An Outline of the Syntactic Structure of Karitiâna Sentences[1]

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RESUMO:

Com respeito aos parâmetros de Greenberg (1963), a língua karitiâna pode ser classificada da seguinte maneira: a ordem básica das palavras e SVO, ocorrem posposições, o genitivo (substantivo possessivo) precede o substantivo nuclear e o substantivo precede os modificadores adjetivais. Em muitos aspectos a língua karitiâna é mais ergativa que a maioria das outras línguas indígenas de América do Sul, conforme as descrições atuais. Outro traço incomum é que, nas orações, marca-se a forma positiva, e não a negativa.

ABSTRACT:

With respect to the parameters of Greenberg (1963), Karitâna can be classified as follows: the basic word order is SVO, postpositions occur, genitives (possessor nouns) precede the possessed noun, and the noun precedes adjectival modifiers. In several respects, Karitiâna is more egative than most other South American Indian languages as currently described. Another unusual feature is that the positive form of statements, and not the negative, is marked.

1. CLASSIFICATION

1.1. Language family.

In the 1950s a group of Roman Catholic Salesian missionaries made an extended visit of about two weeks to the Karitiâna village, situated, as it then was, on the banks of the Rio Candeias, near Porto Velho, Brazil. One of the results of that visit was an extended list of words and phrases, amounting to about 250 items in all, which was taken down by one of the missionaries using the Portuguese alphabet. As a result of this data, Professor Aryon Rodrigues of the University of Campinas was able to classify Karitiâna into a language family. Rodrigues (1955) states that the language is placed in the Tupi stock and the Arikém family. This means that it is quite isolated linguistically, since the other two members of the Arikém family, Kabixiâna and Arikém, are now extinct.[2] Curt Nimuendaju, an anthropologist active in Brazil in the earlier half of this century, published in 1926 a list of five hundred words and phrases in Arikém, which shows that there are over 90% of lexical cognates and almost complete agreement in syntactic structure between Arikém and Karitiâna. In a comparison (unpublished) conducted recently by Rachel Landin between Surui (another Tupian language) and Karitiâna, it was found that there were only 20% of lexical cognates between the two languages, even though they are situated rather close geographically. On a phonological level there are a number of features found in Karitiâna which are typical in Tupian languages. So the available evidence tends to bear out Rodrigues' conclusions well.

1.2. Word order.

Greenberg (1963) suggests a typology based on dominant order of major constituents in the clause: VSO, SVO, SOV, VOS, OVS, OSV. In fact, the question of what exactly is the

typologically characteristic word order needs some further specification. There may be several different word orders for a single language if one considers questions, imperatives, etc. I follow Steele (1978) and most other workers in choosing declarative main clauses with nominal subjects and objects as criterial. Questions and imperatives are initially excluded from consideration. Other sentential elements such as adverbials are also excluded, as are pronominal subjects and objects. In the mass of Karitiâna text material which I have, there are relatively few sentences which fulfil the above requirements, since it is rather uncommon for nouns to be used in the subject position, pronouns being used much more frequently. However some examples, such as the following are available:

(1) Sara ty nàka-y-t taso aka
S V O
alligator big affirmative-eat-tense man that
'The big alligator ate that man'

(2) Õmãky nã-oko-t moroja
S V O
jaguar affirmative-bite-tense snake
'The jaguar bit the snake'

The evidence from such sentences unambiguously shows that Karitiâna is an SVO type language.

Turning now from the basic word order classification, we look at some other orderings which Greenberg sees as significant in classifying languages. Karitiâna is shown, very unusually for an SVO language, to be post-positional (Po) from the following data:

(3) Ø Nãka-tat-Ø ga-p
he affirmative-go-tense field-to
'He went to the field'

(4) Õwã nã-ãtẽ-tysot pikkõm i sypojo-sok
child affirmative-pull-aspect monkey his tail-on
'The child pulled on the monkey's tail'.

The order of genitive (G) and noun (N), or possessor and possessed, in Karitiâna is GN:

(5) Opok nã-atot-Ø i o
wild-indian affirmative-take=away-tense his head
'The wild Indian took away his head'.

(6) Yjja nãka-y-j yj pikkõm pisyp
we affirmative-eat-tense our monkey meat
'We will eat our monkey meat'.

Finally we shall look at the ordering of noun (N) and adjective (A), or head-attribute:

(7) Taso ty nã-yry-t
man big affirmative-arrive-tense
'The big man arrived'.

(8) Y ta-pyki-Ø ep horowa
I affirmative-fetch-tense wood long
'I'll fetch a long pole'.

Here the ordering is NA. To summarise, therefore, using Greenberg's categories, Karitiâna can be classified as:

SVO Po GN NA

He cites the following languages to be in the same group:
most Mandingo and Voltaic languages, Kru, Twi, Gã, Guang, Ewe, Nupe,
Songhai, Tonkawa, Guarani.

It is interesting to note that the only South American language he mentions, Guarani, should have the same word order, although this is not necessarily common or typical (cf Derbyshire and Pullum, forthcoming).

