THE RAMA LANGUAGE;

A TEXT WITH GRAMMATICAL NOTES[1]

Colette G. Craig
University of Oregon

1. The Rama language

Rama is a Chibchan language spoken on the Atlantic Coast of Nicaragua. Although the community of Ramas has steadily increased in the last decades, from 285 in 1909 to 649 in 1981 (CIDCA 1982, the number of speakers of the Rama language has been steadily declining. The Rama community has been concentrated on the island of Rama Cay, south of Bluefields in the Bluefields lagoon. The main language of the Rama community today is Rama Creole, an English-based creole which is distinct from the English-based creole spoken by the Creole population of the Atlantic coast of Nicaragua (Holm 1984).

The last fluent speakers of the Rama language, except for Miss Nora Rigby, do not live on Rama Cay but rather on the mainland south of Bluefields, in small settlements such as Cane Creek, Wiring Cay, Punta Gorda and Monkey Point. By July 1985, twenty three speakers had been identified. So few speakers clearly place the language in danger of extinction, although at least one factor may moderate the imminence of the danger. It is the fact that the remaining speakers are distributed across three generations, with the largest group (11) corresponding to people in the middle generation, in their late thirties and early forties.

Rama is one of the northernmost languages of the Chibchan family. Its exact position in the family has yet to be established (Craig, 1985). The only Chibchan language further north is Paya found in Honduras (Holt, 1975; Campbell 1979). The Rama people did not appear in the colonial documents until the eighteenth century. The Ramas are said to be descendants of the Votos who, at the time of the Spanish Conquest occupied territory extending from the Nicaraguan lagoon of Bluefields to the Costa Rican province of Alajuela, with a concentration of the population on the affluents of the Rio San Juan. The Voto group included two languages of Costa Rica now extinct, Suerre and Guetar. The Rama population (first identified as Voto-Rama) protected themselves from capture by the English, the Spanish and the Miskito invaders by not establishing fixed settlements until late in the eighteenth century (CIDCA 1982).

Linguistic information on the Rama language is very scarce. Brinton (1891), Lehmann (1914, 1920) and Conzemius (1927) contain word lists. The only grammatical information is found in the two short sketches by Lehmann (1920: 415-460) and Conzemius (1927: 326-338). Lehmann's work consists of only phonological and morphological notes. Conzemius contains some information on sentence structure but it consists only of a list of 22 expressions and sentences without morphological analysis. Nietschmann (1971, 1974) and Loveland (1975) are the most recent sources of information on the Ramas, but they contain little to no information on the language itself. Loveland (n.d.) contains a list of kinship terms. The most recent linguistic information is found in Barbara Assadi's field notes (1975).

The text presented here is the first Rama text to be published. It was recorded in July 1985 in Nicaragua by Nora Rigby, a 63 year old speaker of Rama who resides presently in Rama Cay but who has spent most of her life among the Ramas of the mainland, in Wiring Cay, Monkey Point and Cane Creek. The text is in the narrative genre and tells of the traditional hunting of the manatee. It is presented by numbered sentences with both a word by word and a free translation.

2. TEXT

(1) ipang ika kiikna paalpa baanalpi traali lakun aik.
island of men manatee they-look-for go out lagoon in
'Men of Rama Cay go manatee hunting in the lagoon'

(2) paalpa ansungka, paalpa ankungi.
manatee they-see-when manatee they-strike
'When they see a manatee, they strike it'

(3) paalpa anmalngu.
manatee they-kill
'They kill the manatee'

(4) naing paalpa anmlingka, uut tupanuungi.
this manatee they-kill-when dory they-sink
'When they have killed the manatee they sink the dory'

(5) uut tupanuungi nainguku paalpa pshutki ankaakama.
dory they-sink the reason manatee inside so that-they-put
'The reason they sink the dory is to put the manatee inside'

(6) namangku uut nainguku anplungkingi.
then dory so they-bail
'So then they bail out the dory'

(7) su anaatsi.
in they-get in
'They get in'

