement of the verb, which adjoins to all the functional heads projected above it in the tree structure via successive cyclic movement.

If our analysis proves to be correct, it brings to the debate of V2 in the world's languages the suggestion that, at least in Karitiana, V2 is due to head movement to a second structural position in declarative sentences and is not a result of predicate raising. Also, the possibility of V1 word orders suggests that V2 and verb-initial languages may both derive from the same head movement of the verb to functional categories projected above the verb phrase.

Abbreviations

ADVR	Adverbializer
ANAPH	Anaphoric pronoun
ASSERT	Assertive Mood
CIT	Citative Mood
COMPL	Completive Aspect
DECL	Declarative
DEON	Deontic
DOFC	Declarative Object Focus Construction

EMPH	Emphatic
EVID.DIR	Direct Evidential
EVID.IND	Indirect Evidential
FUT	Future
IDEOF	Ideophone
IMP	Imperative
INTENS	Intensifier
IPFV	Imperfective
NFUT	Non-future tense
OFC	Object Focus Construction
PASS	Passive
REPET	Repetitive
WH-	Wh-question marker (polar question marker)

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