The following Phrase Structure (PS) rules would account for the sentences given thus far:

(9) S → NP VP
NP → (Poss) N (Adj) (Dem)
VP → V (NP) (PoP)
PoP → N Po
V → Affirmative VRt { Tense / Aspect }

1.3. Ergativity.

Ergative-absolutive languages are distinguished from nominative-accusative languages in that in the latter type, subjects of both transitive and intransitive verbs are usually marked similarly to each other, but differently from sentence objects. In contrast, in ergative languages there is usually a similarity between the subject of intransitive verbs and the object of transitive verbs, which differs from the subject of transitive verbs as illustrated below:

(10) Nominative-accusative
Intransitive verb S
Transitive verb S O

(11) Ergative-absolutive
Intransitive verb S
Transitive verb S O

As Comrie (1978) has pointed out, languages are rarely completely ergative, but rather show degrees of ergativity. In this dissertation I shall try to show that ergativity has widespread influence in Karitiâna. I have found that many phenomena which I had previously tried to account for under a transitive/intransitive dichotomy are far better handled using the notions of ergative/absolutive. All the evidence argues that Karitiâna should be classified as an "ergative language".

2. DECLARATIVE SENTENCES.

Having considered the classification of Karitiâna, we now turn to look at the various sentence types, and I use the traditional categories of declarative, interrogative and imperative sentences. I shall have more to say about the first two of these than the last, since it is in the areas of declarative and interrogative sentences that the most interesting material is found.

The reader will note from the table of contents that I have distinguished between affirmative and negative declarative sentences on the one hand, and affirmative and negative responses to polar questions, which will be discussed in section three. The reason for this is that whereas in English there is little structural difference between the two groups, in Karitiâna the sentences are formed quite differently depending on whether they are spontaneously spoken or said in response to a question.

2.1. Affirmative statements.

It will be noted from the following examples that the affirmative in Karitiâna has four different forms:

(12) Ỹn nãka-takɨ mĩ'ĩ
I affirmative-pound-tense peanuts
'I will pound peanuts'

(13) Ỹn nã-oky-j sojja
I affirmative-kill-tense pig
'I will kill a pig'

(14) Y taka-põnɨ
I affirmative-hunt-tense
'I will hunt'

(15) Y ta oty-j
I affirmative-bathe-tense
'I will bathe'

The affirmative can thus contain one of the four forms nãka-, nã-, taka-, ta-. The presence of the particle -ka- is simply explained on the basis of a phonological rule which inserts this particle preceding a verb root with initial stress. This reduces the forms of the affirmative to two, nã-, ta-. In attempting to account for the distribution of these two forms of the affirmative prefix from the above examples (12)-(15), it will be seen that nã- occurs with the transitive verbs -tak- 'pound' and -oky- 'kill', whereas ta- is affixed on to intransitive verbs -põn- 'hunt' and -oty- 'bathe'. This observation is in fact able to account for very many affirmative sentences in Karitiâna, but there are a considerable number of exceptions. For example, if the transitive verb -oky- is used with a pronoun object, then the affirmative prefix is ta-, and not nã- as expected:

(16)* Ỹn a nã-oky-j(+Trans ãn
I you affirmative-kill-tense you
('I will kill you')

(17) Ỹn a ta-oky-j ãn
I you affirmative-kill-tense you
'I will kill you'

A comparison with sentence (13) above shows that in certain contexts nã- does occur with this verb. It is clear, therefore, from (17) that the transitivity of the verb is not the deciding factor in selecting which of the affirmative prefixes should occur.

A second hypothesis for the occurrence of nã- and ta- concerns the pronouns immediately preceding the affirmative prefix. I will present the information in the form of a chart, using the grammatical examples already given:

(18)

Prefix	nã-	ta-
Environment	following transitive subject	following intransitive subject and transitive object

It will be seen that the alignments expressed in this chart are exactly those of a typical ergative-absolutive system, and this is the first real evidence that Karitiâna is an ergative language.

There are two further pieces of evidence related to the affirmative which point to the same conclusion.

The first of these is given by a 'gap in the paradigm' . The third person pre-verb object pronoun[3] is a zero. This means that in the sentence 'I will kill him', the affirmative is immediately preceded by the transitive subject pronoun ỹn 'I', and not by a transitive object pronoun. Since this is so, the affirmative prefix is nã- as seen in (19) and (20) (compare (16) and (17)):

(19) Ỹn Ø nã-oky-j i
I him affirmative-kill-tense him
'I will kill him'

(20)* Ỹn Ø ta oky-j i
I him affirmative-kill-tense him
('I will kill him')

This variation between nã- and ta- with the verb -oky- is clearly dependent upon the ergativity of the preceding pronoun.

