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RICE UNIVERSITY

A Grammar of Wayana

by

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A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

Doctor of Philosophy

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ABSTRACT

A Grammar of Wayana

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Petronila da Silva Tavares

Wayâna is a Cariban language spoken in northern Brazil, southern Surinam, and southern French Guyâna by a total of around 900 speakers.

The previous descriptive works on this language consist of a few vocabulary lists, a short grammar sketch, and a few articles on specific topics. This dissertation contributes to the documentation of the language by providing a more detailed description of most aspects of the Wayâna grammar. The chapters range from a description of the language's phonological aspects to the morphology of the speech classes and the basic syntactic patterns. In addition, the appendixes include a collection of texts and a vocabulary list.

Patterns discussed in this work include those of syllable reduction, in which words may undergo reduction of entire syllables; differences in the possessibility of nouns, which depend on semantic and cultural considerations; the complex system of spatial postpositions distinguishing features such as the position, path or goal of a trajector vis-à-vis its landmark; and a split ergative system in which no motivation for the split has yet been explained.

The data used in this work were obtained through elicitation sessions and from recordings of spoken narratives.

To the living, my mother and siblings my husband and daughter

to the dead, my father Aimole Wayâna Mohto Wayâna

and for the One above all.

ACKNOWLEDGEMENTS

Museu Parense Emílio Goeldi, 1991. Belem, Brazil. Denny More and his students recorded an elicitation session with Kujupë, a now deceased Wayâna speaker. Here, a little from the tape:

```
'What is the word for stone?' (Denny Moore)
'Ah! "stone", isn't it ?...[təpu]' (Kujupë)
```

This piece is significant for me for showing the first Wayâna word I heard elicited by my first teacher in linguistics. At that time, Dr. Denny Moore, a real passionated on the indigenous languages of Brazil, led a team of young trainees in linguistics at the Museu Paraense Emílio Goeldi, both as a teacher and as a friend. No one forgets the heated after hours discussions on grammatical themes at his kitchen table while hungrily waiting for his famous pork chops; or the times in which he had our medical bills paid for. He was my first teacher in descriptive linguistics. It was him who told me about this "marvelous" language that I ought to take a look at. That was the beginning of everything.

Soon after I started transcribing those Wayâna tapes, two new additions were made to the Museu. The first to come was Sérgio Meira, a remarkable young intellect with a sometimes obnoxious tendency to precision (he was the one who pointed out to me that I had mistranscribed the Wayâna word for stone as [topu] instead of the "obvious" [təpu]). Meira turned out to be a caring colleague and friend who assisted me so substantially and in so many ways throughout the years (*Ipok manai*, *Sesu*!). His superb Tiriyó grammar was a great aid in the writing of this dissertation.

The second addition was Dr. Spike Gildea who came to the Museu with a project that sharply improved the knowledge on the grammar of northern Cariban languages (specially Tiriyó, Wayâna and Kaxuyana). And it was under the tutoring of Dr. Gildea that my education on Cariban grammar as well as my first field trip to the land of the Wayâna took off. His honesty and immediate connection with the Wayâna people made the way easier in my field work. Through the time of my first elicitation sessions with a Wayâna speaker to the last adjustments of the final draft of my dissertation, Dr. Gildea was more than a teacher, he was a true friend; all and all, his assistance was from the very beginning an indispensable condition for this dissertation to happen.

From my time as a student at the Department of Linguistics at Rice University, there were two very special people I wish to thank. First, my recognition goes to Dr. Philip Davis, who understood my background, and supported me solidly not only through the writing of this work, but through my years in grad school. Second, my recognition goes to Ursula Keierleber, our former department coordinator, for the many times she told me 'Don't worry, you'll do it' (Yes, Ursula. I took it to heart, and I did it!)

My gratitude also goes to Rita Riley, our department coordinator, for the several times she helped me meet deadlines.

As for the research developed among the Wayâna, I wish first to thank this people who amazed me not only with such a beautiful language, but also with the emotional and logistic support while in the villages. My acknowledgments go to all those who shared their language with me, specially Anakali, Pikala, Alinawale, Paji, Vitorino, Enapïn, Enemha, Patuli, Melekuku, Tuwalinke, Aligo, Majani, Mohto, Samole, Mikili, Pipinë, Francisco, Marieta, Jane, Walema, Nataniel, Ikuwa, Kuwaiman, Tintin, Olisimë, Noki,

Mopelu, Sapotoli, Malisa, Renato, Alvina, Pilasisi, Salomao, Aimole, Konsa, Dora, Tadeu, Polonildo, Rubi, Alitana, Araiba, Ohpokaka, Jamae, Apekuwa, Bete, Ocimar, Malikë, Kajapo, Siuka, Paulinho Apalai, Elani, Trindade, among others.

Thanks to the late Aimole ("um rei que reinava como um ser comum")*, to Joao Aranha and to all the Wayâna leaders whose posture confirms the truthfulness of the words of a German expeditioner to the Amazon region (Jari river):

"Eles tem uma andadura soberba, livre, aprumada. A plenitude dos cabelos em cima dos ombros, flechas e arcos na mão, esses homens pernudos e de ombros largos oferecem um espetáculo maravilhoso. Eles são de uma estatura mais esguia [...] com mãos, dedos e pés esbeltos, bonitos, os rostos esquinados, antes quadrangulares do que ovais". (Cristóvão Lins, 1997)

(They have a regal, free, and portly stroll. The plentitude of their hair over the shoulders, arrow and bowls in hand, these long-legged and large-shouldered men offer a marvelous spectacle. They are of a more slender stature [...] with slim hands, fingers and feet, beautiful, the rectilinear faces, rather quadrangular than oval)

And I want to thank the FUNAI (Brazilian Bureau for Indigenous Affairs) representatives for giving me administrative support (and friendship) in my many trips to the Paru River (Obrigada Josinete, Moisés e Rosinha).

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And I want to thank the Wayâna researchers. This grammar was written primarily for you. For you who take upon yourself the responsibility of studying this remarkable people and their language. If you can use this grammar in any way, help to fix its so many flaws, and advance the knowledge of Wayâna grammar, you will have this work justified. May it be another step in the ladder. I want to thank, in particular, Walter Jackson whose

work of only 35 pages proved to be solidly thorough and reliable. I have come back to it so many times since the beginning of my work that, at this point, I can say I know it by heart. My gratitude also goes to Eliane Camargo and Lucia Hussak van Velthem for sharing the same ideal.

Finally, I thank you my beloved husband, friend and partner of so much. Thank you, Jeff, for your love and support (and for gathering wood in the forests of the Wayâna land so we could have our fire). And thank you for taking care of our beautiful child, a maravilhosa Ana Maria Mira, while I wrote.

*Lyrics by Martinho da Vila, Rodolfo, Graúna. Samba enredo da Vila Isabel, 1980.

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ABBREVIATIONS

Attributive'

ExistentAvlz 'Existential adverbializer'

Avlz 'Verbalizer' Nmlz 'Nominalizer'

ModAvlz 'Modifier Adverbilizer' GenModAvlz 'Generic Modifier' SpcModAvlz 'Specific Modifier'

Defect 'Defective'
Prtc 'Participle'
Neg 'Negative'
Intens 'Intensifier'

Red1 'Reduplication type 1'
Red2 'Reduplication type 2'
Red3 'Reduplication type 3'
Red4 'Reduplication type 4'
Red5 'Reduplication type 5'

Pro 'Pronoun'
Pss 'Possessive'
1 'First person'
2 'Second person'

1+2 'First person dual inclusive'
1+3 'First person exclusive'

3 'Third person'

3Refl. 'Third person reflexive'

Cll 'Collective'
Dvl 'Devaluative'

AgtNmlz 'Agent Nominalizer'
ObjNmlz 'Object Nominalizer'
PatModNmlz 'Patient Modifier'
PstAgt 'Past Agent'

CircnstNmlz' 'Circumstantial Nominalizer'
SpcEvnttNmlz 'Specific Event Nominalizer'
GenEvnttNmlz 'Generic Event Nominalizer'
PtNmlz 'Participant Nominalizer'
PrivNmlz 'Privative Nominalizer'

Priv 'Privative'

RecprN 'Reciprocal on nouns'

Recpr 'Reciprocal on postpositions'

Erg 'Ergative'
Dem 'Demonstrative'
Inan 'Inanimate'
Anm 'Animate'
Prox 'Proximal'
Med 'Medial'

Dist 'Distal'

snd 'sound symbolic word'

NPst 'Non Past' HabPst 'Habitual Past' RecPst 'Recent Past'

ImpAblat 'Imperative Ablative'
HortAbl 'Hortatory Ablative'
DistPst 'Distant Past'

ProxImp 'Proximal Imperative' ImpAllat 'Imperative Allative' ProxHort 'Proximal Hortatory' HortAllat 'Hortatory Allative' PurpMot 'Purpose of Motion'

Vrblz 'Verbalizer'

PrivVrblz 'Privative Verbalizer'
PpNVrblz 'Postpositional Verbalizer'

'Transitive' Trans N 'Noun' 'Attributive' Attr Det 'Detransitivizer' Compl 'Completive' **Prfct** 'Perfective' Resumpt 'Resumptive' Necessit 'Necessitative'

Pcoll 'Postpositional Collective'

Comit
Inclus
Inclus
'Inclusive'
Des
'Desiderative'
OblAgt
Oblique Agent'
Ben
'Benefactive'
Dat
'Dative'
Instr
'Instrument'

AvIntens 'Adverbial Intensifier'

() Indicate the text source of the example. \$kkk

1. INTRODUCTION.

1.1. The Wayâna People. The term *Wayâna* is the people's autodenomination and the name of their language; it also means 'people,' 'person.' Other denominations referring to this group and their language are found in the literature: Wayâna, Ayana, Wajana, Oayana, Oyana, Urucuiana, Upurui, and Roucouyenne. (cf. van Velthem1998:31, van Velthem 1995:28, Gildea 1998:14). The differences in the terms mostly reflect the different nationalities of researchers and explorers and of some different ethnic groups incorporated to the Wayâna, as for instance the Upului, who joined this group in the last century (Rauschert-Alenani,1981).

The Wayâna villages are located in an area divided by the borders of three countries, Surinam, French Guyana, and Brazil. On the Brazilian side, their settlements are located along the shores of the Paru river, in Almeirim, Pará. Grimes (1998) counted 950 Wayâna people, and now *Ethnologue* counts a total of 750 in all the three countries. In the census carried out by the Brazilian Bureau of Indigenous Affairs (FUNAI), the Wayâna population on the Brazilian side was of 160 individuals (pc.); the Language Museum gives the number of Wayâna in French territory as 200, and *Ethnologue* reports a population of 397 in Surinam (see below for the electronic addresses of *Ethnologue* and the Language Museum).

Formerly, the Wayâna territory included settlements on the middle and upper Paru river and the upper Jari river, on the now Brazilian side, and settlements on the Litani river and the Palomeu river on the Surinam side (van Velthem 1995:32, Barbosa & Morgado 2003). The inhabitants of the upper Jari now live on the Lawa and Litani rivers in French Guyana. Today, the Wayâna share part of their traditional geographic location

with other Carib groups, particularly the Aparai and also the Tiriyó. The association with the Aparai has continued through several generations, through intermarriage bonds which continue today. This and the shared territory on the Paru River have led the two peoples to often be referred to by a composite label, the Wayâna-Aparai, but van Velthem (1995:29) points to important cultural differences between the two groups, in addition to the language.

The contact with foreigners dates from centuries ago; the Wayâna were first known in the 17th century in the north and in the 19th century on the Brazilian side by Brazilian traders and explorers, traders from Surinam, and the *meikolo*, among others (van Velthem,1998:37). In the second half of the 20th century, American missionaries (from 1962 to 1976) and Brazilian institutions established themselves along the Paru River. The Brazilian Air Force installed a landing site in 1970, and the FUNAI established a headquarters in 1973 (Morgado & Camargo, 1996). Today, external presence in the area includes Brazilian Portuguese teachers, FUNAI representatives, and medical personnel. In 1995, the Apitu (the Association of the Indigenous People of the Tumucumaque Reservation) was created, having as one of its main roles that of administrating the health system.

Today, the Aparai (or Bona) village is the most cosmopolitan in the region, with Wayana, Aparai and Tiriyó communities, and is the most assisted by Brazilian institutions with a nucleus for nurses, teachers, etc.

Our field trips were all carried out along the Paru River, and we discuss the situation of the Wayâna people in this area as it was in our last trip in 2001.

1.2. The economy. The Wayâna are primarily hunters, gatherers and farmers. Thus, their diet consists primarily of what they gather from the forest, rivers, and their farms. However, other aliments bought in the cities, especially Macapá (AP), are also used daily, for instance, salt, sugar, and coffee. A variety of other goods are acquired in the cities, including cloth, sandals, soap, toothpaste, batteries, flashlights, matches, gasoline for motor boats, etc.

Selling arterafts locally or via Apitu is a common way of obtaining cash. Many individuals, however, have steady salaries as employees of one of the institutions operating in the village, the Apitu, Dsei, Nei and Funai, working as language teachers, health workers, boat pilots, radio operators, etc.

1.3. The sociolinguistic situation on the Paru River. Aparai enjoys the status of a *lingua franca* along the Paru River, being the language of the school and of the church (Koehn & Koehn 1986:33, Camargo 1995:4, Camargo & Morgado 1996:4). Therefore, it is more common than Wayâna in the region. Most villages speak only Aparai as their daily language, with the exceptional case of Suwisuwimïn, a Wayâna village, and perhaps Murei (in our only visit of approximately one hour, Wayana was the only language we heard).

Though Suwisuwimin is considered to be a purely Wayâna village by the people of the Paru River, Wayâna is not the only language used there. As we observed in the course of our several visits, Aparai was spoken in everyday conversations by several speakers. We frequently observed dialogs among members of every family being held in

Aparai. Nevertheless, children and men talk to each other mostly in Wayâna. Also, in all major group activities, Wayâna is the language used: men playing sports, Wayâna teachers speaking to Wayâna children in school, the Christian service (though the New Testament was read in Aparai, it was explained to the group in Wayana), and participants in social gatherings in the village hall, the *tukusipan*, all use Wayâna. Thus, in Suwisuwimïn both languages are spoken daily, but with Wayâna dominance.

An almost contrary situation is found in Bona, a predominantly Aparai village (thus, its official name 'Aparai'), with a Wayâna leader and residents from three ethnic groups: Aparai, Wayana and Tiriyó. Aparai is the language most spoken there, but also some Tiriyó, Wayâna, and Portuguese, the latter in everyday communication with the Brazilian personnel, are used.

Two families in Bona spoke Wayana at home. One member of one of the two families was said by everyone to speak Wayâna only: 'She doesn't lose her language,' we were told. We took that to be an indication of a good understanding of Wayâna by the members of the community, since the speaker in question could communicate very well with everyone. On our last trip (2001), however, we witnessed for the first time that speaker addressing others in Aparai.

In sum, the situation of the Wayâna language is not very healthy along the Paru River, as we contacted no monolingual speakers; the few families that speak Wayâna daily also speak other languages, especially Aparai. The reverse situation is not true for Aparai, whose speakers sometimes cannot speak Wayâna fluently.

1.4. Previous research on Wayâna. Until 1994, all the work on the Wayâna language consisted of a few word lists and some morphological descriptions in the works of J. Crevaux (1882), DeGoeje (1909, 1946), and a description of basic morphological patterns by Walter Jackson (1972).

After 1994, when Eliane Camargo and Petronila Tavares started their respective fieldwork, the situation improved enormously. The contributions of Camargo are now many: Compositions in Wayâna (1995), a small lexicon with clinical terms (together with Paula Morgado and Wayâna-Aparai speakers, 1996), a basic phonological description (1996), an essay about bilingualism among the Wayâna and Aparai (1997a), a Wayâna-Portuguese lexicon with about 3,000 entries (1997b), a description of nominal possession (1999), a description of the grammar of the postpositions *pëk* and *ja* (2000a), a description of word order (2000b), a description of the lexical similarities between Wayâna and Aparai (2001a), three Wayâna texts (2001b), a description of food classification (2002), and a description of lexical categories and word formation (in press), among others.

Other contributions are a dissertation by Jean Chapuis with a lexicon (1998) and some articles by Tavares, on the so called 'active/stative' system (1994), on the Wayâna fricatives (1999a), and on the distribution of discourse information in narratives (1999b) (the latter two are manuscripts).

1.5. The database for the present study. Most of the data used for the present study were gathered in my several field trips to the Paru River (for 5 months in 1994, 1 month

in 1995, 2 months in 1997, 2 months in 2001, and 2 months in 2002) and also in numerous occasions in meetings with Wayâna speakers in Belém and Macapá (from 1992 to 2002).

About 80% of the data gathered have been entered in an electronic format, and approximately half have been parsed with the Shoebox program. Most examples in the database constitute elicited data, but as much as possible we have tried to illustrate our arguments in the chapters with examples found in texts. Twenty-six transcribed of various lengths and genres (personal narratives, reports, descriptions, mythical/historical narratives, etc) are entered and parsed with the Shoebox program in a total of approximately 3,000 clauses.

1.6. The scope of this work. This dissertation aims to contribute to the understanding of the basic facts of the Wayâna grammar, most particularly the morphological aspect which forms the bulk of the language's grammar. Thus, we describe all the major speech classes undergoing morphological processes, nouns, verbs, postpositions and adverbs, in more detail than some other aspects of the grammar. Particles, which constitute a class lacking any morphology, are briefly commented on chapter 3.

In addition to the morphological aspects of the language, we present a chapter on the language's phonological aspects (Chapter 2) and a chapter on its basic syntactic patterns (Chapter 8).

It is our intention in this work to be as descriptive as possible. Therefore we seldom adopt a more elaborate theoretical view, even though we recognize that our approach has its pitfalls. We hope that future researchers will fill this gap. For now, we

intend to describe the patterns we have extracted from our data in a most clear way. The reader may disagree with our parsing, labeling, or account of some pattern in the data, but we hope our description is clear enough so she may understand the pattern itself and come to her own conclusions about the most appropriate theoretical analysis.