(8) pulkat mahka, anapaiki.
breeze no-if they-paddle
'If there is no breeze, they paddle'

(9) pulkat aakitka, anaakarngi.
breeze there is-if they-sail
'If there is a breeze, they sail'

(10) ipang su ansiiku.
island to they-come
'They come to the island'

(11) naing ipang su ansiikka, kaulingdut mliika aakar
this island to they-come-when all the people happy are

paalpa anmalngu.
manatee they-kill

'When they come to this island, everybody is happy that they killed a manatee'

(12) mliika anaakar paalpa analkukka.
happy they-are manatee they-hear-when
'They are happy when they hear about the manatee'

(13) paalpa suuli taara, nainguku mliika suanaakar.
manatee animal big that's why happy they-feel
'The manatee is a big animal, that's why they feel happy'

(14) ipang su yuantungutka, uut tupanungi amaing paalpa tabiikama
island to they-carry-when dory they-sink again manatee take-so that
uut ki karka.
dory in out
'When they have carried it to the island, they sink the dory again in order to take the manatee out of the dory'

(15) namangku ariira ankuusu,
then string they-take
'Then, they take a string'

(16) naing paalpa paniis anangaisu, nainguku naing anasarku.
this manatee flippers they-tie so that it they-haul
'and they tie the manatee's flippers so that they can haul it'

(17) ngaling uruksu anasarku.
rocks on top of they-haul
'They haul it up on the rocks'

(18) kiiknadut aatsi anunglaing siiru u anngatikkama.
men come their knife with they-cut-so that
'The men come down with their knives in order to cut it'

(19) ipang ipang anartki.
piece piece they-cut
'they cut it into pieces'

(20) nainguku namangku anngatikatkulu alaungkama.
so then they-cut-up cook-so that
'And so, then they cut it up in order to cook it'

(21) kumaalut bauli kuu.
women bowl take
'The women take bowls'

(22) kaas anskwi.
meat they-wash
'They wash the meat,

(23) analaungu.
they-cook
they cook it,

(24) anasiiku.
they boil
and they boil it'

(25) anasiikka, naing yupsi tabii.
they-boil-when this oil come out
'When they have boiled it, the oil comes out'

(26) yupsi tabii ung su karka, ung saina ankwaakar ariisba.
oil come out pot in from-when pot another they-get empty
'When the oil comes out of the pot, they get another empty pot'

(27) ung ariisba yupsi ankai.
pot empty oil they-put
'They put the oil in the empty pot'

(28) namangku seem wan, naing yupsi ankansii.
then same one this oil they-fry
'Then that same oil, they fry it'

(29) kaas ankansii ankwiskama.
meat they-fry they-eat-so that
'They fry the meat so that they can eat it'

(30) nainguku kauling mliika yu akar.
that's why people happy with it are
'That's why people are happy with it'

(31) yiraa naing nainguku yu ankwiskama.
breadkind this so with it they-eat-so that
'They boil the breadkind to eat it with'

(32) suuli kaas naing pairkungka, seem kiikna naing malngu kaing
animal meat this remain-if same man it kill who

itriis naing tawan ki yutaaki.
piece this town to he-takes

'If any animal meat remains, the same men who killed it take the piece to Bluefields'

(33) tawan ki anpayai.
town in they-sell
'In Bluefields they sell it'

(34) nainguku namangku kyabij anpayai
so then cabbage they-buy
'So then, they buy cabbage,

(35) onion anpayai,
onion they-buy
they buy onions,

(36) macaroni anpayai.
macaroni they-buy
'they buy macaroni'

(37) taimka urnga anpayai yu ankwiskama.
time-when food they-buy with it they-eat-so that
'At that time, they buy food to eat with it'

3. Grammatical notes

Following is a grammatical sketch of some of the most salient characteristics of the Rama language as they can be gleaned from this text. The number of an example in the sketch refers to the number of the sentence in which it is to be found in the text. Unnumbered examples come from direct elicitation.

