Basic word order in Karitiana (Arikem family, Tupi Stock)
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Introduction
The aim of this paper is to propose a preliminary analysis of the phenomenon of constituent order variation in Karitiana, a language spoken today by 154 people who live in "Area Indígena Karitiana", in the state of Rondônia, Brazil. The language has previously been studied by David and Rachel Landin, missionaries of the Summer Institute of Linguistics who lived among the Karitiana for five years. In an article based on his masters thesis D. Landin poses SVO as the basic word order of Karitiana (1984:221). However, no structural argument was ever given to support this hypothesis. D. Landin bases his choice on Greenberg's suggestion that the basic word order in a language should be elicited from the most frequent order used in declarative transitive sentences with overt nonpronominal arguments. Considering that SVO is only one of the 6 word orders found in Karitiana and since it is not the most common one, we have no reason to accept D. Landin's description. Also, SVO is the basic word order in Portuguese, the Brazilian national language, spoken fluently by most of the Karitiana for at least half a century. It is not clear that the use of this word order in translations of transitive sentences out of context is free from influences from Portuguese.

Another problem with posing SVO as the basic constituent order in Karitiana has to do with the parametric characteristics of the language, which are consistent with OV and not VO order: noun-postposition, genitive-noun, noun-adjective. Even though the latter is slightly inconsistent with OV order, it follows a pattern found in genetically related Tupi-Guarani languages, which are OV (Moore 1991:1).

Furthermore, most other Tupian languages of which reliable studies are available are consistently OV. The word order in some of the best studied languages of the Tupi-Guarani family (by far the larger of the Tupian families) are: Kaapor: SOV; Kamayura: SOV; Tupinamba: SOV; Asurini of the Trocara: OVS; Guajajara: SOV in embedded clauses and VSO in matrix clauses. Other Tupian families show the same pattern: Munduruku (Munduruku family): SOV; Gaviao (Monde family): OV; Xipaya (Juruna family): possibly nonconfigurational, but presents OV constructions; Karo (Ramarama family): SOV; Ayuru (Tupari family): SOV. According to Moore, these facts "tend to confirm some earlier speculation that in their past stages the Tupian languages had the basic word order

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1It is worth mentioning that my definition of word order is the underlying order of constituents in a language. This idea is certainly closer to Chomsky's notion of D-Structure than to Greenberg's criteria of frequency of occurrence.
Object-Verb (OV) rather than Verb-Object (VO)". He points out that Landin’s analysis of Karitiana as an SVO language poses the most serious claim to VO order for a Tupian language (Moore 1991:2-3).

**Methodology**

In an attempt to solve the problem, I elicited and analyzed from a corpus of texts all sentences which presented at least a two place predicate with overt nonpronominal arguments. Pronominal arguments were not considered because I am not completely certain about the rules that regulate their distribution. However, whenever needed in the explanation, I used data which exemplifies the occurrence of free pronouns and personal verb prefixes. The texts utilized consist of mythological tales, historical narratives and dialogues.

**Results**

From a total of 62 sentences analyzed, the proportion of word order variation found was:

- VOS: 27
- OVS: 13
- SVO: 9
- VSO: 9
- SOV: 2
- OSV: 2

**VOS and OVS:** The majority of the texts analyzed are mythological tales or reported stories. This fact seems to have influenced the results above, since transitive subject final clauses are much more frequent in narratives than in conversations. A more careful analysis of the data might prove that the sentence final position has a semantic function of agentivity in story telling. R. Landin (1982:3-8) suggested that this position is reserved for the discourse theme. Her evidence, however, is not conclusive since what she describes as the discourse theme almost always coincides with the subject of the sentence².

1. Na-pisorok-Ø mijo Botyj
   erg-gather-nf nut Botyj
   'Botyj gathered the nuts'

2. Ga Y-ti-m-'a-t
   field lp-top-caus-make-nf
   'I made (prepared) the field'

3. Sal na-pitan-ta'at opok
   salt erg-share-evid white man
   'The white man shared the salt'

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²The abbreviations used on this paper are: nf: non-future tense; f: future tense; top: topicalizer; erg: ergative case; abs: absolutive case; lp: 1st person singular prefix; lp.pron: 1st person singular free pronoun; caus: causative; evid: evidential marker; co.3p.poss.: 3rd person singular anaphoric possessive pronoun; asp: aspect; asp.sup: aspect (supine); neg: negation; progr: progressive.
**VOS and VSO** are very common word orders in texts, in contexts where the action is being emphasized. Sentences 4-7 are extracted from a myth where the activities performed by the main character are being described:

4. Na-petet-∅ Botyj mijo ket
   erg-cook-nf Botyj nut unripe
   'Botyj cooked the unripe nuts'

5. Dok Byjty
   seat (ideophone) Byjty
   'Byjty sat'

6. Na-ambo-t kendo ohyn Byjty
   erg-seat-nf coconut above Byjty
   'Byjty sat on the coconut'

7. Na-mynira-t ta-iso Byjty
   erg-lit-nf co.3p.poss.-fire Byjty
   'Byjty lit his fire'

**OVS and OSV** word orders sometimes present the verb prefix *ti-* which Rachel Landin describes (1982:15) as a marker of topicalization of the object. Whenever this prefix occurs on a verb, the object is the first constituent in the sentence. However, not every instance of topicalization of the object is marked by this morpheme, as first noted by Rachel and David Landin. R. Landin correctly noted that this topicalizer occupies the same position in the verb that the ergative/absolutive markers do. She also noted that *ti-* never occurs in the narrative portion of a text, being restricted to "monologues, conversation, and speech quotes in narratives" (1982:11). D. Landin did not make use of this information in his thesis, posing an optional rule (1984:233) that deletes the case prefixes and inserts the topicalizer *ti-* when there is uncertainty as to the syntactic functions of the arguments in a sentence. However, from the examples below it is clear that *ti-* is not a disambiguator of syntactic function, since it is present even when the subject is dropped:

8. Moramon a-ti-m-'a-tykat, y-ta'it
   what 2p-top-caus-do-asp 1p-uncle
   'What are you doing, uncle?'

9. Tyk)y ti-m-'a-tykat, y-saka'et
   palm heart top-caus-do-asp 1p-nephew
   'I am taking (gathering) palm hearts, my nephew'

10. Pom ememo ti-m-'a-t
    nambu black top-caus-make-nf
    '(He=pro) created the black nambu'

11. Ese i-ti-m-'a-t Ora
    water ?-top-caus-make-nf Ora
    'Ora created the water'

12. Y'it kyry y-ti-'y-tysypak?
    lp=son liver lp-top-eat-asp.sup.
    'Am I eating my son's liver?

13. Atykiri naka-sot-∅ [esety Ora ti-m'-a]
    then erg-exist-nf [water big Ora top-caus-do
    'Then there was the river which Ora created'
Also, the characterization of this morpheme as a topicalizer seems to be inadequate because it marks the fronting of elements whose referent is "unknown" such as WH words generated in object position. It is clear that in WH sentences movement is not motivated by pragmatic factors similar to the ones that characterize topicalizations.

Furthermore, ti- is restricted to a certain sentential type used to express direct speech or embedded sentences and it indeed occupies the same structural position filled by the morphemes which indicate ergative/absolutive case in the narrative sentential type. These morphemes (na(ka)/ta(ka)) were shown by D. Landin (1984:223-227) to be in ergative/absolutive distribution, where ta(ka) marks transitive verbs preceded by objects or intransitive verbs preceded by subjects while na(ka) marks everything else. In a parallel fashion ti- marks movement of accusative, as opposed to nominative arguments (which are unmarked) to sentence initial position in direct speech and embedded sentences. That is, the presence of the morpheme ti- reflects a nominative/accusative system in the direct speech sentential type while the morphemes na(ka)/ta(ka) reflect an ergative/absolutive system in narrative sentences. In face of this evidence I suggest that Karitiana has a split ergative system.

14. Sosy  i-ti-oky-t põrõsi
         armadillo 3p-top-kill-nf trap
       'The trap killed the armadillo'
15. Põrõsi  i-oky-t sosy
         trap     3p-kill-nf armadillo
       'The trap killed the armadillo'

Data recently elicited in the field shows that the ergative/absolutive markers also occur in contrast in identical environments:

16. Taso  na-oky-t ombaky
         man  erg-kill-nf jaguar
       'The man killed the jaguar'
17. Taso  ta-oky-t ombaky
         man  abs-kill-nf jaguar
       'The man killed the jaguar'

According to two fairly sophisticated informants tested independently, sentences 16 and 17 convey the same meaning, but the latter is used as "a warning, when you know something will happen as a consequence of the action". In my opinion the absolutive marking is demoting the subject in its characteristics of agentivity (control and intentionality) in order to emphasize the action. The process above could perhaps be described as semantic ergativity.