- 1.7. Wayâna on the Web. Some information on the Wayâna people is found online in the following sites:
 - i) Povos Indígenas do Brasil: the site on Wayâna/Aparai organized by Grabriel Barbosa e Paula Morgado. This is one of the most complete sites about the history and social-economic organization of the Wayâna people. www.socioambiental.org/website/pib/epi/aparai/aparai.shtm.
 - ii) Ethnologue.com, which includes some information on the population and some socio-economic factors, and the existing SIL bibliography. www.ethnologue.com/show_language.asp?code=WAY
 - iii) *The New Testament in Wayâna*, contributed by Wolfgang Kuhl: www.christusrex.org/www1/pater/JPN-wayana.html
 - iv) The Language Museum, offering a sample of the language, the 'Our Father' from the New Testament translation. www.language-museum.com/w/wayana.php
 - v) Povos indigenas do Brazil: photos of cultural activities among the Wayâna.
 www.socioambiental.org/website/pib/epi/aparai/hist.shtm

2. PHONOLOGY.

Wayâna's segmental inventory is relatively small. It contains only nine distinctive consonants (three stops, two nasals, one fricative, one liquid, and two glides) and seven distinctive vowels. Complexity arises in determining the phonemic representation of some segments, in some language-wide morphophonological processes such as syllable reduction, and in phonological processes occurring in consonant clusters. The most interesting aspects of Wayâna phonology are:

- (i) The phonological status of the fricatives. Though there are several fricative sounds in the language, and all may be phonetic realizations of a single underlying segment (/h/ (2.3.3), morphophonological alternations show that some cases of fricatives occurring in coda position are better analyzed as realizations of underlying stops undergoing a dissimilation rule (/stop+stop/→[fricative+stop] (2.3.2.3).
- (ii) Syllable reduction. Wayâna, like many other Cariban languages, presents a pervasive phenomenon of syllable reduction that causes words to have entire syllables lost in some environments but preserved in others (2.3.1).
- (iii) Phonological processes in consonant clusters: assimilation of voice and nasality, dissimilation, and denasalization (2.3.2).
- (iv) The ambiguous phonemic status of glides /j/ and /w/ as opposed to vowels /i/ and /u/: different phonological processes may treat glides sometimes as consonantal and sometimes as non-consonantal segments (2.3.6).
- (v) Stress. Wayâna seems to be of rare typological type: none of the well-known phonetic correlates of stress (vowel quality, length, pitch and intensity) consistently isolate any particular syllable in a given word. Words in isolation have typical intonation

patterns, but these are the same as those found in whole sentences: pitch falls or rises (in questions, lists, etc.) at the end of an utterance (2.4.1).

- (vi) Sound Symbolic words. the Wayâna lexicon is formed by two distinctive categories, the main vocabulary and the sound symbolic words, each presenting some unique phonological features: the fricatives and [ŋ] behave distinctively in the two groups (2.6).
- **2.1. The segments.** There are nine distinctive consonants and seven distinctive vowels in Wayâna.¹
- **2.1.1.** Vowels. There are seven distinctive vowels in Wayana, as shown in Table 1:

Table 1 Wayâna Distinctive Vowels

-	front	central	back
high	i	i	u
mid	e	Э	o
low _		a	

The back vowels /u/ and /o/ are articulated with the lips unrounded. They are therefore different from the vowels found in English or French in which the lips are rounded and prominent. After stops, these sounds are realized just as a burst of air coming out of one side of the lips. When these vowels are adjacent to [w], they are sometimes pronounced with slightly rounded lips.

¹ Examples are presented phonetically according to the IPA chart revised to 1989 (Ladefoged 1993). Stress is not indicated in the examples since it is not distinctive in the language.

The mid vowels /e/ and /o/ present both open and closed realizations: $[e]\sim[\epsilon]$ and $[o]\sim[o]$, respectively, with the latter being the most frequent pronunciation.

```
[c]\sim[o]
                  [e]~[ε]
1)
         a. [murej]
                              [mu[ej]
                                            'fruit (kd.)'
                                                                 a. [ijoj]
                                                                                    [ijoj]
                                                                                             'lizard (kd.)'
         b. [sijew]
                              [∫ijɛw]
                                            'rodent (sp.)'
                                                                 b. [pom]
                                                                                             'lay down'
                                                                                    [mcq]
         c. [kəreekom] ~
                              [kəreekom]
                                            'our liver'
                                                                 c. [kopə]
                                                                                    [kopə]
                                                                                             'rain'
         d. [pepta]
                                             'big'
                              [pepta]
         e. [ahnep]
                              [ahnep]
                                            'peanut'
```

In many instances, the vowel seems to be articulated somewhere between [e] and [ɛ], a sound which I represent here as [ɛ̞]: [ahnɛ̞p] 'peanut'.

A kind of vowel harmony usually accompanies this variation: a vowel is usually found either the open or the closed variant in an entire word.

	[o]	[c]	
2)	a. [∫okoŗõm]	b.[hɔkərəm]	'to paddle'
	c. [koko]	d. [kɔkɔ]	'night'
	e. [kɨnoʈo]	f. [kɨnɔʈɔ]	'macaw'2
	[e]	[ε]	
3)	a. [tenteten]	b. [tɛ̃tɛtɛ̃n]	'to bounce'
•	c. [wewe]	d. [wewe]	'wood'
	e. [eţekɨt]	f. [ετεkɨt]	'wound'
	g. [pepta]	h. [pɛpta]	'big'
	i. [ahnep]	j. [ahnεp]	'peanut'

There also exists a tendency for certain words to be realized either by their open or closed version: [kujɛɛkõm] 'our mother', [kujekõm] 'our teeth'. The adverbializer t-V-(h)e is almost always realized as [hɛ], the collective suffix -kom(o) is almost always realized as [kõm], etc.

² Some speakers say that it must be pronounced [kunoτo], and that [kɨnoτo] is a pronounciation borrowed from Aparai. In any case, [kɨnoτo] is the most common pronunciation among Wayâna speakers in the Paru River.

In a few words, neutralization between /o/ and /u/ is observed (cf. minimal pairs in Table 2).

- 4) a. [hamut] ~ [hamot] 'sand'
 - b. [tamo] ~ [tamu] 'grandfather (vocative)'
 - c. [wakuwa] ~ [wakowa] 'I washed it'

2.1.1.1. Minimal pairs. Table 2 shows minimal pairs for vowel quality.

Table 2

Minimal Pairs for Vowel Quality

/i/	/e/	/ \\ \\ \	/ <u>i</u> /	/a/	/o/	/u/
				_		
[wipohnəp]						
'I think of						
him/her/it'						
		-				
		1				
		F'' 73	•			
		1				ĺ
	[ipi]`hill'					
	6. 7		F: 13 (1 111)			
		1 -	1			
	, -	1 '		•		
	-			F 7611.1	4	
				_		
		[pore] 'to arrive'	[1 *		
[upo] clouming	[OK1] Grink		1			
[ihmo]'egg'	[enutnil'nit'	fural'lit'			[hopu]	İ
	1					
'someone killed						
(it)'	i iicau	DICAU		DI CAU	'spoon'	
	[wipohnəp] 'I think of him/her/it' [wepohnəp] 'I missed him/her/it' [ipi] 'her brother' [əpi] 'your brother' [ipi] 'my brother' [ipi] 'hill' [ipi] 'her brother' [ipa] 'his/her shoulder blade' [upi] 'someone found it' [upo] 'clothing'	[wipohnəp] 'I think of him/her/it' [wepohnəp] 'I missed him/her/it' [ipi] 'her brother' [api] 'your brother' [ipi]'my [api]'tree' brother' [ipi]'hill' [ipi]'her brother' [ipi]'hill' [ipi]'his/her shoulder blade' [upi]'someone found it' [upo] 'clothing' [ihmo] 'someone killed [wipohnəp] 'I think (sp.)' [apewe] 'plant (sp.)' [apewe] 'plant (sp.)' [apewe] 'plant (sp.)' [apewe] 'fly' [apewe] 'fly' [ipi]'tree' [ipi]'hill' [ipi]'hill' [ipi]'his/ [upi]'someone [ski]'pet, family' [oki]'drink'	[wipohnəp] 'I think of him/her/it' [wepohnəp] 'I missed him/her/it' [ipi] 'her brother' [api] 'your brother' [ipi]'my [ipi]'hill' [ipi]'hill' [ipi]'her brother' [ipi]'hill' [ipi]'hil' [ipi]'his/her brother' [ipa]'his/her brother' [ipa]'his/her brother' [ipa]'his/her brother' [ipa]'his/her shoulder blade' [ka]'fish' [upi]'someone found it' [upo] 'clothing' [ihmo]'egg' [uhmo] 'someone killed 'question (dual)' [kunma]'we (dual)' [kunma] 'our pan' [pare] 'fish (sp.)' [pore] 'to arrive' [upo] 'clothing' [uputpi]'his head' bread'	[wipohnəp] 'I think of him/her/it' [wepohnəp] 'I missed him/her/it' [ipi] 'her brother' 'plant (sp.)' [əpi] 'your brother' 'fly' [ipi]'hill' [ipi]'hill' [ipi]'her brother' [ipi]'hill' [ipi]'her brother' (ipi]'hill' [ipi]'her brother' (ipi]'hill' [ipi]'hill' [ipi]'his/her brother' (ipa]'his/her brother' (ipa]'his/her brother' [ipa]'his/her [ipa]'someone [ipa]'fish (sp.)'	[wipohnəp] 'I think of him/her/it' [wepohnəp] 'I missed him/her/it' [ipi] 'her brother' [ipi]'my brother' [ipi]'hill' [ipi]'her brother' [ipi]'hill' [ipi]'her brother' [ipi]'hill' [ipi]'her brother' [ipi]'hill' [ipi]'her brother' [ipi]'his/her shoulder blade' [wastion particle' [ka]'fish' pan' [upi]'someone found it' [upo] 'clothing' [wish]' [upo] 'clothing' [ipi]'pit' [uhmo] [uhmo] [uputpi]'his head' [upu]'manioc bread' "H/She bathed "Shanda "All a "All a	[wipohnəp] 'I think of him/her/it' [wepohnəp] 'I missed him/her/it' [ipi] 'her brother' 'plant (sp.)' [əpi] 'your brother' 'fly' [ipi] 'my [epi] 'tree' [ipi] 'hill' [ipi] 'her brother' [ipi] 'hill' [ipi] 'her brother' [ipi] 'hill' [ipi] 'her brother' [ipa] 'his/her shoulder blade' [ka] 'fish' particle' [ka] 'fish' particle' [ka] 'fish (sp.)' [ipa] 'his/her shoulder blade' [ka] 'fish' [upi] 'someone found it' [upo] 'clothing' [oki] 'drink' [upo] 'clothing' [immo] 'egg' [uhmo] [uhmo] [uhmo] [uputpi] 'his [uputpi] 'h

Though there are underlying long vowels in some words, there are no minimal pairs attesting the distinction between underlyingly long and short vowels. Examples of underlying long vowels are shown in (5). Other cases result from a process of syllable reduction that leads to compensatory lengthening: in examples (6), (7), and (8) the last

syllable of the root, μ or μ , is lost in all environments but retained when the root is followed by a CCV morpheme (cf. 2.3.1.2). (A morpheme boundary is represented by '-', and a word boundary is represented by '+'.)

```
5)
         a. /w-i-paraaka/
                             \rightarrow
                                   [wiparaaka]
                                                  'I spread something'
         b. /w-i-naməəpa/ →
                                   [winaməəpa] 'I adorned someone'
         c. /w-i-puuma/
                                   [wipuuma]
                                                  'I blew on it'
         d. /onookone/
                             \rightarrow
                                   [onookone]
                                                  'damp'
         e. /toloome/
                             \rightarrow
                                   [toloome]
                                                  'swolen'
                             \rightarrow
         f. /maakaru/
                                   [maakaru]
                                                  'bird sp.'
         g. /kərupuukə/
                                   [kərupuukə] 'beetle (sp.)'
6)
         u/uu
                                               CCV morpheme
         a. [pupu]
                       'foot'
                                               [pupupsik]
                                                                  'small foot'
         b. [puupu]
                       'river turtle'
                                                                  'small turtle'
                                               [puuputupsik]
                       'idiot'
                                                                  'there is no idiot'
         c. [aru]
                                               [arumna]
         d. [aruu]
                       'porcupine'
                                               [arurumna]
                                                                  'there is no porcupine'
7)
         e/ee
         a. [etaa]
                       'his kidney'
                                               [etarimna]
                                                                  'without his kidney'
         b. [eetaa]
                       'hole'
                                               [eetarimna]
                                                                  'without a hole'
         c. [ije]
                       'his mother'
                                               [ijemna]
                                                                  'without a mother'
         d. [ijee]
                       'his tooth'
                                               [ijerimna]
                                                                  'without teeth'
8)
         a/aa
         g. [ipa]
                       'his shoulder blade'
                                                                  'his small shoulder blade'
                                               [ipap∫ik]
         h. [ipaa]
                       'his granddaughter'
                                                                  'his small granddaughter'
                                               [ipatip∫ik]
```

2.1.1.2. Distribution of vowels. All vowels can occur word initially, medially and finally as syllable nuclei (in syllable types V., VC., CV., CVC.).

In co-occurrence with consonants, there are gaps and asymmetries in the distribution of certain vowels. For instance, it is infrequent to find certain consonants co-occurring with /i/: /ki/ is rare, /ti/ almost non-existent and, surface occurrences of /ji/ and /wu/ are not attested.

Vowels are affected by only three phonological phenomena: nasalization from adjacent nasal consonants, the backing of /a/, and the devoicing of [i].³

2.1.1.3. Backing of /a/. The low back vowel /a/ presents a still more back pronunciation when preceding word-final [k]. The realized vowel, [a], is similar to that of the English word *father* (Tavares, 1993):

```
9) a. [uφpαk] 'long time ago' b. [juphαk] 'lit' c. [papαk] 'father' d. [akawαk] 'bird (sp.)' e. [məhαk] 'mosquito' f. [akaτephαk] 'far' g. [τapαk] 'fish (sp.)'
```

The same pattern is observed word medially, when in slow speech there is a pause between the syllables:

```
a. [ʃaktɨkɨp]~[ʃ αk.tɨ.kɨp] 'cut'b. [aktuφpɔj]~[αk.tuφ.pɔj] 'up river'
```

It is easy to determine that [a] is not a allophone of /ə/ because [ə], which realizes the latter can also occur preceding word-final /k/.

```
11) a. [napək] 'potato (sp.)'
b. [ekaṛək] 'take it!'
c. [itək] 'go!'
d. [kunmək] 'he came (long ago)'
e. [wanək] 'ant sp.'
f. [tuṛək] 'fly.sp'
```

-

³ Camargo (1996:119) presents differences in vowel quality (lax vs. tense) related to stress. Such patterns were not attested in our data.

2.1.1.4. Nasalized vowels. Vowels are nasalized in normal speech when they are followed by nasal consonants in coda position (Camargo 1996:118). Elsewhere, the oral realization occurs.

```
12)
        (C)VN.CV...
                                               (C)V.NV/NV.CV
        a. [emna]
                      'we (excl.)'
                                               e. [amat]
                                                            'branch'
       b. [kunmak] 'he came (long ago)'
                                                           'finish'
                                               f. [kama]
       c. [pampira] 'paper'
                                               g. [mure]
                                                           'child'
       d. [imna]
                      'there is not'
                                               h. [mamak] 'mother (vocative)'
```

There exist exceptions to this pattern. In a few words, vowels receive a light nasalization in word-final position, even when not adjacent to a nasal consonant. This nasalization disappears in slow speech. I represent this nasality with [~], though it is not as strong as that in the examples described above.⁴

13)	NORMAL SPEECH	SLOW SPEECH	
•	a. [pa∫inã]	[pa∫ina]	'fish (sp.)'
	b. [wajanã]	[wajana]	'people'
	c. [huwã]	[huwa]	'as such'
	d. [akenã]	[akena]	'first'
	e. [pɨʈamɨ̃]	[pɨʈamɨ]	'hand-made piece used to climb palm trees'

In the speech of at least one speaker (Xamore, Bona village), there are words with strongly nasalized word-final vowels. This nasalization is a vestige of the possessive suffix $-n(u)^5$ as in example (14), which is preserved with -kom(o), the collective suffix (14 d), and a CCV particle. Other speakers preserve the possessive suffix in all environments.⁶

Xamore		Other speakers		
14)	a. [pɨtaj]	'heel'	a. [pɨtaj]	'heel'

⁴ Some speakers have corrected me when I pronounced these words with nasal vowels, as in Portuguese, and insist that they are not nasalized. For some speakers [huwã] 'as such' is nasalized even in slow speech.

⁵ In the examples, -n(u) 'possessive suffix' undergoes vowel deletion: $/nu/\rightarrow [n]/_\#$ or $/_-CV$. The same happens to -kom(o) 'collective'. The deletion of segments is thoroughly discussed in section 2.3.1.

⁶ In the examples, [i] represents a syllable nucleus and [j] a coda, as in [ip.ta.ī] 'my heel' and [pitaj] 'heel', respectively. This convention will be used throughout this chapter.

b. [iptaî] 'my heel' b. [iptaîn] 'my heel'
c. [iptajnupʃik] 'my small heel' c. [iptajnupʃik] 'my small heel'
d. [kuptainkom] 'our heel' d. [kuptainkom] 'our heel'

2.1.1.5. Devoicing of /i/. The voiced [i] and voiceless [i] realizations of /i/ are in free variation between [s] and a voiceless consonant.

15) a. [maʃike] ~ [maʃike] 'so'
b. [akiʃita] ~ [akiʃita] 'rheumatism'
c. [təʃikom] ~ [təʃikom] 'their being'

2.1.2. Consonants. There are nine distinctive consonants in the main vocabulary of Wayâna.

Table 3
Wayâna Distinctive Consonants

•	labial	alveolar	retroflex	velar	palatal	glottal
stop	p	t		k		
fricative						h
nasal	m	n				
lateral flap			τ			
glides	w				j	

2.1.2.1. Minimal and analogous pairs. Table 4 presents minimal and analogous pairs for consonants. ('1' stands for first person, '2' for second, and '3' for third.)

Table 4

<u>Minimal and Analogous Pairs for Consonants</u>

	/p/	/t/	/k/	/m/	/n/	/h/	/t/	/j/	/w/
/p/								-	
/t/	[ətap] 'in a hammock' [ətat] 'hammock'								
/k/	[pa] 'surprise particle' [ka] 'quest. particle'	[patu] 'pan' [paku] 'fish sp.'							
/m/	[aʃiphɑk] 'hot' [aʃimhɑk] 'fast'	[tan] 'here (spc.)' [man] '3 rd copula'	[wətupoka] '1 undressed' [wətupoma] '1 dressed'						
/n/	[epi] 'tree' [eni] 'container'	[ʃit] 'vein' [ʃin] 'this here'	[koko] 'night' [kono] 'brother-in- law'	[weme] '1 ate fruit' [wene] '1 saw 3'					
/h/	[hupu] 'spoon' [huhu] 'milk'	[itu] 'jungle' [iʃu] 'shrimp' ⁷	[ke] 'instrumental' [he] 'desiderative'	[mit] 'artery' [ʃit] 'vain'	[nene]'3 saw 3' [hene] '1+2 saw 3'				
/t/	[ipi]'her young brother' [iţi]'sloth'	[tom] 'burn' [tom] 'collective particle'	[ka] 'question particle' [[a]'negative particle'	[me] 'like' [[e] 'intensifier'	[pəne] 'piranha' [pəge] 'fish sp.'	[he]'desiderative' [re] 'intensifier'			
/j/	[epu] 'pole' [eju] 'light'	[ja[a] 'floor' [ta[a] 'how'	[ka] 'question particle' [ja] 'dative'	[mene] '2 saw 3' [jene] '3 saw 1'	[nene]'3 saw 3' [jene]'3 saw 1'	[hene] '1+2 saw 3' [jene] '3 saw 1'	[[[] 'intensifier' [][] 'mother'		
/w/	[pəne] 'piranha' [wəne] '1 bit 3'	[tatə] 'here (global)' [watə] '1 took 3'	[kapu] 'sky' [wapu] 'palm tree sp.'	[mene] '2 saw 3' [wene] '1 saw 3'	[nene]'1 saw 3' [wene]'1 saw 3'	[hene] 'We saw 3' [wene] 'I saw 3'	[[ε[ε]'bat' [wewe]'wood'	[jene] '3 saw 1' [wene] '1 saw 3'	

⁷ Minimal pairs for /h/ vs. /k/, /h/ vs. /m/ show [ʃ] as a realization of /h/, which palatalizes before [i] (cf. section 2.1.2.2.2).