3.1. Sound system

The sound system of Rama resembles that of the neighboring Miskito and Sumu languages. Rama has three basic vowels: i, a, u. The vowels e and o occur only in loanwords. In addition vowels may be short or long. The long vowels are transcribed with double vowels as in:

(1) kiikna 'man' ; (22) kaas 'meat' ; (4) uut 'dory'

The consonant system is a simple one:

p	t		k
b	d		
m	n		ng
	s	sh	
	r		
	l		
w			y

One of the characteristics of this system is the preponderance of velar nasals (transcribed with the diagraph ng), which occur in all positions in a word and are many times more frequent than the other nasals:

(17) ngaling 'rock' ; (32) malngu 'kill'

(37) urnga 'food' ; (18) anunglaing 'their'

3.2. Morphology

3.2.1. Nouns

Nouns are not inflected for case. Animate nouns may be followed by a plural marker, the use of which remains to be determined:[2]

(11) kauling-dut ;	(18) kiikna-dut ;	(21) kumaa-lut
people-pl	man-pl	woman-pl
'people'	'men'	'women'

There is no plural agreement with adjectives or determiners.

3.2.2. Verbs

Verbs are inflected for person, tense/aspect and/or subordination. Examples from the text offer a sample of these inflections.

A subject marker may be prefixed to the verb in the absence of a full NP subject. Independent subject pronouns are used only for emphasis or contrast. The text contains no example of the emphatic subject pronoun but there are numerous examples of the third person plural subject prefix an- as in:

(8) an-apaiki 'they paddle' ; (9) an-aakarngi 'they sail'

(23) an-alaungu 'they cook it' ; (24) an-asiiku 'they boil it'

The subject markers are related to the independent emphatic personal pronouns. For instance, the third person plural pronoun is analut, and the three possible encodings of subjects are as follows:[3]

Full NP: kiikna-dut apaiki
man-pl paddle
'the men paddle'

Pronoun: analut apaiki
they paddle
'THEY paddle'

Subject marker: an-apaiki
they-paddle
'they paddle'

The subject marker is used only in the absence of a full NP or Pronoun. The inflectional nature of the subject marker can be argued on the basis of its morphophonological characteristics. First, it is morphologically a reduced form of the independent pronoun. Second, it is prefixed directly to the verbal element of the predicate. For instance, in an adjectival predicate it can be prefixed to the copula, compare (11) and (12) below. In a transitive clause it can be prefixed to the verb, which reverses the SO word order, creating a OBJECT subject-VERB pattern, as shown in (3) below:

(11) kauling-dut mliika aakar
people-pl happy be
'all the people are happy'

(12) mliika an-aakar
happy they-be
'they are happy'

(3) paalpa an-malngu
manatee they-kill
'they kill the manatee'

Most telling, in derived verbs, the subject marker occurs between the initial adverb-like prefix and the verb root:

(1)	ba-an-alpi ?-they-look for 'they look for'	(3)	tup-an-ungi down-they-sink 'they sink'

Tense/aspect markers are suffixed to the verb, such as -i, and -u. Lehmann (1920:422) had labelled -i as 'present' and -u as 'imperfect' but these labels do not seem appropriate for the use of those suffixes in the speech of the Rama speaker who produced this text. Further study of the other texts produced by this speaker is needed to establish whether the use of the two suffixes follows a differentiated pattern. The switching between -i and -u found in the present text (between sentences 2 and 3; 9 and 10; 14 and 15; 20 and 21; 22 and 23) is illustrative of the use of these suffixes by the speaker.[4]

Another verbal aspect-like marker found in the text is -atkulu, a suffix not identified by Lehmann. It is probably a complex morphological form atk-ul-u where atk is possibly a variant of aakar 'be', -ul- a directional element 'up' and -u the above mentioned aspect marker. atkulu carries a meaning of resultative, completeness:

(20) namangku an-ngatik-atkulu alaung-kama
then they-cut-all up cook-so that
'then they cut it all up in order to cook it'