The obvious conclusion concerning the constituent orders OSV and OVS is that since they get marked for object movement, they must be deviations from the basic word order.

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3The allomorphs naka and taka prefix stress-initial verbs while na and ta prefix verbs with all other stress patterns.
SVO: This is the typical word order used in translations of transitive declarative sentences from Portuguese:

18. Taso na-oky-j ombaky
    man erg-kill-f jaguar
    'The man will kill the jaguar'

19. Y-hay naka-kip-∅ sosy
    lp-old brother erg-open-nf armadillo
    'My older brother opened the armadillo'

This order also occurs in both the narrative and the direct speech sentential types. Semantically, it appears to be unmarked.

The most striking fact we observed about the word order variation, is that the SOV and OSV word orders were found to occur only in subordinate clauses. It is a widely accepted fact that the word order in embedded clauses has a tendency to be more conservative than the one in main clauses, since the former are less subject to influences of pragmatic nature than the latter. This generalization could be used as an argument for the hypothesis that a sequence with the form NP NP V is the basic word order in Karitiana. I am inclined to think that SOV is the basic word order in the language due to the fact that it is morphologically less marked or simpler than OSV, where ti-sometimes indicates movement of the object (as in example 13). However, the latter seems to be by far the most used word order in subordinate clauses, SOV being more common in mythological tales. Other examples of embedded clauses are given below:

20. [ombaky taso oky tykir] y-taka-hyryp-∅  yn
    [jaguar man kill when] 1p-abs-cry-nf 1p.pron.
    'When the man killed the jaguar I cried'

21. [Ahoy byhip tyki-oott] na-pa’ira-t jonsor
    [arroz cook when-progr] erg-angry-nf woman
    'The woman was angry when she was cooking rice'

22. Atykir Botyj naka-m-‘a-‘ot hyryp [Ora ta-‘it then Botyj]
    case-caus-do-first cry [Ora co.3.poss.-son
    byhot tykir] transform when
    'Then Botyj cried first when Ora transformed his son'

23. [Ambi Joana ama tykir] naka-tat-∅ Maria
    [house Joana buy when] case-go-nf Maria
    'When Joana bought the house, Maria left'

24. [Dinheiro y-ahit-iki tykir] y-taka-tat-∅ yn
    [money 1p-get-neg when] 1ps-case-go-nf 1ps
    '[When I did not receive the money] I left'

In an analogy with the analysis proposed for German and all other Germanic languages other than English, I suggest that Karitiana might be a verb second (V2) language. It is a widely accepted fact that the word order in German is that of the embedded sentences (SOV) and that the tensed verb (verb/Infl) has to raise to the COMP position in main clauses (the second structural position in the sentence) in case there is no lexical item occupying that position for the sentence to be well-formed. The COMP node in V2 languages such as German is interpreted as the head of the sentence – an inherently tensed position which needs to be lexically realized in order to assign nominative case to the subject (Platzack 1986).
A consequence of the analysis proposed for constituent order in Karitiana indicates that verbs will always be in final position in embedded sentences and never so in main clauses. This is indeed the distribution I have found in my preliminary analysis of the data.

The V2 hypothesis for Karitiana will not be fully developed in this paper because I do not completely understand the distribution of certain crucial morphemes such as pronominals and case, topicalization and tense markers. However, an interesting fact which seems to support this hypothesis is the absence of several inflectional morphemes in subordinate sentences. These clauses present either no tense marker at all or the unmarked verb suffix which indicates present or past tense. The presence of a future tense suffix in subordinate clauses is considered ungrammatical, which could indicate that COMP is the structural position where future tense is assigned to the verb since narrative main clauses always require a tense marker. Unlike main clauses, embedded sentences do not present aspect markers suffixed to the verb. Subordinate sentences which semantically bear aspect have it expressed in VP internal adverbials as in example 21.