The table above shows an interesting minimal pair for /p/ and /m/: [aʃiphɑk] 'hot' and [aʃimhɑk] 'fast'. Both forms consist of a root, [aʃi], and an adverbializer suffix (which has two allomorphs, -phak(a) and -mhak(a)). The root by itself does not suffice to indicate a difference in meaning between 'fast' and 'hot', so the distinction is shown by the selection of different allomorphs of a same suffix (other examples showing the same phenomenon are [jumhɑk] 'burning' and [juphɑk] 'lit'.)

As for consonant length, there exists at least one example with a long consonant.

This is a unique form since no other geminates are attested elsewhere in the corpus.

However, it is possible that this is a mis-transcription of an Aparai word with a glottal stop:

2.1.2.2. Free variation and complementary distribution of consonants. Consonants that are in free variation and complementary distribution are discussed in this section, with the exception of coda consonants in consonant clusters (all the phonological processes and constraints taking place in consonant clusters are discussed in section 2.3.2).

- **2.1.2.2.1. Stops.** With the exception of coda stops in consonant clusters (2.3.2), stops are affected by three processes: free variation between released/unreleased realizations wordfinally, aspiration, and the palatalization of /t/.8
- Free variation. Word-finally there exists free variation between released and unreleased stops. The release seems more frequent in /k/ than in /p/ and /t/.

```
17)
        a. [kuhelap]
                               [kuhelap]
                                            'manioc stem'
                                            'someone brought it (long ago)'
        b. [kunenep]
                               [kunenep]
        c. [ətat]
                               [ptat]
                                            'hammock'
        d. [amat]
                               [amat]
                                            'branch'
        e. [ipək]
                                            'occupied with it'
                               [ipək]
        f. [warak]
                               [warak]
                                            'fish sp.'
```

• Aspiration. Stops present a characteristic burst of air resulting from their release in onset position.

```
18) a. [p amp ita] 'paper'
b. [p up ot] 'body hair'
c. [t oto] 'bird'
d. [t ot] 'they'
e. [k ok o] 'night'
f. [k op of other italians ital
```

• Palatalization of /t/ before /i/ (cf. Camargo 1996:130). At the moment, there exist only five morphemes presenting a /ti/ sequence in my database. These are always realized with a slight palatalization of /t/: ⁹

```
19)
                                           [pant<sup>f</sup>i]
                                                                  'male vestment'
           a. /panti/
                                           [t<sup>f</sup>int<sup>f</sup>in]
           b./tintin/
                                                                  'noise of metal hitting'
                                           [jarepatajet<sup>5</sup>i]
                                                                  'fish sp.'
           c. /arepatajeti/ →
                                           [magwat<sup>f</sup>iri]
           d./makwatiri/ →
                                                                  'fish sp.'
                                           [t<sup>f</sup>iman]
           e./timanu/
                                                                  'insect sp.'
```

⁸ Camargo (1996:131) has described the glottalization of /k/ (/k/→?/_#.) as one of the distributional facts about consonants in Wayâna. Such data are not attested in our corpus.

⁹ This does not happen across word boundary: [onot.içjan] 'new fruit (kd.)'.

The only stop undergoing free variation is /t/. Free variation between $[t^{j}i]$ and [ti] is found in the dialect of some speakers (cf. Camargo 1996:130 for a similar pattern). The phenomenon is restricted to only a few words.

20) a. [ateptite]
$$\sim$$
 [ateptite] 'small leaf' b. [tijephe] \sim [t^fijephe] 'feverish'

2.1.2.2.2. Fricatives. Wayâna presents only one distinctive fricative: /h/. Its pattern of realization is, however, complex. In order to understand it completely, it is necessary to discuss the realization of /h/ both morpheme-internally and in morphophonological alternations at morphemic boundaries. Thus, the distribution of /h/ in both environments is discussed in this section. The allophones of /h/ are found in Table 5.

Table 5
Realizations of /h/ 11

·	postalveolar	glottal
voiceless	S	h

Morpheme internally, the postalveolar voiceless fricative $[\int]^{12}$ and the glottal fricative [h] occur in complementary distribution as follows: $[\int]$ is realized before [i] and between [i] or [t] and a vowel. [h] is realized word-initially before a vowel (except [i])

¹⁰ As with other consonants, the realizations of /h/ in coda position are not discussed in this section (cf. section 2.3.3 for a discussion on the underlying status of fricatives in this environment). See also section 2..6 for a discussion on the realizations of fricatives in sound symbolic words.

¹¹ In two words with [s] were attested in the speech of young speakers: [apsik], [isandajan]. In both, [s] freely alternates with [ʃ].

¹² The postalveolar [ʃ] is normally a slightly more fronted sound than that in English word *shoot*. Very rarely it may be articulated very close to [s], but it is still a different sound from [s] in European languages such as Portuguese, French and English.

and word medially between vowels and between a consonant and a vowel (as a convention, I use V to represent vowels other than [i]).

Table 6 summarizes the distribution of fricatives morpheme-internally.

Table 6
Distribution of fricatives - Complementary distribution

S	h
i_V t_	#V VV CV

Across morpheme and word boundaries, /h/ has a similar distribution. At morpheme boundary, with the exception of one type of environment, described in the next paragraph, /h/ palatalizes as expected: /__i or /-_i (the examples in (26) are verbs inflected with the proximal hortatory suffix -(h)i, /i-__V (examples in (27), (28), and (29) are respectively a postposition, a noun, and a verb inflected by personal prefixes) and /t-__(the examples in (30) show a verb inflected by suffixes starting in /h/). (The examples in (26 a) and (26 c) show /h/ deletion, a phenomenon discussed in section 2.3.1.3.)

¹³ The suffix -tfe derives adverbials from verbs: [uwə] 'to kill' => [uwə-tfe] 'good to kill' (7.2.1.2.1.)

¹⁴ One speaker did not accepted the palatalized realization of /h/ in this environment.

```
26)
         a. /h-ene-hi/
                                            [henej]
                                                            'Let's see'
                                      \rightarrow
         b./h-ene-hi+hku/
                                            [hene [ihku]
                                                            'Oh, let's see'
                                      \rightarrow
         c. /h-i-panakma-hi/
                                           [[ipananmai] 'Let's listen'
                                           [henesihku]
         d./h-i-panakma-hi+hku/ →
                                                            'Oh, let's see'
27)
         a./marija+he/
                                      \rightarrow
                                            [marijahe]
                                                            'S/he wants a knife'
         b./i-he/
                                           [ihe]
                                                            'S/he/it desires me'
                                      \rightarrow
         c./ə-he/
                                           [əhɛ]
                                                            'S/he/it desires you'
         d./i-he/
                                                            'S/he/it desires S/he/it'
                                           [ise]
28)
         a./hapa/
                                                            'machete'
                                            [hapa]
         b./i-hapa-nu/
                                           [ihapan]
                                                            'my machete'
                                      \rightarrow
         c. /ə-hapa-nu/
                                            [əhapan]
                                                            'your machete'
         d./i-hapa-nu/
                                           [i∫apan]
                                                            'his machete'
29)
         a. /tə-e-hahka-he/
                                     \rightarrow
                                            [təehahkai]
                                                            'torn apart'
          b./m-i-hahka/
                                            [mi(ahka]
                                                            'you tore it apart'
30)
          a. /n-utati/
                                            [nutat]
                                                            'he got lost'
                                            [tutat∫ε]
          b./t-utati-he/
                                                            'lost'
          c./t-utati-he-amo/
                                            [tutat[amo]
                                                            'the lost ones'
                                                            'in order to get lost'
          d./utati-he/
                                            [enat[\varepsilon]
```

Unexpectedly, when in a suffix, /h/ does not undergo palatalization conditioned by a preceding /i/.

```
31) a. /t-eţemi-he/ → [təţɛmihε] 'sang' (*tεţɛmiʃε)
b. /t-upi-he-amo/ → [tupihamo] 'the ones that look for' (*təpiʃamo)
c. /eţemi-he/ → [εţɛmihε] 'in order to sing' (*εţemiʃε)
```

/h/ undergoes palatalization conditioned by /t/ at word boundary, but only in the desiderative postposition (32).¹⁵ No palatalization conditioned by /i/ occurs across word boundaries (33).

```
32) a. /onoto/ → [onot] 'fruit (sp.)'
b. /onoto+he/ → [onot∫ε] 'S/he/it wants onot'
c. /onoto+haponu/ → [onothapon] 'like onot' (*onot∫apon)
d. /onoto+herə/ → [onotherə] 'this onot' (*onot∫erə)
```

¹⁵ No other postposition starting in /h/ has been found. Thus, it is not possible to test if this kind of palatalization is restricted only to the desiderative postposition.

```
33) a./napi+he+wahe/ → [napihewai] 'I want potato' (*napiſewai)
b./napi+haponu/ → [napihapon] 'like potato' (*napiſapon)
c./eremi+he/ → [ɛrɛmihɛ] 'wanting to sing' (*ɛrɛmiſɛ)
```

The lack of contrast between the fricatives, the complementary distribution, and the alternation across morpheme and word boundaries point to the existence of only one underlying segment. There are at least three possibilities for representing this segment: /h/ and /ʃ/ are both surface sounds, and Camargo (1996:130) suggests /s/ as a more abstract alternation. I propose /h/ as the underlying segment because it allows the simplest and most motivated representation: [ʃ] results from palatalization (/t/ and /i/ can both be represented as coronals triggering the palatalization (cf. Kenstowicz 1994:464 for a discussion on front vowels behaving as coronals and on the association between sounds such as [t] and [i] in palatalization rules)), and [h] is the default realization of /h/.

This general pattern (with the exceptions that /i/ does not trigger palatalization across a morpheme boundary in suffixal position¹⁶ or across a word boundary, and that the palatalization triggered by /t/ at a word boundary is restricted only to the desiderative postposition) can be easily represented in the form of a phonemic rule:

34)
$$/h/ \rightarrow [\int]$$
 /_i / i __V / t __ / elsewhere.

It is pertinent to look at another potential representation of the data. If we were to represent the underlying segment as $/\int$, we would lose the generalization that the occurrence of [\int] is motivated in the environments adjacent to [i] and [t]. In addition, we would need to motivate the change from $/\int$ to [h] word initially, intervocalically, and

between a consonant and a vowel, environments that do not present themselves as a natural class.

Another possibility would be to propose /s/ as the underlying form (cf. Camargo 1996). I chose not to adopt this analysis because, though it assumes a common phonological change (cf. Ferguson 1990 for a discussion on the historical trend turning [s]'s into [h]'s) and in fact reflects the history of Wayâna (Tavares 1999a), it creates unnecessary complexity in the synchronic representation of fricatives in the modern language. With /s/ as the underlying form, it would be necessary to derive the realization of *all* fricatives, including [h] and [ʃ], by rules. In addition, it posits as the underlying segment a form that is virtually lacking from my data, namely, [s] itself.¹⁷

To summarize, distributional evidence leads to the conclusion that the fricatives [ʃ] and [h] are allophones of a single phoneme; both economy and naturalness require that this phoneme be identified as /h/. 18

2.1.2.2.3. Nasals. There exists only one phonological process affecting nasals (other than the process of denasalization in coda nasals (2.3.2.4)). Following [i] and [j], /n/

¹⁶ Roots ending in /h/ and suffixes starting in /i/ are unattested. Thus, it is not possible to test if /i/ would cause palatalization in the __-i context in suffixal position.

¹⁷ The Camargo analysis is based on data different from mine. She cites one example presenting [s]: [kasi'ri] 'manioc beer' (1996:132). This pronunciation is found among the Wayâna of the Maroni river. Jackson (1972:48), also reports the existence of [s] in the Wayâna of the Tapanahonij river, which according to him "varies freely between alveolar and alveopalatal points of articulation". In the speech of the Wayâna of the Paru River in Brazil, where I have conducted my fieldwork, [s] is basically not found (but see footnote 11). It is interesting, however, that [s] both in Jackson's and Camargo's data occurs only adjacent to [i] and after [t] (with the exception of some sound symbolic words in Jackson's data). Thus, it presents the same distribution as [ʃ] in my data. According to my hypothesis of how fricatives changed through time, this was precisely the only environment where *s was preserved to later palatalize and become [ʃ]. Elsewhere it turned into [h] (with the exception of sound symbolic words (section 2.6).)

18 There exist a few exceptions to the patterns presented here: [kaʃo] 'pan, box' (a clear borrowing from Portuguese caixa 'box'), and few names for animals which are of onomatopoeic origin (2.6).

normally presents a more palatal realization (Camargo 1996:119), being articulated between the alveolar ridge and the hard palate. This phenomenon takes place mainly in normal speech, being absent in slow speech. Nevertheless, some free variation is also observed in normal speech (35).

```
NORMAL SPEECH
                                  SLOW SPEECH
35)
                                  b. [i.nuu]
                                                'his tongue'
        a. [inuu]
                                               '3rd anaphoric pronoun'
        c. [iɲərə]
                                  [eʒ.en.i] .b
                                  f. [pəj.nə.kə] 'wild pig'
        e. [pəjnəkə]
        g. [morojnə]
                                  h. [mo.roj.no] 'then'
        i. [inene]
                                 j. [inene]
                                               'ant (sp.)'
```

2.1.2.2.4. The retroflex lateral flap. Jackson (1972:48) describes this segment as 'a reverse flap with lateral opening'. The articulation of /r/ can also sometimes come close to a flap ([r]) or to a lateral ([l]). All these articulations can occur freely in all contexts, but the reverse/retroflex is by far the most common pronunciation. 19

```
36) a. [tumtara] 'get on board (a canoe)'
b. [eglot] 'cloud'
c. [pampira] 'paper'
d. [walə] 'I took it'
```

2.1.2.2.5. Glides. The labial glide /w/ is usually not rounded, though sometimes it is slightly so. It alternates freely with the bilabial fricative $[\beta]$ before front vowels (maybe as a result of hardening in an onset position):

```
37) a.[\betaipana\beta] ~ [wipana\beta] 'I heard it' b.[\betae\betae] ~ [wewe] 'wood'.20 c.[\betaene] ~ [wene] 'I saw S/he/it'
```

¹⁹ Jackson states that 'after e and i there tends to be less lateral opening' (1972:48). Though Jackson's phonetic description of the segment is accurate, I was not able to confirm his distributional correlations. This may be due to dialectal variation, since Jackson worked with the Wayâna of Surinam.

²⁰ This word can be also realized as $[\beta \epsilon \beta \epsilon]$ or $[w \epsilon w \epsilon]$, since $[\epsilon]$ and $[\epsilon]$ may also occur in free variation.

```
d. [erewe] \sim [ere\( \beta \)] 'wild fruit (kd.)'
```

Hardening may occur also in the articulation of the patalal /j/. In syllabic onset, [j] and [j³] (still a palatal glide, but with some friction) alternate. This occurs mostly before [u] and [e]. (The alternation is more common in the speech of speakers of the Mulei and Bona villages.)

```
38) a. [jukiñi] \sim [j³ukiñi] 'otter' b. [juwej] \sim [j³uwej] 'I am going to dance' c. [jɛpɛ] \sim [j³epɛ] 'my friend' d. [jewanə] \sim [j³ewanə] 'my heart'
```

- **2.2. Phonotactics.** There are several restrictions on the co-occurrence of segments in Wayâna. The most pervasive is the restriction on co-occurrence of identical elements: no geminates, no sequences of homorganic consonants (with the exception of glides) ever occur root internally, etc.
- **2.2.1.** Syllable types. There are four syllable types in Wayâna, *V.* (only word initially, but cf. section 2.2.3 for exceptions), *VC.*, *CV.*, and *CVC*. No tautosyllabic consonant clusters have been attested.
- 39) V. a. /i.ri/ 'sloth', b. /e.pi/ 'tree', c. /i.pi/ 'mountain', d. /ə.mə/ 'you', e. /a.pə/ 'his arm', f. /o.mo/ 'hand', g. /u.ru/ 'bread'.
- 40) VC. a. /em.na/ 'we (exclusive)', b. /ek.τοτɨ/ 'cloud', c. /ap.hi.kɨ/ 'little, small', d. /em.ʃi.τɨ/ 'his daughter', f. /ihkə/ 'skin-worm'.
- a. /pa.pa.ko/ 'father', b. /pi.tə/ 'first', c. /ko.re/ 'many, a lot', d. /mu.re/ 'child', e. /hapa/ 'machete', f. /pu.pu/ 'foot', g. /ju.ju/ 'boil', h. /wa.pu/ 'fruit (kd.)', i. /we.we/ 'wood'.
- 42) CVC. a. /pəj.nə.kə/ 'wild pig', b. /mam.ha.ti/ 'bird (sp.)', c. /tut.pə/ 'vase', d. /mun.pə/ 'rat', e. /tak.wa/ 'how are you?', f. /i.joj/ 'lizard (sp.)'

All consonants can occur as syllabic onsets. However, not all consonants cooccur with all vowels or with equal frequency: /hə/ and /jə/ occur in only one example each ([təpəhəməj] 'got again' and [jə] 'S/he/it bit me'), /ti/ occurs in only five examples, see (20) above, /ki/ is rare, and /ji/ and /wu/ never occur. As syllabic coda, the restrictions are greater: /t/ never occurs as coda, and /h/ never occurs as coda word-finally.