Verbs also take suffixes which are markers of subordination. Such suffixed subordinate verbs then do not carry the tense/aspect markers -i/ -u. One of the subordinating suffixes is -ka 'if/when' as in:

(3)	paalpa an-malng-u. manatee they-kill-TS 'they kill the manatee'	(4)	naing paalpa an- this manatee they maling-ka... kill-SUB 'When they have killed

the manatee'

(9) pulkat aakit-ka , an-aakarng-i
breeze exist-SUB they-sail-TS
'If/when there is a breeze, they sail'

(24) an-asiik-u
they-boil-TS
'they boil it'

(26) an-asiik-ka...
they-boil-SUB
'When they (have) boil (ed) it...

The other subordinating suffix is -kama 'in order to', as in:

(20) an-ngatik-atkulu alaung-kama
they-cut-up cook-in order to
'they cut it all up in order to cook it'

(37) taim-ka urnga an-paya-i yu an-kwis-kama
time-when food they-buy-TS with it they-eat-in order to
'At that time they buy food to eat it with'

The fact that all tense/aspects and subordinating morphemes are suffixed to the verb will be considered again in the context of a discussion of the word order of the main arguments of a clause.[5]

One more note on the morphology of the verbs is in order here: the root of certain verbs varies depending on the suffixation. The text contains two examples of such variation. One is a case of vowel deletion found in sentences (3) and (4): malng/maling. The other shows a process of partial suppletion with the verb 'be', found in example (9) and (11) or (12): akiit/akaar.[6]

4. Syntax: Word order

The basic word order of the Rama clause is SOV. The occurence of two full NPs in a clause is actually rare in texts, as will be discussed later, but two examples can be found in this one:

(1) kiikna paalpa baanalpi traali
man manatee look for go
S O V
'the men go look for a manatee'

(21) kumaalut bauli kuu
women bowl take
S O V
'the women take a bowl'

(8) pulkat mah-ka
breeze no-if
S V
'if there is no breeze'

(10) kauling-dut mliika aakar
people-pl happy be
S V
'all the people are happy'

(18) kiikna-dut aatsi
man-pl come down
S V
'the men come down'

As an SOV language, Rama exhibits expected word order characteristics. One of the strongest word order correlations that has been observed across languages of the world is the correlation holding between the V/O word order and the nature of the adpositions of the language (Greenberg 1966, Universal # 4). As expected of an OV language, Rama has postpositions:

(10) ipang su
island on
'on the island'

(18) siiru u
knife with
'with a knife'

(34) tawan ki
town to
'to town'

(17) ngaling uruk su
rock top of on
'on top of the rock'

Another strong word order correlation discussed in the recent literature on word order typology (and found in Rama) is the one said to be holding in a language between 1/ both OV and postpositions and 2/ a 'Genitive + Noun' word order in a possessive construction (Greenberg 1966, Universal #2):

(16) naing paalpa paniis
this manatee flippers
'this manatee's flippers'

The placement of the adjective is generally less predictable in OV languages than in VO languages; although a perfect sense of symmetry in the word orders of the two major types of languages would require OV languages to have Adjective + Noun word order, Rama is one of the languages that exhibits the reversed word order Noun + Adjective:[7]

(13) suuli tara
animal big
'a big animal'

To be added to the list of word order characteristics of OV languages is the suffixal nature of both the aspect markers and the clause subordinators, as already discussed in previous sections.

Although Rama exhibits a number of characteristics of OV languages, as seen above, it is not strictly speaking a verb final language to the extent that a language like Japanese is said to be. In Rama a number of constituents may be found post-verbally. Oblique arguments for instance either precede or follow the verb:

(10) ipang su an-siiku
island to they-come
obl V
'they come to the island'

(27) yupsi tabii ung su karka
oil come out pot in from
S V obl
'the oil comes out of the pot'

In addition, the main verb of a complex sentence is not necessarily sentence final either. The relative order of main and subordinate clauses seen in the text follows a (chrono)logical order, so that the time/conditional clauses precede the main verb while the purposive clauses follow it, as in:[8]