If the V2 phenomenon is a reality in Karitiana, then the structural description of sentences will be such that the SPEC of CP position can be occupied by WH words or any argument noun phrase, while the COMP position is always occupied by either the verb or the tensed auxiliary in main clauses. The morpheme ti- seems to mark exactly this fronting of arguments generated in object position to SPEC of CP. A pre-sentential position has to be posed, where conjunctions which function at a level above the clause and ideophone (onomatopoetic) phrases occur. Also, there has to be a clause-final position where the subject can move in certain discourse environments.

Although I am not in a position to give compelling evidence for the V2 phenomenon in Karitiana, the data seems to point to SOV as the basic constituent order in the language. Finally, I hope to have persuaded the reader that at least further analysis is needed before we accept David Landin’s claim that SVO is the basic constituent order in Karitiana.
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REFERENCES


REPORT 8

SURVEY OF CALIFORNIA AND OTHER INDIAN LANGUAGES

Proceedings of the Meeting of
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This volume is dedicated to

JAMES E. REDDEN

on the occasion of his retirement

for his enduring commitment to the publication

of the results of research on Yuman, Hokan, Penutian and

other American Indian languages

and also

for his contributions to the

documentation of the Hualapai language
INTRODUCTION

This volume includes a number of papers presented in conjunction with the 1993 Linguistic Institute at Ohio State University in Columbus, Ohio, at two conferences on American Indian Languages: the meeting of the Society for the Study of the Indigenous languages of the Americas, held July 2-4, 1993, and the meeting of the Hokan-Penutian Workshop, held on the morning of July 3, 1993.

This continues a tradition initiated during the Linguistic Institute at the University of Arizona in 1988, of offering conferences on American Indian languages during the summer Linguistic Institute of the Linguistic Society of America, which is held every two years on the campus of the host institution. The interaction thus afforded between students and faculty of the Institute and specialists in American Indian languages has proved mutually profitable.

We gratefully acknowledge the dedication of Catherine Callaghan in making these meetings thoroughly enjoyable, as well as the hospitality of Ohio State University.

The Hokan-Penutian Conference has a tradition of meetings dating as far back as 1970, when the first Hokan Conference was hosted by Margaret Langdon at UCSD. Since 1976, the Hokan (and later Hokan-Penutian) Conference proceedings were published most years by James Redden, as part of the series *Occasional Papers on Linguistics*, out of the department of Linguistics at Southern Illinois University at Carbondale. Beginning this year, with James Redden's retirement, the reports of these conferences are being published as part of the *Survey Reports* out of the Survey of California and Other Indian Languages at the University of California at Berkeley.

Margaret Langdon  
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# CONTENTS

## GENERAL

Putting pronouns in proper perspective in proposals of remote relationships among Native American languages  
*CAMPBELL, LYLE*  
1

S-prefixation on Upper Chehalis (Salish) imperfective predicates  
*KINKADE, M. DALE*  
21

Comparative difficulties of the "Gulf" languages  
*KIMBALL, GEOFFREY*  
31

Like hair, or trees: Semantic analysis of the Coeur d'Alene prefix *ne* 'amidst'  
*OCCHI, DEBRA J., GARY B. PALMER, AND ROY H. OGAWA*  
40

## SOUTH AMERICA

Constituent order variation in Apurinã  
*FACUNDES, SIDNEY*  
59

Case, verb type, and ergativity in Trumai  
*GUÍRARDELLO, RAQUEL*  
75

Nheengatu (Língua Geral Amazonica), its history, and the effects of language contact  
*MOORE, DENNY, SIDNEY FACUNDES, AND NADIA PIRES*  
93

Reconstruction of Proto-Tupari consonants and vowels  
*MOORE, DENNY, AND VILACY GALUCIO*  
119

Basic word order in Karitiana (Akirem family, Tupi stock)  
*STORTO, LUCIANA R.*  
138

## HOKAN-PENUTIAN WORKSHOP

'How', and 'thus' in UA Cupan and Yuman: A case of areal influence  
*ELLIOTT, ERIC*  
145

Kroeber and Harrington on Mesa Grande Diegueño (lipay)  
*LANGDON, MARGARET*  
170

Conjunctions and reference tracking in Yuma  
*MILLER, AMY*  
183

The shifting status of initial glottal stop in Barbareño Chumash  
*MITHUN, MARIANNE, TSUYOSHI ONO, AND SUZANNE WASH*  
199

Final glottalization in Barbareño Chumash and its neighbors  
*ONO, TSUYOSHI, SUZANNE WASH, AND MARIANNE MITHUN*  
208