2.2.2. Consonant clusters. All consonants show a defective distribution in the clusters: not all consonants occur as coda, and some clusters never happen. Sequences of consonants are always heterosyllabic. ²¹

The attested consonant clusters are:

- 43) [pt], [pk], [ph]
 a. [aptaw] 'when/if', b. [epku] 'sap', c. [asiphak] 'hot'.
- 44) [tp], [tk]
 a. [ʃitpɨrɨ] 'old, ugly', b. [iwatkɨ] 'his tale'
- (kp], [kt]a. [takpiţem] 'red', b. [aktuφpoj] 'up river'.
- (hp], [ht], [hk], [hm], [hr], [hj], [hw]
 a. [aṭahpa] 'parakeet', b. [ihpe] 'there is', c. [tehte] 'to cut wood fast', d. [mahkaw] 'bird (sp.)',
 e. [waṭuhma] 'young woman', f. [əmehna] 'wrist', g. [tɨhwə] 'different', h.[ihjan] 'new'.
- (mp], [mt], [mk], [mn], [mj]
 a. [pampiţa] 'paper', b. [əninomtaţa] 'not leaving', c. [imko] 'gills', d. [eṭamhak] 'afraid',
 e. [əmna] 'nose', f. [amomjai] 'I will take it'.
- 48) [np], [nt], [nk], [nm], [nw]
 a. [munpə] 'rat', b. [wantak] 'remember', c. [tɨnkɨj] 'fan', d. [kunmə] 'we (dual)',
 e. [ipɨnwə] 'caring for'.
- (jp], [jt], [jk], [jm], [jm]
 a. [wajpu] 'cotton anklet', b. [apukujta] 'paddle', c. [kajkuj] jaguar, dog', d. [eτajmak] 'wait!',
 e.[awajna] 'dawn'.
- 50) [wt]
 a. [əwtə] 'land, place', b. [tiwtiw] 'bird sp.'

Some sounds, [n], [b], [g], occur only in clusters:

²¹ Some morphemes start in consonant clusters (/ptipe/ 'tiny', pʃik 'small, little', /mna/ 'without', /hpe/ 'existential', etc.) but all must resyllabify:

[/]are+ptire/ → /a.rep.ti.re/ 'tiny leaf' /omo+psiki/ → /o.mop.ti.re/ 'small hand'

- 51) [bj], [ŋm], [ŋn], [gt], [gw]
 - a. [wibja] 'noise in the canopy, b. [tenme] 'heavy',
 - c. [tiponnem] 'perfumed', d. [egrot] 'cloud', e. [wipetugwa] 'eu guardei'.

As seen above (2.1.2.2.2), [\int] is a realization of h/ which palatalizes after h/.

52) [tʃ] [enetʃe] 'good to see'.

Table 7 summarizes the distribution of consonants in clusters.

Table 7

<u>Morpheme-internal Consonant Clusters</u>

_	p	t	k	h	m	n	τ	j ²²	w
р	Ø	pt	pk	ph	Ø	Ø	Ø	bj	Ø
t	tp	Ø	tk	t∫	Ø	Ø	Ø	Ø	Ø
k	kp	kt	Ø	Ø	ŋm	ŋn	gt	Ø	gw
h	hp	ht	hk	Ø	hm	hn	hτ	hj	hw
m	mp	mt	mk	mh	Ø	mn	Ø	mj	Ø
n	np	nt	nk	Ø	nm	Ø	Ø	Ø	nw
τ	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø
j	jp	jt	jk	jh	jm	jn	Ø	Ø	Ø
w	Ø	wt	Ø	Ø	Ø	Ø	Ø	Ø	Ø

Some conclusions can be made on the basis of the clusters found in table 7:

- No identical segments occur in clusters: this can be understood as a constraint disallowing geminates in the language.
- Some segments do not occur as coda: /t/ never occurs as coda, and /w/ occurs in that position only in [əwtə] 'place', which alternates with [əətə]). /t/ almost fails to occur at all in consonant clusters: only [gt] and [ht] are found.
 - /h/ occurs as coda preceding all consonants, except in a geminate (/hh/) cluster.

 $^{^{22}}$ The glides /j/ and /w/ are listed here as consonants. See section 2.3.6, however, for a discussion on their ambiguous phonological status.

• Besides the restrictions on geminates, and on /t/ and /w/ codas, there are many other non-attested consonant clusters, *[pm], *[pn], *[pt], *[pi], *[pw], *[tm], *[tn], *[tt], *[tj], *[tw], *[kh], *[km], *[kt], *[kt], *[kw], *[mt], *[mw], *[nh], *[nt], *[nj], *[jt], *[jw] (/th/→[tf]).

Looking at the clusters that do occur, it is possible to infer that some gaps seem to be due to phonological processes taking place in the clusters. The sounds [b], [g], and [ŋ] occur only in the clusters [bj], [gt], [gw], [ŋm], [ŋn]. At the same time, the clusters *[pj], *[kt], *[kw], *[km], and *[kn] never occur. The most plausible explanation is that two phonological processes take place in the clusters: assimilation of voice and nasality.

- [stop] \rightarrow [+voice]/_[+sonorant] /pj/, /kt/, /kw/ \rightarrow [bj], [gt], [gw], respectively. [-nasal]
- 54) $[\text{stop}] \rightarrow [+\text{nasal}]/[+\text{nasal}]$ /km/ and /kn/ $\rightarrow [\eta m]$ and $[\eta n]$, respectively.

Obviously, this has implications for other clusters with stops in coda position: the non-attested *[pn] and *[tm] do not occur because stops undergo the two rules in 53 and 54, being thus realized as [mn], [nm].

Some clusters that could be affected by nasalization and voicing as */pm/, */pt/
*/pw/, */tt/, */tj/, */tw/, and */kj/, represent a gap: *[mm], *[bt], *[bw], *[dt], *[dj],
*[dw], and *[gj] never occur within a morpheme. Other clusters such as */kh/, */mt/,
*/mw/, */nr/, */nj/, */jt/, and */jw/ also never occur.

The hypothesis regarding the assimilation of voice and nasalizality is corroborated by morphophonological alternations: In consonant clusters, voiceless stops assimilate voice and nasality from following onset consonants across morpheme and word

boundaries. The non-attested consonant clusters with coda stops, */pm/, */pt/, */pw/, */tt/, */tj/, */tw/ and */kj/ do occur at morpheme and word-boundaries. The outcomes of such clusters are discussed in section 2.3.2.

2.2.3. Vowel sequences. In general, no sequences of two vowels are found either in the same syllable (with the exception of long vowels), or in different syllables (thus, $*V_iV_j$, $*V_iV_j$, $*V_iV_j$, $*V_iV_i$). The only exceptions are V.u and V.i sequences. Examples are presented here both in normal and slow speech: in slow speech it becomes clear that the contiguous vowels are in two different syllables. ²⁴

	NORMAL SPEECH	SLOW SPEECH	
55)	a. [ɨu]	b. [i.u]	'I'
	c. [əu]	d. [ə.u]	'eye'
	e. [kumau]	f. [ku.ma.u]	'papaya'
	g. [wei]	h. [we.i]	'drought'
	i. [ai]	j. [a.i]	'let's go'
	k. [jau]	l. [ja.u]	'wolf-like animal'
	m. [jou]	n. [jo.u]	'black jaguar'

These cases are also exceptional in terms of distribution: [i] and [u] are the only vowels that occur as onsetless syllables word-medially (otherwise, V. syllables occur only word-initially). While (C)V.i and (C)V.u are frequent, no other (C)V.V sequences are found in the data (cf. 2.2.1).

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²³ See, however, some heterosylabic vowel sequences arising from phonological processes: reduplication in section 2.3.7 and of /w/ deletion in section 2.5.1. See also section 2.3.1.1.3 for cases of fusion in vowel sequences at morpheme boundary: $V_1, V_2 \rightarrow V_2$.

²⁴ It is important to note that a distinction between Vj./Vw. versus V.i/V.u exists, as demonstrated by words such as [ku.ma.u] 'papaya' in comparison to [ka.paw] (*ka.pa.u) 'deer', and [we.i] in opposition to [i.joj] (*ijo.i).

**ji*, as well as **ij*. and **uw*. are unattested. ²⁵ The lack of co-occurrence of glides with their equivalent vowels may be accounted for by postulating the existence of a constraint disallowing identical adjacent segments. Both [w] and [u] and [j] and [i] present respectively the same matrix of phonological features, with the first element of each pair occupying a position at the edge of a syllable while the second occupies the nucleus (Kenstowicz 1994:37). ²⁶ Thus, adjacent /w/ and /u/, and /j/ and /i/, similarly to geminates, may not occur in the language. The result is that onset glides get deleted (cf. section 2.5.1 on /w/ deletion):

Figure 1
Deletion of Onset Glides

Unlike the constraint against geminates, the constraint disallowing *wu and *ji is restricted to the domain of the syllable. Note that since i.jV and u.wV are allowed, but *ij. and *uw are not, the constraint must operate within the syllable: (examples are presented as produced in slow speech):

[mawuu] 'cotton' [kurəwumna] 'there's no owl (sp.)' [ijojihpe] 'there is lizard (sp.)'

In the speech of at least one consultant (Nataniel, born in Surinam), it is possible to detect [wu] and [ji] in just a few words. In all [w] and [j] freely alternate with \varnothing : (all other examples coming from Nataniel, however, follow the pattern laid out above).

²⁶ See section 2.3.6 for morphophonological alternations that provide more evidence on the close relationship between [w] and [u], and [j] and [i].

- **2.3. Morphophonology.** Several phonological processes take place at morpheme boundaries. These include the process of syllable reduction (which is comprised of several other phonological processes such as vowel deletion, /t/ deletion, /h/ deletion, and the several processes taking place in consonant clusters); the reduplication processes in verbal words; the allomorphic alternations in verbal and nominal roots (ablaut); the voicing of consonants before vowels across word boundary, etc.
- **2.3.1.** Syllable reduction. The erosion of segments is a common phenomenon in the Cariban family. The whole process, which may result in the deletion of entire syllables, starts with vowel deletion, followed by the weakening and consequent loss of the onset consonant: $CV.CV \rightarrow CVC \rightarrow CV$. (see Gildea 1995 for a discussion on the Cariban family as a whole).

Gildea (1995) has reconstructed (V)CV(CV)... as the canonical syllabic template for words in Proto-Carib. This suggests that all cases of final consonants or CC clusters in the daughter languages result from vowel deletion: *V.CV.CV→ V.CVC, *V.CV.→ VC.CV. In Wayâna both patterns are attested in morphophonological alternations:

In the examples above, vowel deletion took place at the edge of the root affecting either the first or the last vowel, or both. It is clear that vowel deletion took place

historically root-medially as well. In such cases, however, the deleted vowel cannot be recovered, because the affected forms do not present allomorphs preserving it:²⁷

```
58)
        a. /w-apkərə/
                        → [wapkərə]
                                         'I broke it'
        b./w-aktama/
                       → [wagṛama]
                                         'I put it up'
        c. /w-i-təhpəma/ → [witəhpəma] 'I stretched it'
        d./w-i-wipka/
                       → [wiwipka]
                                         'I scratched it'
        e./momta/
                        → [mõmta]
                                         'house (kd.)'
                                         'foam'
        f. /akto/
                        → [agro]
                        → [əmna]
                                         'nose'
        g. /əmna/
```

Morphonological alternations show that besides vowels, consonants can also delete. This is the case of /h/ and / τ / (the latter leaving behind, in some cases, compensatory lengthening). There exist, thus, three syllable reducing processes in the language:

1) *Vowel deletion*. Vowels are deleted in specific environments, leaving behind a consonant that resyllabifies as a coda: (C)V.CV \rightarrow (C)VC.

2) /r/ deletion. After vowel deletion, due to the no coda /r/ constraint, /r/ is deleted resulting (sometimes) in compensatory lengthening: (C)V. $rV \rightarrow$ (C)VV.

3) /h/ deletion. In some morphemes, /h/ is deleted preceding /i/ and /e/ word-finally: (C)V.hi→(C)Vi. Here instead of the vowel, the onset consonant is deleted.

²⁷ Almost all forms in the language end in a vowel that is deleted in the surface allomorph. The only exception seems to be forms ending in glides. See section 2.3.6 for a discussion on the behavior of glide segments.

Table 8 below shows the contexts where these elements are lost and those where they are preserved. Roughly, long allomorphs occur preceding CCV particles or suffixes while short allomorphs occur word-finally, before -VC(V) suffixes and, in the case of verbs, preceding -CV suffixes. The non-verbal forms are nouns, adverbs, postpositions, and particles. (Examples are presented with person marking prefixes, n- '3A3O', w- '1 A3O', i-/j- '1st person', i- '3rd person', the discontinuous morpheme t- -ke 'having', the suffixes -ta 'Possessive Inchoative Verbalizer', -k(a) 'Proximal Imperative', - $tp\ddot{e}$ 'Devaluative', -kom(a) 'Collective', -ama 'Resumptive', -me 'Attributive', -mna 'without', and the particle pfik 'little, small').

Table 8
Long and Short Allomorphs

		#	CV suffix/particle	VC(V) suffix	C/CCV Particle/suffix
words					
Non-verbal	PHONEMIC		<u></u>		
forms	REPRESENTATION		SHORT ALLOMORPH		FULL ALLOMORPH
V	/jumi/ 'father'	[i-jum] 'his father'	[ijumta] 'I have a	-	[ɨju mɨ mna]
			father'		'without my father'
(/սյ/) /ɨյ/	/piti/ 'brother'	[ipii] 'my brother'	[tipiike] 'with a	[ɨpiʈam] 'my	[ipi ri mna] 'withou
			brother'	brothers'	a brother'
/h/	/wəţihi/ 'woman'	[wəţɨj] 'woman'	[wətɨjme] 'like a	[wəriham] 'women'	[wəri∫imna]
			woman'		'without a woman'
Verbs					
v	/enepi/ 'bring'	[n-enep] '3-	[enepkə] 'bring-3!'	-	[nenepip∫ik] '3-
		brought-3'			brought-3 a little'
/h/	/əpəhi/ 'grab, get'	[napəj] '3-got-3'	[apəjkə] 'get-3!'	[təpəhəməj]	[wapəʃip∫ik] '1-
				'1-got-3 again'	got-3 a little'
		FULL ALLOMORPH			
/tu/ (/tɨ/)	/ewa ru / 'burn'	[newaru] '3-	[ewaakə] 'burn-3!'	-	wewa ru p∫ik '1-
0 (0)	-	burned-3'			burned-3 a little'
Suffixes					
V	-n(u) 'possessive'	[ipakoron] 'my	[ipakoronkom]		[ipakoronutpi] 'his
•	, , , , , , , , , , , , , , , , , , ,	house'	'their house'		old house'
	}				110404
/tɨ/	-ti 'possessive'	[jeree] 'my liver'	[ireekom] 'their	-	[ererinpi] 'his
C		,	liver'		former liver'
/h/	-he 'purpose of motion'	[enej] 'go in order	-	-	[enehepsik] 'go in
		to see'			order to see a little'

Full allomorphs occur whenever followed by CCV particles or suffixes, a surface -C suffix (63 c), and by some morphemes beginning with CV: $-p\dot{m}(\dot{\imath})$ 'Privative Nominalizer' (with $-m\dot{m}$ allomorph), -pa 'Negative' and the postposition ja 'Dative.'

```
-n(u) and -t(t) Possessive'
62)
        a. /paruru/
                           → [paru]
                                               'banana'
        b./paruru-mna/
                            → [parurumna]
                                               'no bananas'
                           → [iparurun]
                                               'my banana'
        c. /i-paruru-nu/
                                               'wound'
        d./əreki/
                           → [ərek]
        e./j-ereki-ti/
                           → [jerekit]
                                               'my wound'
          -pin(i)
63)
        a. /ipoke/
                            → [ipok]
                                               'good'
        b./ipoke-pini/
                           → [ipokepin]
                                               'good'
                                               'greedy'
        c./əməmhakə/
                           → [əməmhak]
        d./əməmhakə-pɨnɨ/ → [əməmhakəpɨn] 'the one with no greed'
          -ra
64)
        a. /ipoke/
                            \rightarrow [ipok]
                                               'good'
        b./ipoke-ra/
                            → [ipokera]
                                               'good'
        c. /əməmhakə/
                            → [əməmhak]
                                               'greedy'
        d./əməmhakə-ra/
                           → [əməmhakəra]
                                               'the one with no greed'
          ja
65)
        a./pakako/
                            → [papak]
                                               'father'
        b./papako+ja/
                            → [papakoja]
                                               'by/to my father'
        c./imepini/
                            → [imepin]
                                               'another'
        d. /imepini+ja/
                            → [imepinija]
                                               'by/to another'
```

The following sections discuss the main aspects of syllable reduction (vowel deletion, /h/ deletion, and /r/ deletion) with relation to non-verbal and verbal morphemes.

2.3.1.1. Vowel deletion.

2.3.1.1.1. Non-verbal Forms. Discussion of these forms will be arranged according to the number of syllables in the morpheme. Thus, one syllable morphemes are presented first, two syllable morphemes are presented second, and so on.

2.3.1.1.1.1. Forms with one syllable. In all forms consisting of one syllable, only suffixes undergo vowel deletion. Suffixes ending in /i/ and /u/ all have their vowels deleted (examples (66)); ²⁸ As for suffixes ending with /ə/, some undergo vowel deletion, such as the proximal imperative $-k(\vartheta)$ and the imperative allative $-k\vartheta(\vartheta)$ (examples (67)), but $-n\vartheta$ 'Generic Event Nominalizer' does not (cf. section 4.2.2.1.2); suffixes ending in /e/ only delete the vowel if preceded by /k/ (examples (68)).

Other suffixes that delete their vowel are -m(t) 'Participant Nominalizer', -n(u) 'Possessive', -w(t) 'in', t(t) 'Possessive', -k(t) 'into.'

```
66)
        a./t-ə-he-mi-mna/
                                   → [təhemimna]
                                                         'without food'
        b./t-ə-he-mi/
                                   → [t-ə-hem]
                                                         'food'
        c. /i-pakoro-nu-mna/
                                   → [ipakoronumna]
                                                         'I don't have my house'
                                   → [ipakoron]
                                                         'my house'
        d./i-pakoro-nu/
        e. /i-pakoro-nu+ta-wə/
                                   → [ipakorontaw]
                                                         'inside my house'
        f. i-pakoro-nu+ta-wə+phiki/ → [ipakorontawəpʃik] 'to my house also'
                                   → [ipakoron]
                                                         'my house'
        g./i-pakoro-nu/
                                   → [epitimna]
                                                         'without his medicine'
        h./epi-ti-mna/
                                   → [epit]
                                                         'his medicine'
        i. /epi-ti/
```

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²⁸ This includes the possessive suffix /ri/. This however is discussed in section 2.3.1.2.