(14) ipang su yu-an-tungut-ka, uut tup-an-ungi amaing
island to they-carry-when dory they-sink again
WHEN-clause MAIN clause

paalpa tabii-kama uut ki karka
manatee take-in order to dory in out
IN ORDER TO-clause

'When/after they have carried it to the island, they sink the dory again in order to take the manatee out of the dory'

The placement of relative clauses in Rama does not correspond to what is expected of an OV language either, in that they do not precede their head, although this fact may not be so surprising in view of the post-nominal placement of adjectives mentioned above. As a matter of fact, relative clauses are scarce in the texts of this speaker and were difficult to obtain in direct elicitation. The limited data, however, seems to indicate that in Rama they follow their head noun, being often in fact completely extraposed to the right of the whole clause, with a repeat form of the head noun. In spite of their post-nominal placement, the relative clauses conform in their internal clause structure to their SOV word order type since the optional relative marker kaing is clause final. The only example of relative clause available in this text raises more questions than it answers about the structure of relative clauses in Rama. While it clearly illustrates the clause final nature of the relative conjunction, this particular example raises the question of whether the head may not be also internal to the relative clause sometimes, a pattern otherwise found with verb final languages.

(53) seem kiikna naing malngu kaing...
same man it kill REL
'the same man who killed it...'

All the above remarks on the nature of relative clauses in Rama will have to remain tentative until further data is collected, and should probably be accompanied with the following word of caution: the scarcity of naturally produced relative clauses and the difficulty encountered in eliciting data on the process of relativization, coupled with the multiplicity of strategies apparently used to negotiate the construction may in fact turn out to be attributable to the phenomenon of language attrition in the speech of this particular speaker.

To summarize, although Rama cannot be said to be an absolute verb final language, it shows strong characteristics of OV languages. Specifically, it supports the universal principle of word order that correlates basic VO/OV word orders with the nature of adpositions and the placement of genitive, while providing more evidence that the order of adjectives does not warrant the establishment of strong word order correlations.

5. Discourse: Preferred argument structure

It is strictly in the context of sentence syntax that one can talk about the canonical SOV pattern of Rama. In the reality of a text, one must address the issue of the widespread phenomenon of argument ellipsis causing many clauses to not have the expected canonical word order.

A simple count of the patterns encountered in the clauses of the text (table I) shows how an overwhelming majority of clauses indeed do not have the canonical SOV or SV constituency, as they are missing at least one major constituent in the surface:[9]

TABLE I

Number of Constructions with Missing arguments

	all full NPs		missing 1 + NP	
	#	%	#	%
intransitive	9	53	8	47
transitive	2	5	40	95
	11	19	48	81

The question may be raised then of whether any sense can be made out of such frequent ellipsis, whether patterns of ellipsis can be established and how they could be accounted for.

Such questions have been taken up in recent discourse studies such as the ones conducted by Givon (1983), DuBois (1981, 1985) and their students. What has emerged from cross language studies based on text counts is a clearer understanding of how languages encode information flow. For instance, the variation between full NP, pronoun and zero anaphora has been demonstrated to be a function of the topicality of the NP, with full NPs encoding new topics and new information, and with pronoun and zero anaphora encoding old persisting topics and old information.

There were for instance only two full SOV clauses in the text: the first clause of the text itself and the one shown below with its subsequent clauses (all missing at least one argument):

(21)	kumaa-lut	bauli	kuu.		(22)	kaas	an-skwi	
	woman-pl	bowl	take			meat	they-wash	
	S	O	V	------		O	V	--

(23)	an-alaungu.		(24)	an-asiiku.
	they-cook			they-boil
	V	------		V

'The women take bowls. They wash the meat. They cook it. They boil it.'