Another piece of evidence is available which, while it does not positively indicate ergativity of the preceding pronoun to be the conditioning factor of the affirmative prefix, does show that it is not simply the transitivity of the verb which has the effect. The verb in this example is -yry- 'arrive', which is an intransitive verb. In (21) this verb is accompanied by the affirmative nã-:

(21) Ø Nã-yry-t
he affirmative-arrive-tense
'He arrived'

It is obvious from this example and many others like it that it is not the transitivity of the verb which affects the form of the affirmative. This example also shows that in the absence of any overt preceding pronoun, the basic form of the affirmative prefix is nã-, the marked form is ta-. This could be expressed in the rule of Affirmative Agreement:

(22) nã- ⟶ ta- / Pn_____[4]
(+Absolutive)

2.1.1. Pronouns.

Before actually examining the pronouns in Karitiâna, it should be noted that a phenomenon known as pronoun ambi-fixing[5] occurs. A pre-verb pronoun is optionally repeated after the verb, though the post-verb form of the pronoun may be different from that of the pre-verb form:

(25) Y taka-tarɨ ỹn
I affirmative-go-tense I
'I will go'

In the event of there being two pre-verb pronouns, then the one closest to the verb is selected for repetition:

(26) Ỹn a taka-mĩ-j ãn
I you affirmative-hit-tense you
'I will hit you'

Repetition of pronouns could be analysed transformationally by means of a Pronoun Repetition rule expressed as follows:

(27) SD X - Pn - V - X
1 2 3 4 ⇒ OPT
SC 1 2 3+2 4

The pronouns in Karitiâna are an important part of the system of ergativity in the language. There are three groups of pronouns, namely subjects of transitive verbs, objects of transitive verbs and subjects of intransitive verbs. The latter two groups find identical expression, which is different from that of the first group. The pronouns thus express the classic ergative-absolutive dichotomy. The following chart lists the pronouns found in subject and object positions:

(28)

		1S	2S	3S+P	1P INCL	1P EXCL	2P
Subj + Intr. =Absolutive	Pre-vb	y	a	Ø	yj		aj
Obj + Tr.	Post-vb	ỹn	ãn	i	yjja	yta	ajja
Subj + Tr. =Ergative	Pre-vb						
	Post-vb			Ø			

2.1.2. Progressives.

The progressive in Karitiâna is formed according to the following structural description:

(29) X - VRt (+Tr) - Y - Aspect - X

The aspect suffix indicates not only the progressive form of the verb, but also the position or stance of the referent of the subject, e.g. sitting, standing, in motion or supine.[6] The following examples illustrate the use of the progressive:

(30) I nã-oky-tysyp sara
he affirmative-kill-aspect (supine) alligator
'He is killing the alligator'

(31) Taso nã-atik-tysot kina
man affirmative-throw-aspect (standing) things
'The man is throwing things'

It will be noted that the structural description (29) demands a transitive verb root. This means that sentences such as (32) are ungrammatical:

(32)* Y taka-mik-tỹnh iso-pityp
I affirmative-sit-aspect (sitting) fire-beside
('I am sitting beside the fire')

In sentences where the verb is intransitive, the structural description (29) is met by use of the transitive verb -akar- 'be'. The verb -akar- is shown to be transitive on the basis of its co-ocorrence with the ergative subject pronoun series. When it occurs with an intransitive verb in the progressive, the intransitive verb assumes the position Y in the above structural description. This yields grammatical forms such as:

(33) Ỹn nã-akarɨ mik-tỹnh iso-pityp
I affirmative-be-tense sit-aspect (sitting) fire-beside
'I am sitting beside the fire'

(34) I nã-akarɨ põn-tykat
he affirmative-be-tense hunt-aspect (motion)
'He is hunting'

It should be noted that the lexical sub-categorisation of the verb -akar- prohibits its co-occurrence with a transitive verb. This means that sentences such as the following are ungrammatical:

(35)* I nã-akarɨ oky-tysyp sara
he affirmative-be-tense kill-aspect (supine) alligator
('He is killing the alligator')

In order to generate the above progressive sentences, it is necessary to modify some of the rules already listed in (9):