Two suffixes, the proximal imperative -k(a) and the discontinuous t-N-k(e) 'having' (with allomorphs t-N-te and t-N-je), have a long and a short allomorph. The imperative suffix undergoes vowel deletion everywhere, except when preceded by consonants and high vowels (example (67)) (cf. section 2.3.1.1.1.1 for examples with -t-N-te and with stems undergoing -t-N-te allomorph -t-N-te of the adverbializer undergoes vowel deletion that is lexically conditioned:

```
67)
          a. /enepi-kə/
                                        [enepkə]
                                                            'bring!'
                              \rightarrow
          b. /epi-kə/
                                                            'bathe!'
                                        [epikə]
         c. /əməmi-kə/
                              \rightarrow
                                                            'enter!'
                                        [əməmkə]
                              \rightarrow
          d. /eremi-kə/
                                        [eremikə]
                                                            'sing!'
          e. /atuku-ka/
                                        [ətuhkə]
                                                            'eat!'
         f. /ku-mereka-kə/ →
                                        [kumerekak]
                                                            'touch me!'
          g. /ene-kə/
                                        [enek]
                                                            'look at it!'
         h. /oko-kə/
                                        [okok]
                                                            'cut it!'
         i. /arə-kə/
                                        [açək]
                                                            'take it!
                              \rightarrow
         j. /apəhi-kə/
                                        [apəjkə]
                                                            'get it!'
         k. /ehi-kə/
                              \rightarrow
                                                            'be!'
                                        [eikə]
68)
          a. /ti-pakoro-ke/ →
                                        [tipakoroke]
                                                            '(someone) has a house'
                                                            '(someone) has a clay bowl'
          b. /ti-tumeri-ke/ →
                                        [titumerik]
```

The other two allomorphs of the adverbializer do not reduce:

```
69) a. /ti-pupu-te/ \rightarrow [tipubte] '(someone) has feet'
b. /t-əwu-te/ \rightarrow [təwute '(someone) has eye'
c. /t-əki-je/ \rightarrow [təkije] '(someone) has an animal'
d. /ti-pi-je/ \rightarrow [tipije] '(someone) has a wife'
```

Most morphemes of one syllable do not undergo vowel deletion. Examples below show free forms: ²⁹

70) a./ka/
$$\rightarrow$$
 [ka] 'fish'
b./pa/ \rightarrow [pa] 'shoulder blade'
c./nu/ \rightarrow [nu] 'tongue' (cf. -n(u) suffix)

-

²⁹ Some other morphemes of one syllable are: a) suffixes: -ma 'Give verbalizer', -ta 'Possessive inchoative verbalizer', -ja 'Non-past', -po 'Causative', -ne 'Agent nominalizer', -no 'Generic event nominalizer', -ne 'Distant Past', -la 'Negation', -me 'Attributive adverbializer'; b) particles: pa 'surprise', ne 'Question', lo(lo) 'Emphatic', ka 'Question', mo 'Emphatic'; c) postpositions: ke 'Instrument; Source', ta 'in permanent location', ja 'Dative'.

```
d./ta/ \rightarrow [ta] 'what?'
```

Obviously, these words could never undergo vowel deletion, since the output would be a form consisting of a sole consonant.

2.3.1.1.1.2. Forms with two syllables. Vowel deletion is more prevalent in two-syllable than one-syllable forms, since some free forms undergo vowel deletion. Still, the majority of these forms presents a full allomorph:

```
V.CV
            CV.CV
71)
         a. /mita/ → [mita] 'mouth'
                                                     71b) a. \langle u u u u \rangle \rightarrow [u u u] 'cassava bread, potato (sp.)'
          b. /jeri/ \rightarrow [jeri] 'tooth'
                                                             b. \langle oti \rangle \rightarrow [oti]
         c. /pupu/ → [pupu] 'foot'
                                                             c. /əmɨ/ → [əmɨ] 'face'
          d. /tuma/ \rightarrow [tuma] 'pan (kd.)'
                                                            d. /əpə/ → [əpə]
                                                                                    'arm'
         e. /pimi/ → [pimi] 'neck'
                                                            e. \langle api \rangle \rightarrow [api]
                                                                                     'back'
          f. /mota/ → [mota] 'shoulder'
                                                            f. \langle eni \rangle \rightarrow [eni]
                                                                                     'container'
          g. /kumu/ → [kumu] 'palm fruit (sp.)'
                                                            g. \langle omo \rangle \rightarrow [omo] 'hand'
         h. /paku/ \rightarrow [paku] 'fish (sp.)'
                                                            h. /əre/ → [əre]
                                                                                     'liver
         i. /tami/ → [tami] 'cigarret'
                                                            i. /əmu/ → [əmu] 'testicles'
         j. /patu/ \rightarrow [patu] 'pan'
                                                            j. /əwu/ → [əu]
                                                                                     'eyes'
         k. /kapu/ → [kapu] 'sky'
                                                            k. \frac{1}{2} \rightarrow [əri]
                                                                                     'vagina'
          1. /hapo/ \rightarrow [hapo] 'hat'
                                                            1. \frac{\text{lek}_{i}}{\rightarrow} [eki]
                                                                                     'family, pet'
          m. /pəne/ → [pəne] 'piranha'
                                                            m. /əti/ → [əti]
                                                                                     'what?'
```

Some of the forms in (72) present a short allomorph when possessed by a noun. Examples in (72 a-b) undergo vowel and $\frac{1}{2}$ deletion (cf. section 2.3.1.2 for a discussion on $\frac{1}{2}$ deletion).

```
72) a. /niţa+paţi/ → [niţapaa] 'Nila's grandchild'
b. /niţa+piţi/ → [niţapii] 'Nila's brother'
c. /niţa+ miti/ → [niţamit] 'Nila's artery'
d. /niţa+∫iti/ → [niţaʃit] 'Nila's vein'
e. /niţa+ punu/ → [niţapun] 'Nila's body'
```

A few two-syllable words undergo vowel deletion in all environments (except, of course, in the environments were vowels are retained: __CCV particles and suffixes, etc.).

These are function words, a few body parts, and some kinship terms. The deleted vowels are /e/, /i/, /a/, /u/, and /o/.

```
CV.CV
                               → CVC
73)
        a. /i-piti-mna/
                              → [ipitimna]
                                                  'without his wife'
        b. /piti/
                              → [pit]
                                                  'wife'
        c. /ajmore+piti/
                              → [ajmorepit]
                                                  'Aimole's wife'
        d. /i-jumi-mna/
                              → [ijumimna]
                                                  'without his/her father'
        e. /jumi/
                              → [jum]
                                                  'father'
        f. /nira+jumi/
                              → [nitajum]
                                                  'Nila's father'
        g. /mane+hnə/
                              → [manehnə]
                                                  'third person copula + also'
        h. /mane/
                              \rightarrow [man]
                                                  'third person copula'
        i. /məki+nma/
                              → [məkɨnma]
                                                  'the distal demonstrative animate plus really'
        j. /məkɨ/
                              → [mək]
                                                  'distal demonstrative animate'
        k. /mini+hnə/
                              → [mɨnɨnə]
                                                  'distal demonstrative inanimate plus also'
        1. /mɨnɨ/
                              \rightarrow [min]
                                                  'distal demonstrative inanimate'
        m. /hɨnɨ+hnə/
                              → [ʃinihnə]
                                                  'proximal demonstrative inanimate plus also'
        n. /hɨnɨ/
                              \rightarrow [[\sin]]
                                                  'proximal demonstrative inanimate'
        o. /pəkə+hnə/
                              → [pəkəhnə]
                                                  'about (it) also'
        p. /pəkə/
                              → [pək]
                                                  'about'
        q. /patu-tomo-mna] -> [patutomomna] 'without pans'
                              → [patutom]
        r. /patu-tomo/
                                                  'pans'
        s. /toto/
                              → [tot]
                                                  'third person particle'
                                                  'adversative particle'
        t. /rep/
                              → [[ep]]
        u. /heke/
                              \rightarrow [hek]
                                                  'only'
```

Forms of syllabic shape V.CV almost never reduce: $*V.CV \rightarrow VC$. There are only two exceptions to this pattern: the words for /uru/ 'bread' and /oti/ 'meat' reduce when inflected by prefixes for first and second persons and do not reduce when inflected by third person reflexive prefix. The dual prefix presents an idiosyncratic allomorph of these

Almost all free forms undergoing vowel deletion are of syllabic shape CV.CV.

```
74)
                                     'bread'
        a. /uru/
                        \rightarrow [uru]
        b. /nira+uru/ → [nirauru] 'Nila's bread'
        c. /j-uru/
                        → [juu]
                                     'my bread'
        c. /əw-uru/
                        → [əuru]
                                     'your bread'
        c. /ik-uru/
                        → [iku]
                                     'our bread (dual)'
        c. /t-uru/
                        → [turu]
                                     'his own bread'
        d. /oti/
                        → [oti]
                                      'meat'
```

two forms: *ik*- (in all other nouns, k/ V and ku/ C).

```
g. /pəne+oti/ → [pəneoti] 'piranha's meat'

f. /j-oti/ → [jot] 'my meat'

f. /əw-oti/ → [əwot] 'your meat'

f. /ik-oti/ → [ikot] 'our meat (dual)'

e. /t-oti/ → [toti] 'his own meat'
```

In looking at all two syllable words, one is tempted to conclude that vowel deletion seems to take place in the most frequent forms. Suffixes, for instance, like function words, all undergo vowel deletion, including those of syllabic type *V.CV*:

75)	a. /ene-topo-npə/	\rightarrow	[enetoponpə]	'former seeing'
	b. /ene-topo/	\rightarrow	[enetop]	'seeing'
	c. /ku-patu-komo+hnə/	\rightarrow	[kupatukomohnə]	'our pan also'
	d. /ku-patu-komo/	\rightarrow	[kupatukom]	'our pan'
	e. /ətuku-kətə+hnə/	\rightarrow	[etuhkətəhnə]	'come to eat also'
	f. /i-pampira-pini-mna/	\rightarrow	[ipampirapinimna]	'one not in need of paper'
	g./i-pampira-pɨnɨ/	\rightarrow	[ipampirapin]	'with no paper'
	h./ipoke-anu/	\rightarrow	[ipokan]	'good one'

To summarize: words with the syllabic shape *VC.V* never reduce; a few with the syllabic shape *CV.CV* reduce (function words, body-parts, kinship terms). All bound morphemes of two syllables reduce. In all cases, the deleted vowel is the last; indeed, it is the only vowel that can be deleted without compromising syllable structure constraints.

2.3.1.1.1.3. Forms with three syllables. In these forms, it is possible to see that vowel deletion is not restricted to the rightmost syllable, but may also happen in other syllables within a root (vowels undergoing deletion are presented in boldface):

```
h./pumo/ →[pumo] 'egg'

CV.CV.CV → CV.CVC i./pupoti/ →[pupot] 'body hair'

(CV.CV.CV → CVC.CV) Not attested in morphophonological alternations
```

All the cases in which it is still possible to recover the root-medial vowel are found in nouns. This is due to the fact that unpossessed forms still preserve the vowel that is lost in the possessed forms (all other cases of root-medial vowel deletion in the language are of this nature).³⁰

In example (76 e, f) above, the word /mita/ 'mouth' is a two-syllable word that may not have any of its vowels deleted: the deletion of /i/ would create an ill-formed cluster, and /a/ is never deleted (most two-syllable words do not undergo vowel deletion anyway). When it is inflected by \dot{F} 'First person,' it is a three syllable word, and thus the deletion of medial /i/ is possible.

The examples below show that all of the vowels /e/, /i/, /ə/, /u/, and /o/ undergo deletion word-finally. Only the vowels /i/ and /u/, however, delete root-medially.

```
a. /i-jumi/→[ijum] 'my father', b. /i-punu/→[ipum] 'my body',
c. /imiti/→[imit] 'my artery', d. /i-peti/→[ipet] 'my thigh',
e. /eheti/→ [ehet] 'name', f. /j-akono/→[jakon] 'my sister',
g. /əjamo/→[əjam] 'louse', h. /onoto/→[onot] 'fruit (kd.)',
i. /ipoke/→[ipok] 'good', j. /jopoko/→[jopok] 'evil supernatural being',
k. /əw-oti/→[əwot] 'your animal based food',
l. /ətaku/→[ətak] 'saliva', m. /əkunu/→ [əkun] 'waist',
n. /əpeki/→[əpek] 'wound',
o. /ətati/→[ətat] 'hammock', p. /əniki/→ [ənik] 'who?',
q. /umiti/→[umit] 'log', r. /ikati/→ [ikat] 'his fat',
s. /upake/→[upak], t. /j-epi-ti/→ [jepit] 'my medicine',

78) V.CV.CV→VC.CV

a. /i-tuma/→[imma] 'my pan (kd.)', b. [tuma] 'pan (kd.),
c. /i-mita/→[imta] 'my mouth', d. /mita/→[mita] 'mouth'
```

³⁰ Forms that must have undergone this kind of vowel deletion historically are: a) V.CV.CV→VC.CV: /ətpo/ 'beard', /emna/ 'we (exclusive)', /ihkə/ 'skin-worm', among others; b) CV.CV.CV→CVC.CV: /tutpə/ 'vase (kd.)', /watkɨ/ 'tale', /munpə/ 'rat', among others.

```
e ./i-pumo/→[ihmo]'his egg', f./pumo/→[pumo]'egg'
```

```
79) CV.CV.CV → CV.CVC a. /ipoke/→ [ipok] 'good',
b. /wapoto/→[wapot] 'fire',
c. /kaneti/→[kanet] 'hammock string',
d. /munətə/→[munət] 'scorpion',
e. /katipi/→[katip] 'like',
f. /mɨhenu/→[mɨhen] 'poor', g. /joτoko/→[joτok] 'devil',
h. /terenu/→[teren] 'big', i. /kurumu/→[kurum] 'vulture',
j. /hamutu/→[hamut] 'sand',
k. /parumi/→[parum] 'son-in-law',
l. /kopini/→[kopin] 'grass',
m. /wetepu/→ [wetep] 'belly',
n. /patumi/→[patum] 'nephew', o. /j-emi-ti/→ [jemit] 'my face',
p. /wapoto/→[wapot] 'fire'.
```

There are at the same time several words in which /e/, /i/, /ə/, /u/, and /o/, in the same contexts, do not delete.

```
80)
        /e/
                  [oroke] 'royal sloth'
        /i/
81)
                  a.[manati] 'breast',
                  b. [ipimi] 'my neck' (cf. /kaneti/→[kanet] 'hammock string', c. /ətati/→[ətat] 'hammock,
                  d. /i-mita/→[imta] 'my mouth').
82)
        /ə/
                  a. [əwanə] 'heart, b. [nunuwə] 'moon', c. [ʃirikə] 'star', d. [tutukə] 'brazil-nut',
                  e. [ərukə] 'caterpillar', f. [nunuwə], g. [əriwə] 'clay', h. [purunə] 'clay', i. [əwtə] 'land'
                  (cf. /munətə/→[munət] 'scorpion')
83)
        /u/
                  a. [piraku] 'ankle', b. [əmeku] 'lower-arm, wrist',
                  c. /i-mumu/→[imumu] 'my son (man speaking)'
84)
        /o/
                  a. [opoto] 'bread holder', b. [oroko] 'helmet (kd.)', c. [etato] 'side',
                  d. [əheto] 'both sides', e. [nukumo] 'throat' (cf. /onoto/→[onot] 'fruit (kd.)')
```

This shows that vowel deletion is not automatic; it applies to some words, but not to others. In addition, there exists an asymmetry in terms of frequency: /i/ is most frequently deleted (with only two attested cases in which it is not deleted), followed by /u/ (with four attested non-deleting words). /ə/, on the other hand, seems to be the vowel that is deleted least frequently (with only one attested example undergoing deletion). As for /o/, though it deletes in several examples, in several others it does not. And /e/, though it is preserved in only one example, is deleted in only three.

As expected, /a/ and /i/ do not delete at the ends of three-syllable words. The same is true of $\frac{\tau}{V}$, other than $\frac{\tau}{V}$ and $\frac{\tau}{V}$ (cf. section 2.3.1.2 for the deletion of $\frac{\tau}{V}$ and $\frac{\tau}{V}$ final syllables):

```
a. [atuţa] 'river otter', b. [epaţe] 'palm fruit (sp.)', c. [akuţi] 'agouti', d. [eţuwa] 'man',
e. [kaʃiţi] 'manioc beer', f. [maţija] 'knife', g. [ţekimi] 'lime', h. [kajama] 'cassava flower',
i. [kumaka] 'three (sp.)', j. [maţipa] 'palm fruit (sp.)', k. [manaţe] 'sieve', l. [kɨnoţo] 'macaw',
m. [taţaţa] 'lightning', n. [hoţoţo] 'bird (sp.)', o. [pɨjaţo] 'bird (sp.)', p. [koţoţo] 'white',
q. [pakoto] 'house', r. [akəţə] 'with'.
```

Finally, comparing forms with two and three syllables, it becomes clear that vowel deletion takes place more commonly in forms with three syllables. Words such as /peti/>[peti] 'thigh' as opposed to /i-peti/>[ipet] 'my thigh', as well as /pumo/ as opposed to /i-pumo/>[ihmo] 'his egg', illustrate this.

2.3.1.1.1.4. Forms with four syllables. These forms behave similarly to three syllable words. Due to their larger size, however, it is possible to see that more then one vowel can be deleted in the same word.³¹ The example in (89 b) shows a word with four syllables shortening to two syllables.³²

	4	3			
86)	V.CV.CV.CV	→ V.CV.CVC	a. /imepɨnɨ+hnə/	→ [imepɨnɨhnə]	'another also'
,			b. /imepɨnɨ/	→ [imepin]	'another'
87)	V.CV.CV.CV	→ V.CVC.CV	/i-wapotə/	→ [iwaptə]	'my fire'
88)	V.CV.CV.CV	→ VC.CVC	Not attested in mor	phophonological alt	ernations
	4	2			

³¹ Examples of forms with four syllables that must have undergone vowel deletion historically, but not attested in morphophonological alternations are: V.CV.CV.CV.CV.CV.Actahpa/ 'bird (sp.)', /əhehmu/ 'knee', /əkəmnə/ 'later', /əpihpo/ 'eyebrown', /əjapta/ 'armpit'; V.CV.CV.CV.CV.CV.CV not attested; CV.CV.CV.CV.CV.CV.CV.CV.patakta/ 'fruit (kd.)', /watənkə/ 'vulture (sp.)', /pajakwa/ 'bird (sp.)', /watehna/ 'back of the knee'; CV.CV.CV.CV.CV.CV.CV.CV.hitpiti/ 'ugly, bad', /mamhati/ 'bird (sp.)', /jahpine/ 'shallow', /wotkata/ 'ribs'.