The sequence illustrates the progression from SOV (21) to OV (22) to V (23, 24) showing the use of full NPs for new information and the need to interpret the zero anaphora of the missing arguments as given information. In the SOV clause (21) both the subject and the object happen to be in contrast with both the subject and the object of the preceding sequence which was about men cutting meat. In (22) the missing subject is the same as the one of the preceding clause, hence given information, while the full NP object re-introduces, as a new object, the meat that had been previously handled by the men and is now in the hands of the women. In (23) and (24) both subject and object are given information, hence missing. As mentioned earlier, Rama has independent personal pronouns but they are restricted to emphatic and contrastive use (of which there are no examples in the present text) so that the tracing of given information is done through chains of zero anaphora.

The expression "preferred argument structure" is due to DuBois (1985) and refers to the tendency for clauses in discourse to contain at most one full NP. This tendency is reflected in the present Rama text, as shown in table II:

TABLE II

Preferred Argument structure

1 NP		0 NP		2 NPs	
#	%	#	%	#	%
35	60	22	37	2	3

When clauses with less than 2 NP's are combined, the numbers are even more striking: 97 % vs 3 %.[10] The explanation for this preferred argument structure found across typologically diverse languages is to be found in the pattern of informational flow. In Givon (1984) and Chafe (in press) the processing principle found in declarative sentences of connected discourse is shown to consist of a particular balance of old to new information within clauses. The tendency is for the clause to contain only one chunk of new information, hence one full NP maximum, the rest being presupposed, backgrounded or topical old information.

When investigating further the nature of the preferred argument structure of clauses in discourse DuBois points out that not all arguments are equally likely to be missing.

When using the three way distinction A/S/O familiar from the studies of ergativity (Dixon 1979) whereby:

A : subject of transitive
S : subject of intransitive
O : object of transitive

a closer look at the distribution of missing arguments points to a clear tendency for one argument --the A-argument-- to be the one most frequently missing as shown in table III:

TABLE III

Distribution of missing arguments

	Not missing NP	#	Missing NP ( )	#
intransitive	S V	9	(S) V	8
transitive	A O V	2	A (O) V	0
			(A) O V	25
			(A) (O) V	15

The table shows that beyond the preference for clauses with no more than one full NP mentioned above, one argument of the transitive clause--the A argument (or subject)--is most likely to be the one missing. This fact is hughlighted in table III:

TABLE III

Roles of missing arguments

A			S			O		
total #	missing #	%	total #	missing #	%	total #	missing #	%
42	40	95	17	8	47	42	15	38

The propensity of the A argument to be missing (95% are missing) correlates with the fact, documented in numerous languages, that new information is virtually never introduced as the A argument of a transitive clause. This is the basis of DuBois's 'given A constraint' which we see confirmed in Rama. Meanwhile, new information (hence full NPs) is most likely to be introduced as the S or O argument of a clause.

It is worth noting that DuBois's proposed "preferred argument structure" and "given A constraint" came from his search for a motivation for the phenomenon of ergativity, i.e. for a reason why the subject of a transitive verb would be encoded differently from the subject of an intransitive verb, which in turn would be encoded the same as the object of a transitive verb. This search for a motivation for ergativity has cast the phenomenon in a new light: ergativity can now be seen as a morphological encoding of discourse information flow. However, as seen with the sample text here, the same pattern of information flow obtains in Rama, even though Rama is not a morphologically ergative language.

In Rama the pattern is encoded in the use of zero anaphora, showing that the facts of information flow are of a more general nature than originally thought.

6. Epilogue

The grammatical notes just presented constitute the preliminary results of the initial phrase in the analysis of the grammar of Rama. The content of the grammatical sketch has been dictated by the linguistic material present in the text but the sketch has covered some of the most recurrent and regular features of the language.

The issue of the variant root forms of certain verbs appears to be a morphophonological characteristic of Chibchan languages, the result of widespread vowel deletion and metathesis already identified in other Chibchan languages. The SOV word order and its correlative postpositions and postposed subordinating conjunctions is an areal feature shared with the neighboring Costa Rican Chibchan languages as well as the neighboring Nicaraguan Misumalpan languages: Sumu and Miskito. Finally, the discussion of missing arguments brought to light universal features of clause structures and underlined the need to study grammar in the context of discourse.