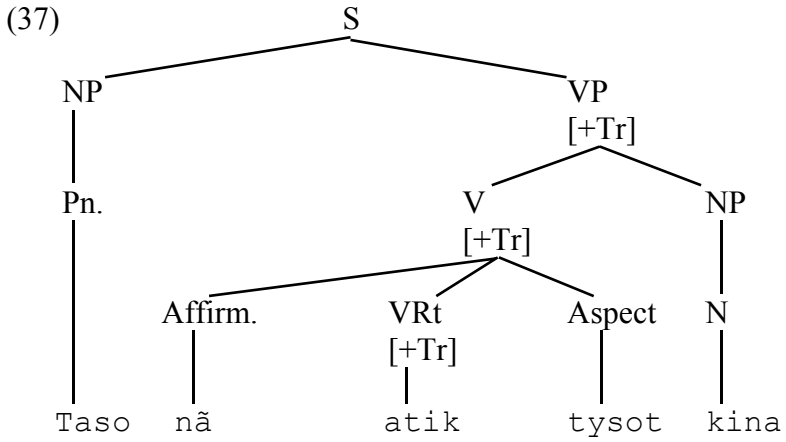
(36) VP ⟶ V { (NP) (PoP) / VP }

V ⟶ (Affirmative) VRt { Tense / Aspect }

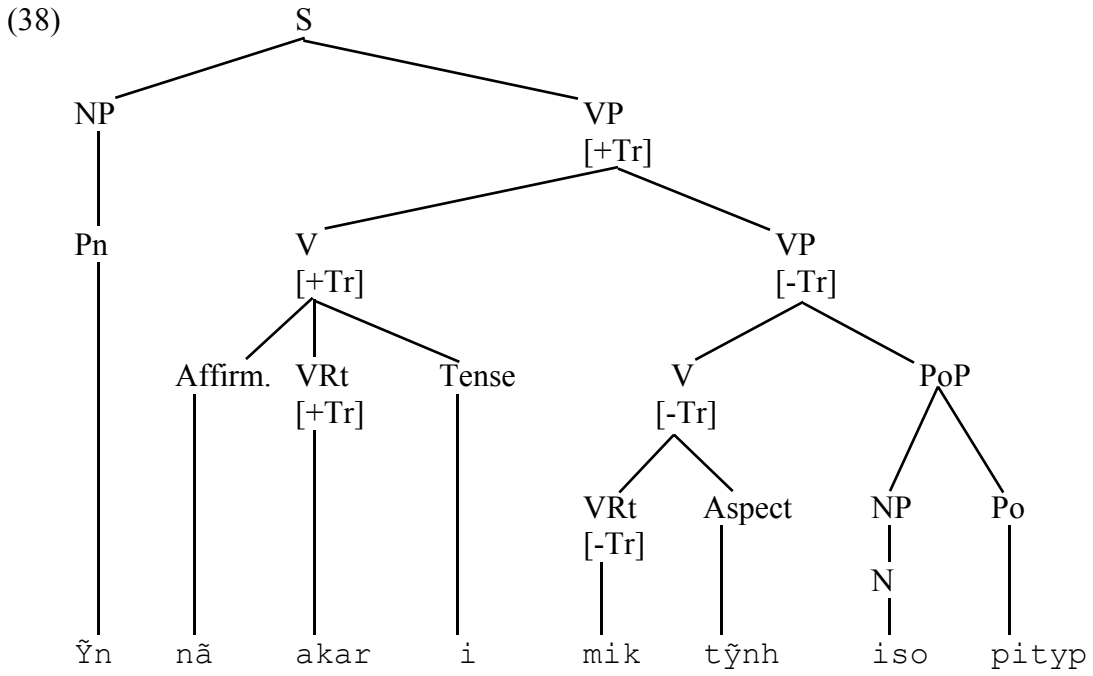
Given these PS rules, sentences (31) and (33) would be assigned the following (underlying) structures, in which I assume a feature [+Tr] on VPs to indicate transitivity (together with the Head Feature Convention discussed by Gazdar, Pullum and Sag (forthcoming), which ensures that a [+Tr] VP will have a [+Tr] V). Note that -akar- is always

[+Tr], even when it is not followed by an NP. This assumption is necessary, because -akar- always selects the ergative affirmative marker.

(37)



(38)



2.1.3. Topicalisation.

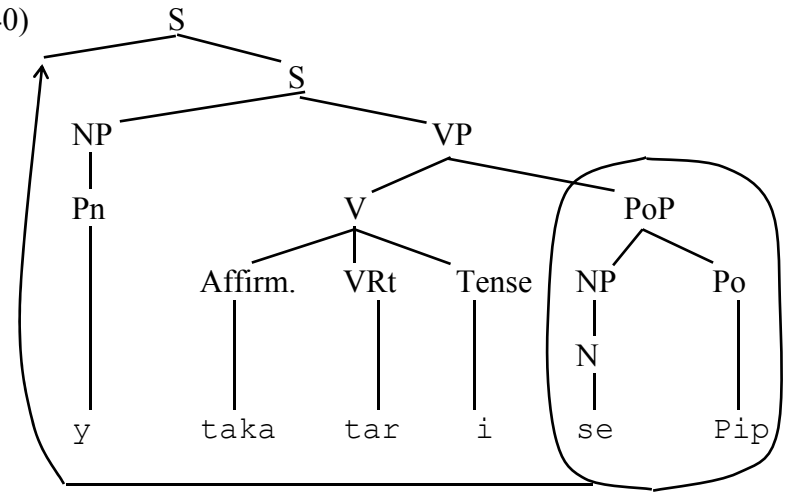
A number of the different sentence elements in Karitiâna can be preposed or topicalised,[7] including post-positional phrases, direct objects, verbs and embedded sentences. In all of these, topicalisation is accomplished by bringing the item to the front of the sentence, but in topicalising some of the above, additional rules apply. We shall first examine the topicalisation of post-positionals.