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³² Examples that must have undergone the same change are: /aphikɨ/→[apʃik] 'little small', /ihjanu/→[ihjan] 'new', /ahmiti/→[ahmit] 'bench', /umheti/→[umhet] 'hair'.

```
89)
      V.CV.CV.CV \rightarrow VC.CVC
                                          a. /pupoti-mna/
                                                             → [pupotimna]
                                                                              'no body hair'
                                          b. /i-pupoti/
                                                             → [ihpot]
                                                                              'my body hair'
90)
      CV.CV.CV.CV → CV.CV.CVC a. /minerumi-mna/ → [minerumimna] 'no husband'
                                          b. /nira+minerumi/ → [niraminerum] 'Nila's husband'
91)
      CV.CV.CV.CV → CV.CVC.CV
                                          Not attested in morphophonological alternations
      CV.CV.CV → CVC.CV.CV Not attested in morphophonological alternations
92)
93)
      CV.CV.CV.CV \rightarrow CVC.CVC
                                          Not attested in morphophonological alternations<sup>33</sup>
```

The examples above show that vowel deletion takes place in alternating syllables. Again, as in three syllable words, /u/ is deleted root-medially, and we see that /o/ may also be deleted in that context. As opposed to words with three syllables, however, in four-syllable words, though /i/, /ə/, and /u/ delete word-finally, /e/ and /o/ do not.

Examples with vowel deletion word-finally:

```
94) V.CV.CV.CV.CV.CVC

a. /i-kaneti/→[ikanet] 'its string',
b. /i-patumi/→[ipatum] 'my son-in-law',
c. /i-patumi/→[ipatum] 'my nephew'
d. /əṭamuku/→[əṭamuk] 'sweat', e. /əlinatu/→[əṭinat] 'plate,
f. /akawakə/→[akawak] 'bird (sp.)'.

95) CV.CV.CV.CV.CV.CVC

a. /totopiti/→[totopit] 'bird (generic)', b. /fipaṭatə/→[fipaṭat]
'crab', c. /j-eṭeki-ti/→[jeṭekit] 'my wound',
d. /minenoti/→[minenot] 'mother-in-law',
e. /hakahakə/→hakahak] 'spider sp.',
f. /waṭunakə/→[waṭunak] 'evening'.
```

Examples that fail to undergo vowel deletion include:

96) a. [petesina] 'orange', b. [kaţajuwa] 'Brazilian', c. [maţaţija] 'palm tree (sp.)', d. [kaţakuţi] 'money', e. [kuţumuţi] 'bamboo', f. [aţakuwa] 'bird (sp.)', g. [akaţima], h. [aimaţa] 'fish (sp.)', i. [ekoţoţi] 'bread crumbs', j. [imanati] 'my breasts', k. [jaţamata] 'chin', l. [inukumo] 'my throat', m. [əţepata] 'chest', n. [əţeminə] 'kidney', o. [kokonoto] 'coconut'.

The deletion of specific vowels seems to be more systematic in words with four syllables than in words with three syllables: in words with four syllables final /u/, /i/ and

³³ Though CV.CV.CV.CV.CV.CVC is not attested in morphophonological alternations, forms such as

/hihnatə/→[ʃihnat] 'liana', /mɨphakə/→[mɨphak] 'ant', /j-etpo-tɨ/→[jetpot] 'my face hair'

/ə/ almost always delete (with the exception of /imanati/→ [imanati] 'my breasts' and
/ə[eminə/ → [ə[eminə] 'kidney', /i-wapotə/→[iwaptə] 'my fire'. /o/ and /e/ do not delete
word-finally.

2.3.1.1.1.5. Forms with five syllables. Forms with five syllables show the same pattern of root-medial vowel deletion as words of three and four syllables, with /i/ and /u/ deleting. The only attested syllabic types undergoing vowel deletion are:

98) V.CV.CV.CV. V.CV.CV.CV. a. /əheruwawə/→/əheruwaw/ 'three'

99) *V.CV.CV.CV.CV→ VC.CV.CVC [uwakʃiţiţi]

seem to represent this pattern.

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100) *V.CV.CV.CV.CV→ VC.CV.CVC [əwokohko] 'fish (sp.)'

Some words of five syllables that do not undergo vowel deletion are:

a. [taparukawa] 'venus', b. [tapirukawa] 'wasp (sp.)', c. [kuritaparu] 'fish (sp.)', d. [kapukapusi] 'supernatural being', e. [ijaramata] 'my chin'

Forms with six or more syllables present a similar pattern to that found in forms with five syllables, with deletion of segments occurring in alternating syllables (example 102b shows /h/ deletion (2.3.1.3):

- 102) a. /ti-mumuku-ta-he/→[timumuktai]
 - b. /ti-minerumi-ta-he/→[timnerumtai]

In summary, vowel deletion does not affect all Wayâna words; it seems to occur in a process of lexical diffusion that affects some forms and not others. For instance, most words of two syllables keep their last vowel, with vowel deletion restricted to the most frequent terms: function words, body parts, and kinship terms. Words such [pimi] 'neck'(from /pimi/), as opposed to [min] (from /mini/) 'Distal Demonstrative Inanimate', and [manati] 'breast' (from /manati/), as opposed to [kanet] (from /kaneti/) 'hammock string', are examples of this.

Historically, vowel deletion must have taken place in syllables in all positions within the word (with the exception of the leftmost syllable). Looking at synchronic data, one may come to the incorrect conclusion that deletion took place only at the edges of words. It appears to be the case that word-medial deletion is always related to possession (e.g., when a possessive prefix results in a three-syllable word, the second syllable of the word, and the first syllable of the root, is subject to deletion):

In comparing the two forms, we arrive at an underlying form preserving the vowel. However, to define the locus of deletion as the edge of the word would be to miss the fact that root medial consonant clusters almost certainly resulted historically from vowel deletion, though in such cases the deleted medial vowel does not reappear in allomorphic variation:

```
104) /umheti/ → [umhet] 'hair'
/j-umheti/ → [jumhet] 'my hair'
/miphakə/ → [miphak] 'ant'
/watənkə/ → [watənkə] 'vulture (sp.)'
```

Considering the cases that do undergo vowel deletion, it is possible to discover that vowel deletion obeys strong principles:

- i) Vowel deletion depends on vowel quality. While /i/ and /u/ delete both word-finally and -medially, /o/ deletes almost only word-finally (with one exception /i-wapotə/→[iwaptə] 'my fire'), /e/ deletes only word-finally, and /a/ and /i/ never delete.
- ii) Vowel deletion takes place from right to left. There are no attested cases of deletion of a vowel word-initially, or in a initial CV syllable (due to disallowed tautosyllabic consonant clusters). Word-final vowel deletion, on the other hand, is widely attested. Vowel deletion takes place from right to left in alternating syllables, since deleting two sequential vowels would create syllables with an unacceptable consonant cluster: CVCVCVCV→*CV.CVCC). This is clear in the existing examples: (example (105 c) undergoes /h/ deletion (2.3.1.3))
- 105) V.CV.CV.CV a. /i-pupoti/ → [ihpot] 'my body hair' CV.CV.CV.CV.CV.CV b. /ku-manati-komo/ → [kumanatkom] 'our breast' CV.CV.CV.CV.CV.CV c. /ti-mumuku-ta-he/ → [timumuktai] 'having a son'

This organization must obey the vowel quality principle; thus, deletion skips vowels that may not be deleted (only /i/ and /u/, and /o/ can be deleted root-medially): examples (106 a-d) show vowel deletion starting at the rightmost syllable, then skipping the third syllable since /e/, /ə/, and /a/ may not delete. In examples (106 e and f), deletion skips the rightmost syllable; in example (106 f), deletion starts on the second, and then goes to the fourth syllable from the right. In effect, when the rightmost syllable cannot be deleted, the deletion begins with the rightmost syllable that can, and moves left in alternation from that point.

```
106)
       V.CV.CV.CV.CV
                             a . /iminerumi/
                                              → [imnerum] 'my husband'
                                              → [imnenot]
                             b. /iminenoti/
                                                            'my mother-in-law'
                             c. /i-kirəkunu/
                                              → [igrakun]
                                                            'my ankle'
                              d. /i-pitajinu/
                                              → [iptain]
                                                            'my heels'
                              e. /mumukə/
                                              → [mumkə]
                                                            'woman's son'
        CV.CV.CV.CV f. /t-əki-nomo-ke/ → [təŋnomke] 'having pets'
```

There are no cases of three deleted vowels that can be recovered, but cases like

107) *V.CV.CV.CV.CV.CV [aktuφpoj] 'up river' (*/a.kV.tu.CV.po.jV/)

shows that deletion must take place three times in the same word, as well.

Though there are not a large number of examples in support of this analysis, there are none that contradict it. There are no cases showing root-medial deletion skipping a syllable with /i/ and /u/ further to the right (i.e. in morphophonological alternations there are no roots with consonant clusters preceding a syllable with /i/ or /u/).³⁴

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³⁴ As a matter of fact, there exists one exception in my corpus, one case that must have undergone syllable reduction on the third syllable without having undergone syllable reduction on the first: [ʃitpiti] 'ugly, bad'. But, this example is not clearly an exception: the ri/u does not always delete, and a /pt/ cluster is not allowed in the language. Forms such [iwatki] 'his wing' may seem like an exception but, they are not, since they had -ri deleted: /i-watki-ri/→[iwatki].

iv) There exists a hierarchy among vowels. Observing which vowel is chosen to be deleted, it is possible to see that some vowels outrank the others. In /ijumi/→[ijum] 'my father' and /imita/→[imta] 'my mouth' it is possible to see that /i/ is chosen to be deleted over /u/ and /a/. In /i-pupoti/→[ihpot] 'his body hair', /u/ is deleted, but /i/ is also deleted (indicating that /u/ preceding /i/ on the same root will only delete if the /i/ also deletes). In the case of /i-pumo/→[ihmo] 'his egg', it seems that /u/ outranks /o/. The hierarchy is:

$$/i/\rightarrow /u/\rightarrow /o/\rightarrow$$
 the others.

The hierarchy is, thus, more important than starting the vowel deletion in the right-most syllable.

Whenever the hierarchy does not distinguish between two vowels (i.e., when the two are equal), vowel deletion starts in the right-most syllable, as expected. Never in these cases is there root-medial deletion; thus, the validity of the *right to left* parameter is corroborated.

108) a. /i-punu/→[i-pun] 'my body', b. /j-əkunu/→[jakun] 'my waist', c. /ənɨkɨ/→[ənɨk] 'who?',
 d. /imepɨnɨ/→[imepɨn] another'.

In the next section, vowel deletion in verb forms is discussed.

2.3.1.1.2. Verbal forms. Vowel deletion is much more straightforward in verbs than in other word classes. It is almost completely restricted to the right edge of the verbal root, with only three examples of vowel deletion occurring on the left edge of the root (only example (109) is a monomorphemic root; examples (110) and (111) are stems derived from nouns that undergo left edge vowel deletion (cf. section 2.3.1.1.1.3):

```
109)
       a. /ni-pikərə/
                             → [nipkərə]
                                                 'he cut it'
       b./i-punu+pikərə-po/ → [ipunpikərəpo]
                                                 'someone caused him to cut meat'
110)
       a. /ni-pupo-ka/
                             → [nihpoka]
                                                 'he shaved it (a pig)' (vowel deletion + dissimilation)
        b./pupo/
                             → [pupo]
                                                 'body hair'
111)
       a. /wemitapi/
                             → [wemtap]
                                                 'I opened my mouth'
```

As for right edge syllable reduction, verbal roots with two or fewer syllables almost never reduce. The only exceptions are those discussed in section 2.3.1.2.2 on /t/ deletion and roots ending with /ju/ (/w-aju-ja-he/ \rightarrow [wajjaj] 'I dry it', /w-eju-ja-he/ \rightarrow [wejjaj] 'I scold him/her'). ** /i/ and /u/ are deleted at the ends of verbal roots with three or more syllables (no cases of /e/, /i/, /o/, and /ə/ being deleted are found) ** These vowels are retained when followed by *CCV* particles or suffixes (and the same exceptional CV(C) morphemes: -pin(i) 'privative nominalizer' and -ta 'negative') and

³⁵ Other examples of verbal roots with one and two syllables are:

^{./}w-ene/→[wene] 'I saw it', /w-eta/→[wetə] 'I played flute', /w-epa/→[wepa] 'I teached s/he/it', /w-epi/→ [wepi] 'I bathed', /i-hita/→[iʃita] 'I burped', /w-e-pi/[wepi] 'I ate (vegetal based food)', /w-apu/→[wapu] 'I prayed', /w-i-nəmə/→[winəmə] 'I left it', /w-i-pimi/→[w-i-pimi] 'I tied it ip'.

³⁶ Examples of verbal roots that do not undergo vowel deletion: [weţama] 'I went back', [nepeta] 'it gave fruit', [jeţemi] 'I cried', [jetakina] 'I whistled'. Examples that must have undergone word-medially vowel deletion historically are: [nuhmo] 'he killed it', [wapkəʒə] 'I broke it'.

when inflected by the nominalizer - \mathcal{O}' Specific event' (examples are presented with he 'Desiderative'): 37

```
112)
        CCV
                         a. /w-uməki+phiki/ →
                                                            [uməkip[ik]
                                                                              'I came a little'
        -pin(i), -ra
                         b./uməki-ra/
                                            → [uməkɨra]
                                                            'not come'
        -\varnothing + he
                         c. /uməki+he/
                                            → [uməkihe]
                                                             'someone wants to come'
113)
        CCV
                         a. /w-ukuku+phiki/→ [ukukup∫ik] 'I tried a little'
        -pin(i), -ta
                         b./ukuku-ra/
                                            → [ukukura]
                                                             'not tried'
        -\varnothing + he
                         c./ukuku+he/
                                            → [ukukuhe]
                                                             'someone wants to try it'
```

There are two environments in which the last vowel of a verbal root is deleted, the first two being when the root is followed by a -CV suffix or $-\mathcal{O}$ 'Recent Past' (if not followed by a CCV particle) ³⁸ (the examples are presented with -ja 'Non-past'):

```
114) -CV . /n-uməki-ja / → [numəkja] 'He will come'
-Ø . /n-uməki/ → [numək] 'He came'

115) -CV . /n-ukuku-ja/ → [nukugja] 'He will try'
-Ø . /n-ukuku/ → [nukuk] 'He tried it'
```

Note that the two zeros suffixes, $-\emptyset$ 'recent past' and $-\emptyset$ 'Specific event nominalizer', affect the verbal roots differently. While the former causes vowel deletion, the latter causes vowel retention (the nominalizer $-\emptyset$ is discussed in section 4.2.2.1.2).

2.3.1.1.3. Vowel deletion in *V-V* sequences. Vowel deletion takes place in one additional context to those discussed above: root-final vowels are deleted at morpheme

Ø- 'Recent Past'

[wepi] 'I bathed'

[wapu] 'I prayed'

[wamo] 'I cried'

[wamone] 'I cried a long time ago'

 $^{^{37}}$ The same behavior is seen with other postpositions and particles following verb form nominalized with - \varnothing .

³⁸ Verbal roots with two syllables are an exception:

boundaries when inflected by a suffix starting with a vowel. This is due to the constraint disallowing tautosyllabic sequences of vowels in the language. As a result, the first vowel is deleted and the second occupies its position: $CV_i-V_j \rightarrow CV_j$. The reduction takes place independently of vowel quality.

There are several vowel-initial suffixes in Wayâna, as for instance, the allomorphs of the 'Participant' nominalizer and of the collective morpheme which start with /a/ and the 'Resumptive' -əmə:

```
116)
        a. /ipoke+nma/
                            → [ipokenma]
                                               'very good'
        b. /ipoke-anu/
                            → [ipokan]
                                               'the good one'
        c. /ipoke-anu-mna/ → [ipokanumna]
                                               'without the good one'
        d. /kore+nma/
                           → [korenma]
                                               'a lot'
        e. /kore-anu/
                            → [koran]
                                               'the many'
        f. /kore-anu-nma/
                           → [koranunma]
                                               'the very many'
        g. /era-mhakə+nma/ → [eramkakənma] 'very scared'
        h. /era-mhakə-anu/ → [eramhakan]
                                               'the scared one'
        i. /i-piri-Ø-amo/
                            → [ipilamo]
                                               'her brothers'
117)
        a. /kokone/
                            → [kokone]
                                               'yesterday'
        b. /kokone-ato/
                            → [kokonat]
                                               'the one from yesterday'
        c. /upake-ra/
                            → [upakera]
                                               'not long ago'
                            → [upakat]
                                               'the old one'
        d. /upake-ato/
        e. /upake-ato-nomo/ → [upakatonom]
                                               'the old ones'
118)
        a. /ti-pata-ke/
                            → [tipatake]
                                               'possessing a village'
        b. /ti-pata-ke-amo/ → [tipatakamo]
                                               'the ones possessing a village'
        c. /t-utati-he/
                            → [tutat∫e]
                                               'lost'
                            → [tutat∫amo]
                                               'the lost ones'
        d. /t-utati-he-amo/
```

The Resumptive suffix has three allomorphs: -jomo, -jmo, and -omo. In a very consistent pattern, the allomorphs distinguish three different verb classes in the language: class 1, inflected by -jomo, is composed of the verbal roots ending in /i/ that do not undergo vowel deletion and of /i/; class 2, inflected by -jmo, is composed of roots ending in /a/, /o/, /e/, /ə/ (all of which do not undergo deletion); and class 3, inflected by -omo, is

composed of verbal roots ending in /i/ and /u/ which undergo vowel deletion. Class 3 is the only one to undergo vowel deletion, as table 9 shows. (In the table 9, V stands for /e/, /a/, /o/ and /ə/).

Table 9
The /(j)(ə)mə/ 'Resumptive' suffix

	Vowel deletion	plus /jəmə/	Examples
class 1	/Ci/→Ci	ijəmə	/w-i-pimi-jəmə/→[wipimijəmə] 'I tied it up again'
			/w-aki-jəmə/→[wakijəmə] 'I missed it again',
			/w-e-pi-jəmə/→[wepijəmə] 'I took bath again'
	/Ci/→Ci	ijəmə	/w-upi-jəmə/→[upijəmə] 'I searched it again'
			/j-eremi-jəmə/→[jeremijəmə] 'I sang again'
class 2	/CV/→CV	Vjmə	/w-ene-jmə/→[wenejmə] 'I've found it back'
			/w-oko-jmə/→[wokojmə] 'I cut it again'
			/w-epe-jmə/→[wepejmə] 'I fled again'
class 3	Ci/u→C	Cəmə	/j-iniki-əmə/→[jinikəmə] 'I slept again'
			/w-uməki-əmə/→[uməkəmə] 'I came again'
			/w-ukuku-əmə/→[ukukəmə] 'I tried it again'
			/w-enepi-əmə/→[wenepəmə] ' I brought it again'

The next section addresses another important process in syllable reduction: $\ensuremath{/\tau/}$ deletion.