To complete even a preliminary sketch of the grammar of Rama one would need to address a number of other issues such as the encoding of non-subject arguments, the existence of a complex system of negation, a much more elaborate system of tense/aspect / modality marking than the one found in this text as well as a number of more or less productive processes of verbal derivation which account for the compound nature of many verbal predicates.

FOOTNOTES

1. This paper is the first report on a Rama Grammar research proyect supported by the National Science Foundation (Grant BNS - 851156). The first phase of field work took place in the summer of 1985. I wish to thank here Bonny Tibbitts for her assistance in collecting, transcribing and translating texts and to acknowledge my sponsors in Nicaragua, the Center of Investigation and Documentation of the Atlantic Coast (CIDCA) and the Ministry of Culture. The text and a very short version of the grammatical notes is to appear in the second issue of WANI, Una revista de la Costa Atlantica, a publication of CIDCA.

2. The plural marker is not strictly a noun suffix in that it may appear as the last element of an NP when the noun is followed by a determiner or a quantifier:

kiikna saina dut
man other pl
'these other men'

3. analut is itself a form composed of ana+lut where the second element is the plural marker. The third person personal pronoun is related to the third person possessive plural found in:

(18) anunglaing siiru u
their knife with
'with their knife'

4. Direct elicitation from this speaker did not reveal a clear pattern of use, a fact which may be interpreted as one possible feature of language loss. Miss Nora Rigby is best characterized as a semi-speaker of Rama; she learned Rama as a second language at age 8 and has not had a chance to use it consistently for many years now. She is the only fluent speaker of Rama living on the island of Rama Cay where she settled about fifteen years ago.

5. At least one other suffixed subordinator has been identified in the language. It is -su 'because'. Other aspect/modality markers not present in this text have been identified in the language, (-bang ?, -uwing 'habitual ?', -batingi 'going to/want'). Although their exact meaning has not been established yet, they are mentioned here because they all share the structural characteristic of being suffixed to the verb, which must be in its embedded form if it has one. There is also a postposed auxiliary verb for the progressive, a compound form of the aakar 'be': bakar/bakuru in 'present/past progressive'.

6. In addition to the process of vowel deletion, the speech of Miss Nora exhibited a fairly widespread process of metathesis, although in a number of instances it is not possible to say whether the process at work is vowel deletion or metathesis:

pulki/apluk	'pick (oysters)'	yamalku/amlak	'pick (coconut')
ingaktit/yangtki	'cut'	barka/bakar	'but'

Some of these alternations may be reflexes of a tendency of Proto-Chibchan to delete vowels in a C1VC2V pattern where C2 is a liquid, with possible additional metathesis (Constenla, personal communication).

7. The generalization would be the following mirror image formulation:

VO , Prep. , N Gen., N Adj.
OV , Postp., Gen. N, Adj. N

See Comrie 1981 for a discussion of Greenberg 1968, Lehmann 1973, Venneman 1972, Hawkins 1973.

8. There is one exception in the text to the generalization that time / conditional clauses closed by -ka precede the main clause to be found in (12). It is the only exception to the clear style of chaining of Miss Nora's speech, both in English and in Rama, in which texts proceed by repeats: "X did Y. And when X had done Y-ka ,..." It is possible that the sentence cut is wrong, in that the next sentence should be interpreted as an interjection made for the benefit of the ignorant field worker, a characteristic of the fragmentation of an oral text.

9. The text counts offered in this paper must remain of course mostly of a suggestive nature, considering the small number of tokens involved. Convincing evidence for any of the proposals to be articulated below would require text counts on a much larger body of texts, although this sample text contains good examples of the phenomena discussed.

10. The text counts presented here do not take into consideration the presence of oblique full NPs. If full oblique NPs are included the tendency still holds:

0 NP	1 NP	2 NP	3 NP
16 : 28%	37: 63%	5 : 8%	1 : 1%

If we combine again all the clauses with one NP or less, the proportions are close: 91% vs 9%.

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