Postpositionals. This is the least complex of the various types of topicalisation, in which a post-positional phrase is moved from the end of the sentence to the beginning, as in the following example:

(39) Se-pip y taka-tarɨ ỹn
water into I affirmative-go-tense I
'Into the water I will go'

This sentence could be described transformationally in roughly this way:

(40)



Direct Objects. A second type of topicalisation is used to bring direct objects to the front of a sentence, by an unbounded movement rule, as with topicalisation of post-positionals. The following sentence illustrates D.O. topicalisation:

(41) Mora yjja ti-pyn
ball we topicaliser-kick
'The ball we kick'

Several structural differences between sentence (39) and (41) will be noticed. Firstly, although in both cases the sentences begin with two close or juxtaposed NPs, in the case of the PoP, the NP is marked by the presence of the post-positional -pip 'into'. Thus the presence of this morpheme prevents any possible opacity which might occur because of the presence of the two NPs in close proximity. However, in sentence (41), the possibility of confusion could arise, and so the sentence is marked in two ways, by a rule which deletes the affirmative and inserts ti- 'topicaliser':

(42) Object Topicalisation

X	-	NP	-	NP	-	Affirmative	-	VRt (+Tr)	-	X		
1		2		3		4		5		6	⇒	OPT.
1		2		3		Ø + ti		5		6		

Topicalisation of direct objects can be accompanied by postposing of the subject, which results in an OVS word order in sentences where this process occurs. The Subject Postposing Rule in fact has a wider application than merely in topicalised sentences, but this is a convenient point to mention it.

This rule of subject postposing can be expressed as follows:

(43) Subject postposing

SD	X	-	NP	-	Affirmative	-	V	-	X
	1		2		3		4		5 ⇒ OPT.
SC	1		Ø		3		4+2		5

The following sentences exemplify the application of rules (42) and (43):

(44) Pyopetemẽmẽ ti-oky-t opok
Pyopetemẽm topicaliser-kill-tense wild=Indian
'It was Pyopetemẽm the wild Indian killed'

(45) Eremy ti-m-a-anyki ỹn
hammock topicaliser-causative-make-tense I
'It is the hammock I'm about to cause to be made'

Rule (43) only has been applied in the following sentence:

(46) Nã-egy-t i osop i keet
affirmative-vomit-tense his hair his younger=brother
'Vomited up his younger brother his hair' = 'His younger brother vomited up his hair'

Verb roots, ideophones and reported speech. There is a third group of sentence constituents which can be topicalised in Karitiâna sentences, namely verb roots, ideophones and quotes. These are linked in that they all require the presence of the dummy verb -a- 'do, say' in the main clause. Once again, topicalisation occurs by bringing the topicalised item to the front of the sentence. Obligatory subject postposing accompanies topicalisation of these items. The following examples illustrate this type of topicalisation:

(47) Terek nãka-a-t Ø
walk affirmative-do-tense they
'Walk they did'

(48) Pajsyk pỹg nãka-a-t Ø
arrow=noise hitting=noise affirmative-do- tense it
'Swish thud it went'

(49) 'Y ta-pyt'y-taj' nãka-a-t nhõnso
I affirmative-eat-tense affirmative-say- tense woman
'"I will eat," said the woman'

These and the other examples of topicalisation already discussed can be seen as expressions of the following Topicalisation rule:

(50)

X	-	{ PoP, NP, VRt, Ideo., Root S }	-	X			
1		2		3	⇒	OPT.	
2+1		Ø		3			

It may be that topicalisation with some of these, namely ideophones (as in (48)) and quotes (as in (49)), is obligatory. This might indicate that topicalisation should be re-analysed in terms of phrase structure rules. That this is perfectly feasible is shown in Gazdar (1982).

2.2. Negative statements.

As was mentioned earlier, negative statements and negative responses are formed differently in Karitiâna, and I will not discuss the latter in this section. Negative statements are those negative sentences which are not given in reply to a question, but are spontaneously offered by the speaker. I have observed a very unusual, and perhaps unique phenomenon in Karitiâna negative statements. That is, negative statements are formed not by the addition of a negative morpheme, but by the deletion of the affirmative from the corresponding affirmative sentence. Neither Dahl (1979) nor Payne (1978) in their cross-linguistic surveys of negation mention a language that works in this way. In fact, Payne states categorically that:

> Standard negation may take a variety of syntactic forms... What these forms have in common is that they all involve the addition of a negative morpheme to a corresponding positive sentence. (Payne's emphasis)

The following pair of sentences show how Karitiâna negative statements are formed:

(51)

Y	ta-oty-j	ỹn
I	affirmative-bathe-tense	I
'I will bathe'		

(52)

Y	oty	ỹn
I	bathe	I
'I will not bathe'		

It will be noted that in negative statements no tense or aspect suffix is present. In order to generate negative statements, a further modification of one of the PS rules expressed in (9) and (36) is necessary:

(53) V ⟶ (Affirmative) VRt ({ Tense, Aspect })

A further rule is necessary for the formation of negative statements with transitive verbs; I shall call it "Direct Object Pronoun Epenthesis".[8] It has in fact a wider application than merely in negative statements, but for convenience I shall mention it here.

(54) Direct Object Pronoun Epenthesis

Ø ⟶ i / Pn____VRt (+Tr) OBL.