2.3.1.2. $/\tau V/$ deletion. The high vowels /i/ and /u/ are par excellence the elements that delete in all word classes. They are basically the only vowels that delete having $/\tau/$ as their onset consonant (All other vowels are retained with $/\tau/$ as onset.) ³⁹ With the

³⁹ There are a few examples of forms ending with /τ/2 that also undergo /τ/ deletion. The deletion of /τ/2, however, is a much more restricted phenomenon than that affecting forms ending with /τ/2 or /τ/4. The only attested examples are five pronominal forms (/inəτəτə/→[inəτə] '3rd Person Anaphoric Pronoun', /əməτəτə/→[əməτə] '2nd Person Pronoun', /məkτəτə/→[məkτə] 'Demonstrative Animate Medial Pronoun', /məkjaτə/→[məkja] 'Demonstrative Animate Medial Collective Pronoun', /məhaτə/→[məha]

deletion of /i/ and /u/, /t/ is left as coda, and then deleted due to the *no coda /t*/ constraint operating in the language. The output is the reduction of the whole syllable (with lengthening on the vowel of the preceding syllable depending sometimes on word size).

Though there are cases of /i/ and /u/ deleting root-medially, this never happens if /r/ is the onset; i.e., there are no cases of long allomorphs with ri/ru root-medially alternating with short allomorphs.

Again, as in vowel deletion, there are differences between verbal and non-verbal forms. These are discussed in the next sections.

2.3.1.2.1. Non-verbal forms. The most interesting aspect of $/\tau$ / deletion in nouns is that it is necessary to distinguish between the possessive suffix $-\tau i$ and τi / τu syllables that are part of the nominal root. As in the case of vowel deletion, the τi / τu syllable is retained when followed by morphemes that trigger the long allomorph (CCV particles or suffixes and the idiosyncratic CV morphemes, the privative -pin(i), the negative $-\tau u$, and the dative postposition ja).

Lengthening can be an indication of whether there is a lost ri/ru syllable. As a general rule, forms presenting a long vowel word-finally have lost a ri/ru syllable.

However, this statement is valid only for some three syllable words, mostly those starting

^{&#}x27;Demonstrative Animate Proximal Collective Pronoun',) two adverbs (/hemaŢəŢə/→[hemaŢə] 'today', /huwaŢə/→[huwa] 'as such',) and a particle (/ˌʊṬə/→[τə] 'Emphatic'.)

with a V.CV syllabic sequence (119 a and e). For all other word sizes, the lengthening is basically lost, unless a CV suffix or clitic follows immediately (120 c and f).⁴⁰

```
119) a. /ewu-ri/
                          \rightarrow [euu]
                                             'his/hers/its eye' c. /uru/
                                                                               \rightarrow [uru]
                                                                                                  'bread'
       b. /ewu-ri-mna/ → [eurumna]
                                             'with no eye'
                                                               d. /uru -mna/
                                                                               → [urumna]
                                                                                                  'with no bread'
       e. /parari/
                          [cereq] <
                                             'frog'
                                                               g. /kopa /
                                                                               → [kopə]
                                                                                                  'rain'
       f. /pərəri-mna/ → [pərərimna]
                                             'with no frog'
                                                              h. /kopə-mna/ → [kopəmna]
                                                                                                 'with no rain'
                                                                               → [ariwe]
                          → [prewe]
                                                               k. /ariwe/
                                                                                                  'alligator'
       o. /əreweri/
                                             'fly'
      j. /əreweri-mna/→ [eperirimna] 'no fruit'
                                                               1. /ariwe-mna/ → [ariwemna]
                                                                                                 'no alligator'
120) a. /eperiri/
                                                         'fruit'
                                 \rightarrow
                                       [eperi]
                                 \rightarrow
                                                         'no fruit'
       b. /eperiri-mna/
                                       [eperirimna]
                                 \rightarrow
       c. /eperiri+pəkə/
                                       [eperiipak]
                                                         'occupied with fruit'
       d. /ku-tuna-ri/
                                 \rightarrow
                                       [kutuna]
                                                         'our (dual) water'
       e. /ku-tuna-ri+phiki/
                                 \rightarrow
                                       [kutunaripsik]
                                                         'our (dual) little water'
       f. /ku-tuna-ri-komo
                                       [kutunaakom]
                                                         'our water (of us all)'
```

In the case of the -ri suffix, the lengthening on the final vowel occurs, obviously, only in the possessed forms; the suffix reappears in its full form when followed by the morphemes that trigger long allomorphs. ⁴¹ (-ri 'possessive' undergoes vowel harmony when inflecting nouns ending in /u/).

```
121)
                                                           'foot'
         a./pupu/
                                       [pupu]
         b./i-pupu-ri/
                                 \rightarrow
                                                           'his foot'
                                       [ipupu]
                                                           'without his foot'
         c. /i-pupu-ri-mna/
                                 \rightarrow
                                       [ipupurumna]
         d. /pupu-mna/
                                 \rightarrow
                                       [pupumna]
                                                           'with no feet'
         e. (*ipupumna, *pupurumna)
         f. /omo/ 'hand'
         g. /j-amo-ri/
                                       [jamo]
                                                           'my hand'
         h. /j-amo-ri-mna/
                                 \rightarrow
                                       [jamorimna]
                                                           'without my hand'
                                                           'without a hand'
         i. /omo-mna/
                                       [omomna]
```

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⁴⁰ Other examples of τɨ/τu deletion are: [paτu] 'banana', [aτuu] 'porcupine', [ipo] 'mythical river being', [akɨɨ] 'raised animal, parasite', [mamii] 'liana (sp.)', [iʃuu] 'shrimp', [ekuu] 'flower', [mauu] 'cotton', [epu] 'pole', [aʃi] 'pepper', [puupu] 'river turtle' (Note the Aparai form [puτμυρυτα] 'river turtle'), etc.

⁴¹ Other examples are: [əta] 'kidney', [əpə] 'arm', [əte] 'liver', [əti] 'cowlick', [əu] 'eye', [əmu] 'testicles', [əti] 'vulva', [nu] 'tongue', [mɨu] 'blood', [ekɨ] 'pet, family', [waʃi] 'lower leg', [mumkə] 'woman's son', [pana] 'ear', [mota] 'shoulder', [mɨta] 'mouth', [wetep] 'belly', [napi] 'potato', etc.

(*jamomna, *omorimna)

Nouns ending in /tpə/ change their endings to /tpɨrɨ/ when taking possessive prefixes. This may have been historically a result of vowel harmony, but no examples of /ə/ harmonizing to /ɨ/ are attested elsewhere in the language:

```
122)
       a. /uputpə/
                           → [uputpə]
                                              'head'
       b. /j-uputpiti/
                           → [juputpi]
                                              'my head'
       d. /j-uputpiṛi-mna] → [juputpiṛimna] 'without my head'
       a. /awotpa/
                           → [əwotpə]
                                              'aunt'
       b. /i-wotpiri/
                           → [iwotpi]
                                             'my aunt'
       c. /i-wotpiri-mna/
                           → [iwotpirimna] 'without my aunt'
```

Nouns with the devaluative suffix $-tp\vartheta$ (with allomorph $-np\vartheta$) ⁴² show parallel behavior to the nouns above (cf. section 4.2.1.1):

123)	a. /pupu-tpə/b. /pupu-tpə-mna/c. /i-pupu-tpiţi/d. /i-pupu-tpiţi+phiki/	→→→	[puputpə] [puputpəmna] [ipuputpi] [ipuputpitipsik]	'footprints, former foot' 'there are no footprints, former foot' 'my footprints, former foot' 'my little footprints, former foot'
	e. /jeti-npə/	→	[jeŢinpə]	'hand severed from the body'
	f. /jeṛi-npə-mna/	\rightarrow	[jeṛɨnpəmna]	
	g. /i-je ti-npiti /	\rightarrow	[ijeţinpi]	'my former hand' 43
	h. /i-jeţi-npiţi-mna/	\rightarrow	[i-jerinpirimna]	'without my former hand'

There exist some forms for which it is not possible to determine whether compensatory lengthening results from the deletion of a syllable of the nominal root or

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⁴² The occurrence of either -npə or -tpə is defined lexically. Nouns inflected with -npə are /əta/ 'kidney', /ətati/ 'hammock', /ka/ 'fish', /miwu/ 'blood', /pana/ 'ear', /əwu/ 'eye'. Nouns inflected with -tpə: /nu/ 'tongue', /wetepu/ 'belly', /uru/ 'bread', etc.

⁴³ See section 2.3.8 on ablaut for o/a and other alternations.

from the deletion of -ti. These forms end in ti/tu in the unpossessed forms, and delete ti/tu in the possessed form.⁴⁴

```
124)
        a./jeri/
                       → [jeღi]
                                     'tooth'
        b./i-jeri/
                       → [ijee]
                                     'my tooth'
        c. /i-jeri-mna/→ [ijerimna] 'without his tooth'
        d./jeri-npə/
                      → [jerinpə] 'tooth severed from the body'
        e.*jeririmna,
        f. /uru/
                       \rightarrow [uru]
                                     'manioc bread'
        g./j-uru/
                       → [juu]
                                     'my manioc bread'
        h./j-uru-mna/ → [jurumna] 'without his manioc bread'
        i. /uru-npə/
                      → [urunpə] 'old, unpossessed manioc bread'
        j.*jerurumna
```

It is noteworthy that since the -ti 'possessive' undergoes deletion, the final vowel of the surface allomorph of the nominal root is always kept.

```
125)
        a./wetepu/
                         → [wetep]
                                         'belly'
        b./i-wetepu-ri/
                         → [iwetepu]
                                        'my belly'
        c. /əramuku/
                         → [əramuk]
                                        'sweat'
        d./j-eramuku-ri/ → [jeramuku] 'my sweat'
        e./ərinatu/
                         → [ərinat]
                                         'plate'
        f. /j-erinatu-ri/
                        → [jerinatu]
                                        'my plate' (check length)
        g./ətaku/
                         → [ətak]
                                         'saliva'
        h./j-etaku-ti/
                         → [jetaku]
                                        'my saliva'
```

In suffixes starting with a vowel, such as the adverbial nominalizer -an(u) and the collective -am(o), and in a few possessive phrases, vowel deletion takes place, but /t/ is kept (note that in the compounds it is preserved only in certain forms):

/ku-paṛi-komo/→[kupaakom] 'our granddaugther' /ku-pa-komo/→[kupakom] 'our shoulder blade'

/ku-jeti-komo/→[kujeekom] 'our tooth' /ku-je-komo/→[kujekom] 'our mother'

⁴⁴ Other similar forms are: /paṛɨ/ 'granddaughter', /piṛɨ/ 'brother'. It is interesting to compare /jeṛɨ/ 'tooth' and /paṛɨ/ granddaugther' with /pa/ 'shoulder blade' and /je/ mother, the latter with no possessive suffix at all: (examples are shown with discontinuous morpheme ku-N-kom(o) '1st Person Collective'

```
126)
        a./pətukuru/
                             → [pətuku]
                                                'beautiful, well'
                             → [pətukuran]
                                                'the beautiful one'
        b./pətukuru-anu/
        c. /i-piti-amo/
                             → [ipiram]
                                                'his brothers'
        d./ku-piţi-amo-komo/→ [kupiţamkom] 'our brothers'
        e./pupu+eperiri/
                             → [pupueperi]
                                                'sole'
        f. /i-pupu-ti+epetiti/ → [ipupurepeti]
                                               'my sole'
        g./ə-pupu-ri+eperiri/ → [əpupureperi] 'your sole'
        h./pupu+umiti/
                             → [pupuumit]
                                                'big toe'
        i. /i-pupu-ri+umiti/ → [ipupuumit]
                                                'his big toe'
        j. /i- pupu-ri+umiti/ → [ipupurumit]
                                               'my big toe'
                                               'your big toe'
        k./ə-pupu-rɨ+umɨtɨ/ → [əpupurumɨt]
        1. /ti- pupu-ri+umiti/ → [tipupurumit]
                                               'his own big toe'
                             → [[ikueni]
        m./hiku+eni/
                                                'bladder (Lit. 'urine container')
                             → [i[ikureni]
                                                'my bladder'
        n./i-hiku-ri+eni
```

Not all ri/ru final syllables delete. A few nouns and the postposition nominalizer -ri preserve them:

```
a. [ʃitpɨrɨ] 'ugly', b. [aʃikaru] 'sugar', c. [kuritaparu] 'fish (sp.), d. [kahuru] 'bead', e. [maakaru] 'bird sp.', f. [ekororɨ] 'bread crumbs'; g. [iʃorɨ] 'rapids'.
```

128) a. /taṛi+hna-ṛi/→[taṛihnaṛi] 'the one in the open', b. /itu+hta-ṛi/→[ituhtaṛi] 'the one in the bushes', c. /tuna+kwa-ṛi/→[tunagwaṛi] 'the one in the water'.

It is interesting that as in the cases of vowel deletion, only words of more than two syllables lose the ri/ru syllable (/pari/ \rightarrow [pari] 'granddaughter', but /i-pari/ \rightarrow [ipaa] 'my granddaughter', /jeri/ \rightarrow [jeri], but /i-jeri/ \rightarrow [ijee]. The interesting exception is the word for 'manioc bread,' which is compared here with the word for 'meat' (cf. section 2.3.1.1.1.2 on two-syllable words). The forms inflected by j- '1st Person' have two syllables, but they behave just like other three-syllable words, losing their last syllable or vowel. Note that t- '3rd Person Reflexive' does not cause this phenomenon.

```
a. /utu/ → [utu] 'manioc bread'
b./j-utu/ → [juu] 'my manioc bread'
c. /tutu/ → [tutu] 'his/her/its own manioc bread'
d./oti/ → [oti] 'meat'
```

⁴⁵ See section 2.3.1.1.1.2. for a discussion on forms like /pati/ and /piti/ losing their last syllable when possessed by a noun.

```
e. /j-oti/ → [jot] 'my meat'
f. /t-oti/ → [toti] 'his own meat'
```

2.3.1.2.2. Verbal forms. Similarly to nouns, verbal roots lose their [τ u] or [τ i] in the final syllable entirely. However, while nouns preserve those syllables only when they are followed by the morphemes that trigger long allomorphs, verbs preserve them everywhere except when followed by a CV suffix. Examples are shown with -ja 'Non-past' (plus -(h)e 'SAP Affirmative'), -ne 'Remote Past', the verbal ambifix t-V-(h)e, $-\varnothing$ 'Recent Past' and the postposition he 'Desiderative.'

```
130)a./w-iri-ja-he/
                                          'I am going to make it'
                       → [wiijaj]
                       → [wiine]
    b./w-iri-ne/
                                          'I made it (a long time ago)'
    c. /t-iri-he/
                       → [tiihe]
                                          'made'
    d./w-iri/
                       → [witi]
                                          'I made it'
    e. /iri+he/
                       → [irihe]
                                          'someone wants to make it'
    f. /tiri-kə/
                                          'do it!'
                       → [tiikə]
131)a. /w-ewaru-ja-he/ → [wewaajaj]
                                         'I am going to burn it'
                       → [wewaane]
                                          'I burned it (a long time ago)'
    b./w-ewaru-ne/
    c. /t-əwaru-he/
                       → [təwaahe]
                                          'burned'
                       → [wewaru]
                                          'I burned it'
    d./w-ewaru/
    e./ewaru+he/
                       → [ewaruhe]
                                          'someone wants to burn it'
                        → [ewaakə]
    f. /ewaru-kə/
                                          'burn it!'
```

It is interesting that -k(a) and -(h)e (suffixes that reduce after vowels other than /i/ and /u/) do not reduce when there is ti/tu reduction (cf. section 2.3.1.1.2 on vowel deletion in verbs, and section 2.3.1.3 on /h/ deletion). Phonotactics accounts for this: with a preceding long vowel, if the suffixes reduced the result would be an extra heavy syllable, not attested anywhere in the language (V.CVVC, e.g., *ewaak).

⁴⁶ Other CV suffixes are -ta 'Imperative Ablative', -k(a) 'Proximal Imperative', -kat(a) 'Imperative Allative', -(h)e 'Purpose of Motion'.

Preceding $-\partial m\partial$ 'Resumptive', a suffix starting in a vowel, ri/ru syllables undergo vowel deletion, but /r/r is retained.

```
132) a. /w-ewaru-əmə/ → [wewarəmə] 'I burned it again' b. /w-iri-əmə/ → [wirəmə] 'I made it again'
```

The third and last issue related to syllable reduction is the deletion of /h/.

2.3.1.3. /h/ deletion. Usually the first step in syllable reduction is the deletion of vowels, leaving behind onset consonants to resyllabify as coda of the preceding syllables, or, as in the case of /t/, to be deleted. In the case of word-final /hi/ and /he/ syllables, it is the consonant itself that is deleted (recall that /i/ never deletes). The remaining vowel resyllabifies as a coda glide of the preceding syllable: /Vhi/→Vj, /he/→CVj.

The environments in which /h/ is preserved are the very same as those in which vowels are: preceding the morphemes that trigger long allomorphs.

2.3.1.3.1. Non-verbal forms. Two bound morphemes undergo /h/ deletion: -(h)e 'SAP Affirmative' and -(h)i 'Proximal Hortatory'.⁴⁷

```
133) a. /j-iniki-ja-he/ → [jinikjaj] 'I will sleep'
b. /j-iniki-ja-he+phiki/ → [jinikjahepsik] 'I will sleep a bit',
c. /w-epi-ja-he/ → [wepijaj] 'I will eat vegatable based food'
d. /w-epijahe+psik/ → [wepijahepsik] 'I will eat vegetable based food a bit'
```

The SAP Affirmative suffix does not always undergo deletion, however. In the example below (134 b), the full form of -(h)e occurs in a contexts where there is

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⁴⁷ The postposition *he* 'desiderative' and the postpositional collective suffix -*he* do not undergo this change.

emphasis (here the speaker is announcing he is approaching the house where the hearer is). This is the only attested context in which this suffix does not undergo /h/ deletion.

In addition to /h/ deletion, there exists a process of glide formation. This takes place in certain morphemes ending in /he/ (all occurring word-finally): the purpose of motion suffix (135 b), *t-V-(h)e* (135 a), and the SAP Affirmative suffix (135 d). The process can be represented as

An explanation for this is that the deletion of h before e creates a V_iV_j sequence not attested in the language (i.e. [ae]). [j], on the other hand, is a perfectly possible coda (cf section 2.2.1 on Wayâna syllabic structure).