Negative statements using transitive verbs are formed as shown in the following pair of examples:

(55) Ỹn nãka-paka-j ỹn pykyp
I affirmative-clean-tense I clothes
'I will clean the clothes'

(56) Ỹn i paka ỹn pykyp
I it clean I clothes
'I will not clean the clothes'

There are in addition two further "morph epenthesis" rules which apply in negative statement formation:

(57) ry- epenthesis

$$\emptyset \longrightarrow \text{ry-} \;/\; \underline{\qquad} \; \underset{\begin{bmatrix} + \text{Init stress} \\ - \text{Transitive} \end{bmatrix}}{\text{VRt}}$$

(58) -y epenthesis

$$\emptyset \longrightarrow \text{-y} \;/\; \underset{[+\text{C final}]}{\text{VRt}}\underline{\qquad}$$

Negative statements illustrating these rules are given below:

(59) Ỹ ry-tat-y ỹn
I go I
'I will not go'

(60) Ỹn i m-hok-y ỹn tõmtõm
I it causative-play I guitar
'I will not cause the guitar to play'

Before leaving the subject of negative statements, there are two other points which I should like to mention. The first of these is that in both affirmative and negative statements, there is no difference in the intonation contour; both types of statement have contours of the form:

(61)

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______________________
               ___ _
(_   _)___           __
______________________
   Y ry-tat-y ỹn
Y  taka-tar-i ỹn
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The second point is to do with nomenclature. It seems that instead of using the term, 'negative statement", it might be more appropriate to use the term "non-affirmative statement". If one considers the range of sentence types in Karitiâna, (some of which are touched on in later sections), the only sentences which use the affirmative particles nã- and ta- are affirmative sentences. These particles are omitted in negative statements, as we have seen, in polar questions and responses, and in WH questions, all of which could be thought of in some sense as non-affirmative.

Verb root negation. There is in fact a negative morpheme in Karitiâna, but it is very limited in both its distribution and use. This morpheme, ki 'not', is only attached to minimally expanded verb roots and to the conjunction tykit 'if'. In the case of verb roots, a non-affixed root as in (62) can form a complex sentence:

(62) Mẽm
enter
'He entered'

And such a sentence can be formed with a negated verb root:

(63) Mẽm ki
enter not
'He didn't enter'

In this minimal sentence form, no noun phrases or other verb phrase elements occur.

When used with the conjunction tykit, the negative morpheme has the effect of negating the whole subordinate sentence, as for example in:

(64) A pyt'y tykit, y taka-tarɨ
you eat if, I affirmative-go-tense
'If you eat, I will go'

(65) A pyt'y ki tykit, y taka-tarɨ
you eat not if, I affirmative-go-tense
'If you don't eat, I will go'

Despite the existence of this negative morpheme, it must be emphasised that its distribution is limited to the two contexts illustrated here and its function is never to negate statements of the usual syntactic form.

3. INTERROGATIVE QUESTIONS AND ANSWERS.

This section is divided into two main sub-sections which deal with polar questions and responses to them, and WH or information questions.

3.1. Polar questions and responses.

3.1.1. Polar questions.

As in English, a polar question in Karitiâna may be negative or positive, and we shall look at these different forms in turn. A general observation to be made is that there are tense restrictions on these questions, as stated informally below:

(66) A positive polar interrogative must have past tense.
A negative polar interrogative must have future tense.

Thus positive polar questions may never occur in the future tense, and negative polar questions may never occur in the past tense or have an aspect marker.

Positive questions are formed using the morpheme hỹ 'question (+ pos)', which occurs sentence finally:

(67) A tat-Ø ãn ohỹ?
you go-tense (+ past) you question (+ pos)
'Did you go?'

(68) Ãn i oky-t sojja hỹ?
you it kill-tense (+ past) pig question (± pos)
'Did you kill the pig?'

Rule (54), Direct Object Pronoun Epenthesis, applies, as does the following phonological rule:

(69) Ø ⟶ o / C____hỹ
(+ nas)

Negative questions contain the negative morpheme kymĩnĩ 'question (+ neg)', which immediately follows the affixed verb root:

(70) A tarɨ kymĩnĩ?
you go-tense (+ fut) question (± neg)
'Won't you go?'

(71) Ãn i oky-j kymĩnĩ sojja?
you it kill-tense (+ fut) question (± neg) pig
'Won't you kill the pig?'

3.1.2. Polar responses.

Just as there are positive and negative questions, so there are also positive and negative responses to such questions. These responses are not the same as affirmative statements. No tense suffixes are allowed with either positive or negative responses.

Positive responses are formed using the verb root prefix mỹ and the suffix -n 'response (+ pos)'. Rule (54), Direct Object Pronoun Epenthesis, does not apply. Examples showing positive responses are given below:

(72) Ỹn mỹry m-hoko-n tõmtõm
I response (+ pos) causative-play-response (± pos) guitar
'Yes I play the guitar'

(73) Y py pyt'y-n
I response (+ pos) eat-response (± pos)
'Yes I eat'

Three phonological rules apply so as to give the differing forms of the positive response affixes. These rules are:

(74) m ⟶ p / Pn____ OBL.
(–Erg)

(75) Ø ⟶ r / mỹ____Vowel (–stress)
(+ Initial stress)
ry /

(76) Ø ⟶ V /VRt . . .VC ____ polar response
i /VRt . . .C
(+Nas)

Rule (74) is interpreted as saying that the positive response prefix mỹ changes to py following na absolutive pronoun.

Rule (75) prevents vowel clusters and contiguous stressed syllables between the positive response prefix and the following verb root.

Rule (76) is a vowel repeating mechanism used to prevent consonant clusters between the verb root and the polar response suffix.

Negative responses are formed using the morpheme -pannĩ 'response (+ neg)' which is suffixed to the verb root, as illustrated below:

(77) Ỹn i m-hoko-pannĩ tõmtõm
I it causative-play-response (+ neg) guitar
'No I don't play the guitar'

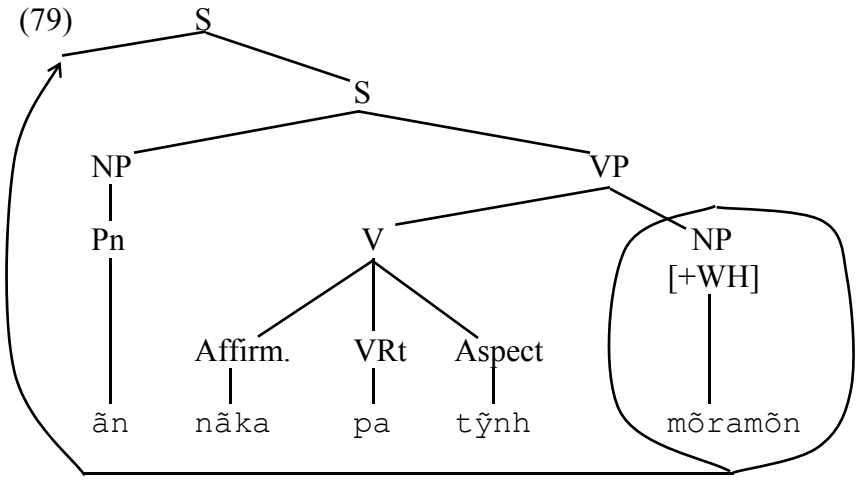
(78) Y pyt'y-pannĩ
I eat-response (+ neg)
'No I don't eat'

Rule (54), Direct Object Pronoun Epenthesis, does apply, as does phonological rule (76) above.

3.2. Information (WH) questions.

WH questions in Karitiâna could be treated transformationally as shown in (79):

(79)



The derivation of (79) is:

(80) Mõramõn a ti-pa-tỹnh?
what you (+ Abs) topicaliser-weave-aspect
'What are you weaving?'

The movement of the WH word to the front of the sentence in (80) exactly parallels the topicalisation of direct objects (rule (42) above). For this reason, WH question formation and topicalisation might both be seen as manifestations of the same rule (cf. Chomsky (1977) for an attempt to unite topicalisation and question formation in English).

There is one striking difference between topicalisation and WH question formation, however. There may be a difference in ergativity between a topicalised sentence and a question. Consider the following example of topicalisation:

(81) Seppa ỹn ti-pa-tỹnh
basket I (+ Erg) topicaliser-weave-aspect
'A basket I am weaving'

If we compare (80) and (81), it will be noticed that the pronoun in (80) is absolutive. That is, although the verb is normally transitive, here it appears to be detransitivised. The question word mõramõn 'what' seemed not to count as a full object NP. In (81) there is a topicalised direct object, and since this is explicitly mentioned, the pronoun is ergative.

In other WH questions where the direct object is explicitly mentioned, then the pronoun retains its + Erg value, for example:

(82) Mõrãsõg ãn i pa-tỹnh seppa?
why you (+ Erg) it weave-aspect basket
'Why are you weaving a basket?'

Examples (8O)–(82) clearly show that in Karitiâna it is not the transitivity of the verb which determines the ergativity value of the accompanying pronouns, but rather the number of associated NPs. If a transitive verb has a subject and no object, then the subject pronoun associated with that verb will be absolutive, and not ergative. This is expressed in the following diagram:

(83)

Verb type	Subject	Object
Intransitive	Absolutive	-
Transitive	Absolutive Ergative	- Absolutive

The curious and unexplained fact is that a WH-word like mõramõn does not count as an object NP, while a pronoun, or even an NP that has been removed by topicalisation, does count.

4. IMPERATIVES.

Imperatives in Karitiâna do not have any tense or aspect suffix, and there is no affirmative prefix. Some typical examples of imperatives using transitive and intransitive verbs follow:

(84) Yj pyt'y
we eat
'Let's eat!'

(85) Yjja i amãg-a
we it plant
'Let's plant it!'

(86) Ãn i oky
you (sing.) it kill
'Kill it!'

(87) A tar-a
you go
'Go!'

(88) I oky
it kill
'Kill it!'

(89)* Pyt'y
eat
('Eat!')

From the above examples some other features of imperatives can be seen. I have taken imperatives to include both second person singular and plural, and also first person plural imperatives, where the speaker intends to take part in the activity. Imperative Subject Deletion occurs only with second person subjects and transitive verbs:

(90) X – $\begin{bmatrix} \text{Pn} \\ +\text{2nd Pers.} \end{bmatrix}$ – VRt [+Tr] – X

1 2 3 4 ⇒ OPT.
1 Ø 3 3

(89) above is ungrammatical in that the verb root is intransitive, and so the subject may not undergo deletion. Rule (54), Direct Object Pronoun Epenthesis, occurs, as exemplified in (85), (86) and (88). There are also three phonological rules which apply in imperatives.

(91) -a Epenthesis

$$\emptyset \longrightarrow a \;/\; \begin{matrix} \text{VRt} \\ [+\text{C final}] \end{matrix} \_\_\_\_$$

(92) $\begin{bmatrix} +\text{Cons.} \\ -\text{Voc.} \end{bmatrix}$ $\begin{bmatrix} +\text{Voice} \\ -\text{Nasal} \end{bmatrix}$ /VRt_____ $\begin{bmatrix} +\text{Voc.} \\ +\text{Low} \end{bmatrix}$

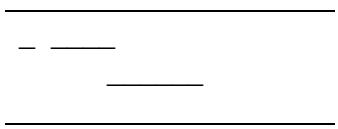
Segment structure constraints will guarantee that voiced non-nasal /p/ is [w] and voiced non-nasal /t/ is [r].

The third phonological feature is the distinctive rising intonation contour on imperatives:

(93)

A pyt'y
'Eat!'

This rising intonation on the final stressed syllable of the verb root can be contrasted with the falling intonation found on the morphologically similar negative statement:

(94) 

Y pyt'y
'I will not eat'

5. CONCLUSION.

In this paper I have classified Karitiâna for the first time using other than lexico-statistical criteria. This Tupi language spoken in north-western Brazil emerges as having the word order characteristics of SVO Po GN NA. Whereas this is not extremely rare, as is the case with some other South American languages (e.g. Hixkaryana OVS), it provides more information to help complete the picture of the regional typology.

The presence of ergativity in the language is discussed especially as it applies in the pronominal and affirmative marker systems, but with other references in the polar questions and responses and in some WH-questions. The presence of ergativity in South American languages is not unknown, but Karitiâna is the only language known to me in the Tupi language family which exhibits this. (Editor's note: Certain other Tupi languages have been shown to exhibit limited types of ergative phenomena. Guarani, for example, has what Dixon calls "the split S-marking type" of ergativity (R. M. W. Dixon, 1979. 'Ergativity'. Language 55, p. 82).)

The declarative, interrogative and imperative sentence types are examined in some detail. Phrase Structure rules are given, which together with a series of transformational rules give a possible account of the underlying sentence structures.

Negative declarative sentences are shown to be of considerable interest in that there is no negative marker, the negatives rather being formed by the deletion of the affirmative marker in affirmative declarative sentences. Thus it appears that the unmarked form is the negative, a phenomenon previously unknown in the literature.

It is hoped that further synchronic research in Brazil may yield information which will show that these phenomena in Karitiâna are not unknown in other Tupían languages.

NOTES

1. The Karitiâna language is spoken by a group of about eighty people living on the Posto Indígena Karitiâna, which is near Porto Velho, in the Territory of Rondônia, Brazil.

This paper is based on field work carried out in Brazil by my wife and me between 1972 and 1978 under the auspices of the Summer Institute of Linguistics and the Fundação Nacional do Índio (FUNAI). All the material in this paper is completely original and is not a re-analysis of previous work by other linguists, since no previous linguistic analysis has been done on the Karitiâna language.

I should like to thank members of the Linguistics Department of University College London for their helpful comments and suggestions; the Karitiâna Indians for their help in

providing the data without which this could not have been written; and my wife and children in supporting me during its writing.

Editor's Note: This paper was originally the author's master's thesis, submitted in 1980 to the Department of Phonetics and Linguistics, University College London, in partial fulfillment of the requirements for the M. A. degree in linguistics.

2. Voegelin and Voegelin (1977) erroneously state that Karitiâna is also extinct, although the population is in fact growing.

3. Pronouns will be considered fully in section 2.1.1.

4. This is the normal pattern. However, if the speaker wishes to emphasise strongly his intention to do something then the rule expressed in (22) is superseded by what I shall call, for mnemonic reasons, the Emphatic Intention rule:

(23)

Pn	Affirmative	⟶	Pn	Affirm.	OPT.
(α Erg)	(α Erg)		(+Erg)	(+Abs)	

This is illustrated in the following example:

(24) Ỹn ta-pyt'y-j
I affirmative-eat-tense
'I WILL eat'

5. A similar type of "ambi-fixing" occurs in Malagasy demonstratives, cf. Keenan (1976).

6. This use of the progressive to indicate body position is found in some other Tupían languages, including Guarani.

7. I will use the term "topicalisation" to refer to fronting of any syntactic category.

8. "Epenthesis" is a term that usually refers to the insertion of segments, whereas it might be argued that here a whole syntactic formative (morph) is being inserted. But the term seems apposite nonetheless.

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