The Proximal Hortatory -(h)i also undergoes /h/ deletion:

```
a. /k-iniki-hi/ → [kinikij] 'let's sleep'
b./k-iniki-hi+hku/ → [kinikiʃihku] 'please, let's sleep'
c. /kut-iṛi-hi/ → [kutiṛij] 'let's make it'
d. /kut-iṛi-hi+hku/ → [kutiṛiʃihku] 'please, let's make it'
e. /h-apəhi-hi/ → [hapəʃij] 'let's get it'
f. /h-apəhi-hi+hku/ → [hapəʃiʃihku] 'please, let's get it'
```

In free forms, as in suffixes, /h/ deletion generally takes place word-finally. There are, however, some exceptions: when inflected with the Attributive adverbializer –pe, /pihi/

'shame' is then a word with three syllables, which undergoes /h/ deletion (cf. /mɨta/→[mɨta], /ɨ-mɨta/→[ɨmta] 'my mouth).⁴⁸

```
137) a. /pɨhi/ → [pɨʃi] 'shame'
b. /pɨhi-pe/ → [pɨjpe] 'shameful'
c. /w-i-pɨhi-ptə/ → [wipɨsiptə] 'I made him ashamed'
```

/h/ may be deleted in words with more than two syllables:

```
138)
        a. /ərahi/
                         → [əraj]
                                        'fear'
        b./j-erahi-ri/
                         → [jerasi]
                                        'my fear'
        c./ətahi/
                         → [ətaj]
                                        'cheeks'
                         → [jetaʃi]
                                        'my cheeks'
        d./j-etasi-ri/
        e. /wərihi/
                         → [wəţij]
                                        'woman'
        f. /i-warisi-ri]
                        → [iwari[i] 'my daughter' (i.e. a close woman that is not a wife)'
```

/h/ deletion has created ambiguity in the phonological representation of some forms. It is now difficult to determine whether or not words ending in [j] are a result of /h/ deletion (note that these words do not present the same morphophonological alternations as the ones above because they cannot be possessed).⁴⁹ Consequently, in elicitation sessions, speakers alternate greatly when asked to produce such roots followed by *CCV* particles.

In some words, it seems that speakers insert /h/ where it was not historically present. This is clearly the case of the word for snake:

```
139) a. /əkəju/ → [əkəj] 'snake'
b. /əkəju-jmə/ → [əkəjujmə] 'anaconda'
c. /əkəju-mna/ → [əkəʃimna] 'with no snake'
(*əkəjumna)
d. /əkəju-hpe-an/ → [əkəʃihpe] 'there is a snake'
(*əkəjuhpe)
```

In some cases, the variation in speaker judgment is great: a single speaker in a single session may spontaneously offer a form and refuse it the next minute. Others

⁴⁸ There is comparative evidence for /h/ deleting word-medially in Wayâna: the word for tapir is [majpuţi] in Wayâna but [maʃipuɣi] in Aparai).

accept one form but not the other and *vice-versa*, and still others recognize two possibilities. Some of these forms are:

```
CCV (psik 'small little', -mna 'without, -hme 'Existential')
140)
                                           ~ [mureimna] 50
                         [muresipsik]
                                                              'fruit (kd.)'
        a. [murej]
                                           ~ [əkəimna]
        b. [əkəj]
                         [əkə∫ihme]
                                                              'snake (generic)'
        c. [ehnaj]
                         [ehna∫ip∫ik]
                                           ~ [ehnaip∫ik]
                                                              'corn'
                                                              'bird (sp.)'
        d. [arakakaj]
                         [arakakaksimna] ~ [ərakakaimna]
                         [kuwa[imna]
                                           ~ [kuwaimna]
                                                              'palm tree (sp.)'
        e. [kuwaj]
                         [tunasipsik]
        f. [tunaj]
                                           ~ [tunaip∫ik]
                                                              'snake (sp.)'
                                                              'hummingbird'
        g. [tukuj]
                         [tuku[imna]
                                           ~ [tukuimna]
       h. [anapamij]
                         [anapamisimna] ~ [anapamiimna] 'fan'
```

The examples below, however, were produced consistently by speakers, always presenting /h/ when followed by *CCV* particles. Further investigation must be carried out in order to discover whether this is truly a consistent pattern as opposed to mere coincidence.⁵¹

⁵⁰ See section 2.3.6 on morphophonological alternations between [j] and [i]: j→in onset position, etc.

⁵¹ Nevertheless, it is interesting to compare Wayâna with Aparai, a language that has preserved /s/ where Wayâna lost /h/ (cf. Tavares (1999a) on the s→h phonological change that took place in Wayâna). Most words that consistently present /h/ before CCV particles in Wayâna have an [s] (or [ʃ]) in Aparai (Aparai data were collected by myself in my fieldtrips to the Paru River.)

Aparai	Wayâna		Plus CCV	
[orisi]	[wəţij]	'woman'	[xi{qi { ijew]	'small woman'
[kaikusi]	[kajkuj]	ʻjaguar'	[kajku∫ip∫ik]	'small dog, jaguar'
[orosi]	[oroj]	'cashew fruit'	[oroʃipʃik]	'small cashew fruit'
[pɨjasi]	[pɨjaj]	'shaman'	[pɨja∫imna]	'with no shaman'
[umosi]	[umoj]	'jealousy'	[umo∫imna]	'with no jealousy'
[mose]	[məj]	'that one'	[mə∫ihnə]	'this one (animate) also'
[masi]	[kuwamaj]	'snot'	[kuwama∫imna]	'with no snot'
[josi]	[joj]	'lizard (sp.)'	[jo∫imna]	'with no lizard (sp.)'

However, there are also exceptions. The words below present an [s] or $[\int]$ in Aparai, but fluctuate in Wayâna.

[tukusi]	[tukuj]	'hummingbird'	[tuku∫imna]~[tukuimna]
[muresi]	[murej]	'fruit (sp.)'	[muresipsik]~[mureimna]
[o ∫ inase]	[ehnaj]	'corn'	[ehna∫ip∫ik]~[ehnaip∫ik]

⁴⁹ Most nouns for animals, fruits and elements of nature, may never be possessed (cf. section 4.1.3).

```
141)
        a. /məhi/
                             → [məi]
                                                 'this one'
        b. /məhi+hnə/
                             → [endi]em]
                                                 'this one also'
        c. /wərihi/
                             → [wərij]
                                                 'woman'
        d. /wərihi+phiki/
                            → [wəriʃipʃik]
                                                 'small woman'
        e. /kajkuhi/
                             → [kajkuj]
                                                 'dog, jaguar
        f. /kajkuhi-mna/
                             → [kajkusimna]
                                                 'with no dog, jaguar'
        g /turihi/
                             → [turii]
                                                 'fruit (kd.)'
        h. /turihi-mna/
                             → [turisimna]
                                                 'with no fruit (kd.)'
           /pijahi/
                             \rightarrow [pijaj]
                                                 'shaman'
                             → [pɨjaʃimna]
        j. /pɨjahi-mna/
                                                 'with no shaman'
        k. /omohi/
                             → [umoi]
                                                 'iealousy'
        1. /umohi-mna/
                             → [umosimna]
                                                 'with no jealousy'
        m. /kuwamahi/
                             → [kuwamaj]
                                                 'snot'
        n. /kuwamahi-mna/→ [kuwama∫imna]
                                                'with no snot'
                                                'lizard (sp.)'
        q./ijohi/
                            → [ijoj]
        r. /johi-mna/
                             → [jo∫imna]
                                                 'with no lizard (sp.)'
        s. /tɨnkɨhi/
                             → [tinkij]
                                                 'de-juicing instrument'
        t. /tɨnkɨhi-mna/
                             → [tinkisimna]
                                                 'with no de-juicing instrument'
```

Words that consistently do not present /h/ before CCV particles are:

```
142) a. /əpij/ → [əpij] 'stair'
b. /əpij-mna/ → [əpiimna] 'no stairs'
c. /kutej/ → [kutej] 'bottle'
d. /kutej-hme/ → [kuteihme] 'there is a bottle'
```

Again, as in the case of vowel and /t/ deletion, the change does not affect all

forms. Attested examples that fail to undergo vowel deletion are:

```
143)
         a. [emʃii]
                             'sister'
         b. [aruma∫i]
                            'fish (sp.)',
         c. [patakasi]
                            'fish (sp.)'
         d. [kunumusi]
                            'old woman',
         e. [kapukapusi]
                            'Kapukapusi (a supernatural being's name)'
         f. [pasi]
                             'small agouti'
                             'sister'
         g. [ta∫i]
         h. [etasi]
                             'scissors'
         i. [kura∫i]
                             'chicken'
```

The same is true of words that do not have a fricative in Aparai but may present one in Wayana.

```
[tunai] [tunaj] 'snake (sp.)' [tunaʃipʃik]~[tunaimna]
[okoj] [əkəj] 'snake (generic)' [əkəʃihme]~[əkəimna]
[arakakaj] [arakakaj] 'bird (sp.)' [arakakaʃimna]~[arakakaimna]
[waj] [kuwaj] 'palm tree (sp.)' [kuwaʃimna]~[kuwaimna]
```

```
j. [tamuʃi] 'old man, grandfather'
k. [kapaʃi] 'armadillo'
l. [kuʃi] 'toucan (sp.)'
```

2.3.1.3.2. Verbal forms. Two verbal roots /apəhi/ 'to get/grab' and /epuhi/ 'to get fat' present /h/ deletion. The contexts in which /h/ is kept and lost in these forms is the very same as those in which vowels are kept or lost in other verbal roots. The only exception is when the two roots are inflected by -ja 'Non-past' and -ama 'Resumptive'. In this case, vowel deletion occurs as in all other verbal roots. These constitute the only attested cases in which the surface allomorph of a root ends in a fricative.

```
144)
                                           'let's get it'
        a. /h-apəhi-j/
                           → [hapəʃij]
        b./apəhi-ta/
                           → [apəjta]
                                           'go get it'
                          → [wapəjne]
        c./w-apəhi-ne/
                                           'I got it (long ago)'
        d./n-apəhi-ja/
                          → [napəhja]
                                           'he will get it'
        e. /w-apəhi-əmə/ → [wapəhəmə] 'I got it again'
                           → [apəʃira]
                                           'not to get it'
        f. /apəhi-ra/
        g./w-epuhi-ne/
                          → [wepujne]
                                           'I got fat (long ago)'
        h./n-epuhi-ja/
                           → [nepuhja]
                                           'he will get fat'
        i. /w-epuhi-əmə/ → [wepuhəmə] 'I got fat again'
        j. /epuhi-ra/
                           → [epusira]
                                           'not to get fat'
```

Note that under no other circumstance does /i/ undergo deletion. In the examples above, however, preceding [-consonant] elements, it does (cf. section 2.3.6, however, for a discussion on the ambiguous behavior of glides as sometimes [-consonant] and sometimes as [+consonant] segments).

Some forms of the copula also undergo /h/ deletion: (examples below show voice and nasal assimilation, discussed in sections 2.3.2.1 and 2.3.2.2, respectively)

```
145) a. /wahe/ → [waj] 'I am'
b. /ipoke+wahe+hnə] → [ipogwahehnə] 'I am good also'
c. /manahe/ → [manaj] 'you are'
d. /ipoke+manahe+hnə] → [oponmanahehnə] 'you are good also'
```

In conclusion, there seems to exist a tendency in the language to make morphemes as small as possible. The two main points to be highlighted are: first, syllable reduction starts at the right edge of words. It may progress in the word, in alternating syllables, in order to respect the syllabic template. Deletion of segments (vowels, /t/ and /h/) follow this pattern (examples already presented are repeated here):

3→2 (c)v.cv.cv→(c)v.cvC (c)v.cv.cv→(c)v.cv (c)v.cv.cv→v.cvj	/wetepu/ /pəʈəʈɨ/ /ətahi/ /w-apəhi/	→→→	[wetep] [pəţəə] [ətaj] [wapəj]	'belly' 'frog' 'cheeks' 'I got it'	V deletion /ʈ/ deletion /h/ deletion /h/ deletion
4→3 or 2					
(c)v.cv.cv.cv→cv.cvc	/əramuku/	\rightarrow	[əʈamuk]	'sweat'	V deletion
(c)v.cv.cv. c v→cv.cv.cv	/j-eʈahi-ʈɨ/	\rightarrow	[jeʈa∫i]	'my fear'	/ʈ/ deletion
(c)v.cv.cv. > cv.cv.cvj	/h-apəhi-hi/	\rightarrow	[hapə∫ij]	'let's get it'	/h/ deletion
(C) V.CV.CV.CV \rightarrow (C)VC.CVC	/i-pupoti/	\rightarrow	[ihpot]	'my body hair'	V deletion
5→4 or 3					
(c)v.cv.cv.cv. $cv \rightarrow$ (c)v.cv.cv.cv	/i-wetepu-Ţi/	\rightarrow	[iwetepu]	'my belly'	V deletion
	/j-eramuku-ri/	\rightarrow	[jeramuku]	'my sweat'	/t/ deletion
(c)v.cv.cv.cv. > (c)v.cvc.cvj	/w-apəhi-ja-he/	\rightarrow	[wapəhjaj]	'I will get it'	/h/,V deletion
(c)v.cv.cv.cv.cv→(c)vc.cv.cvc	/i-minetumi/	\rightarrow	[imnetum]	'my husband'	V deletion

Second, deletion takes place through the process of *lexical diffusion*, with the change not taking place at once, but happening to individual words as members of different classes:

- a) two syllable, three syllable words and so on are affected differently: three syllable words present the most cases of reduction.
- b) vowels are affected differently: /i/ is the most frequent to delete and /i/ the least; /a/ never deletes.

It is not clear what is the prime factor motivating syllable reduction is. Stress would be a likely candidate (as proposed in Gildea 1995). It is not possible, however, to account for the synchronic patterns of syllable reduction in Wayâna on the basis of stress

patterns. As opposed to Tiriyó, which presents a rhythmic stress system, Wayâna lacks any systematic phonetic correlates for diagnosing stress clearly. A phonetic feature that might be thought to be a correlate of stress is that utterances normally end with a falling or with a raising pitch. Sometimes in three-syllable words, it is the second syllable that is realized with the highest pitch and the greatest intensity (cf. 2.4.1). Note that this is exactly the syllable that is currently undergoing deletion in at least one word: /w-itə-ja-he/->[witsaj]~[witsjaj] 'I will go'.

2.3.2. Phonological processes in consonant clusters. After vowel deletion, consonant clusters are created (CVC→CC). The clusters created at morpheme and word boundaries present less restriction concerning the co-occurrence of consonants than the clusters found root-internally. Nasal geminates are found at word boundaries and geminate glides are found at morpheme and word boundaries. The distribution of glides is defective and asymmetrical: there are roots ending in [w], but no bound morpheme (or even a particle) starting with [w] was found. Bound morphemes starting with [j], however, are quite frequent. Thus, [jj] is possible at morpheme and word boundaries. Some of the restrictions found root-internally still hold: /t/ never occurs as coda; /h/ is found in consonant clusters, but never in a geminate.

Some restrictions, however, also hold at morpheme and word boundaries: specifically, those related to the defective distribution of stops. As seen in section 2.1.2.2.1, voiceless stops show defective distributions, never occurring as the first

element in clusters with nasals, non-nasal sonorants, or with other homorganic stops.

Examples below show voiceless stops:

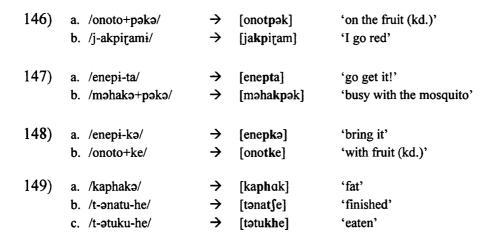


Table 10 Defective Distribution of Stops

	p	t	k	h	m	n	w	τ	j
p		pt	pk	ph					
t	tp		tk	tſ					
k	kp	kt		kh					

Morphophonological alternations provide us with a clue to understanding this distribution. Stops undergo five phonological processes in consonant clusters: (i) voicing, (ii) nasalization, (iii) dissimilation (c.f. Jackson 1972, Camargo 1996, and Tavares 1998), (iv) denasalization, and (v) deletion or change due to the */pr/ constraint.

These processes take place across both morpheme and word boundaries, as seen in the next sections.

2.3.2.1. Voice assimilation. Stops become voiced before non-homorganic non-nasal sonorants. Note that in addition to assimilating voice, /t/ becomes palatalized before [j]

(151 d). The examples below show assimilation of voice taking place across morphemic and word boundaries: (The emphatic particle $\tau = (\tau)$ in example (150 d) undergoes τ deletion (2.3.1.2))

150)	a. /tumhurop/ b. /tumhurop+wi-ka/ c. /w-enepi/ d. /w-enepi+rərə/	→→→	[tumhutop] [tumhutobwika] [wenep] [wenebtə]	'jump (sound simbolic)' 'I jumped' 'I brought it' 'I really brought it'
151)	a. /ikanetɨ/b. /ikanetɨ+w-ene/c. /n-enatu/d. /n-enatu-ja-he/	→→→	[ikanet] [ikane dw ene] [nenat] [nena d ³ jaj]	'hammock string' 'I saw the string of the hammock' 'it finished' 'it will get finished'
152)	a. /təkţeweje/ b. /məki-jamo/ c. /akţo/ d. /əniki/ e. /əniki+ţəţə/	→→→→	[təgτeβej] [məgjam] [agτο] [ənik] [ənɨgτə]	'slippery' 'they' 'foam' 'Who' 'Who really?'

Table 11 summarizes this:

Table 11
Voiceless Stops and the Assimilation of Voice

	p	t	k	h	m	n	W	τ	j
p		pt	pk	ph			bw	bτ	bj
t	tp		tk	t∫			dw		d³j
k	kp	kt		kh			gw	gt	gj

In the table above, we notice that [dt] is missing. This gap is accounted for in section 2.3.2.3 on the dissimilation process.

2.3.2.2. Assimilation of nasality. Stops become nasals before non-homorganic nasal consonants:

d./kunmə/	\rightarrow	[kunmə]	'we (inclusive)'
e. /tekme/	\rightarrow	[teŋme]	'heavy'
f. /w-i-panakma/	\rightarrow	[wipanaŋma]	'I heard it'
g./t-aharap-nəpi-he/	→	[taharamnanəphe]	'H/she/it dried it'
h./papako/	\rightarrow	[papak]	'father (voc.)'
i. /papako+n-eha/	\rightarrow	[papaŋneha]	'It was my father'
j. /tumhurop/	\rightarrow	[tumhurop]	'jump (sound symbolic)'
k./tumhurop+ni-ka/	\rightarrow	[tumhuromnika]	'I jumped'
l. /itə-kə+naj/	\rightarrow	[itənnai]	'Go now!'

Table 12 presents a summary of assimilation to nasality:

Table 12
Voiceless Stops and the Assimilation of Voice and Nasality

	p	t	k	h	m	n	w	t	j
p		pt	pk	ph		mn	bw	рţ	bj
t	tp		tk	tʃ	nm		dw	дţ	d ³ j
k	kp	kt		kh	ŋm	ŋn	gw	gt	gj

2.3.2.3. Dissimilation. Stops preceding non-approximant homorganic consonants change into [h] or [ʃ]~[ʒ]~[h] (/ i_C)⁵² as in examples (155 a and d and 156 b).⁵³

154)	a. /i-pupo-ti-mna/ b. /pupo/ c. /i-pupo-ti/ d. /i-pupo-ti/	→ → → →	[ihpotɨmna]~[iʃpotɨmna] [pupo] [ɨhpot] [iʃpot] ~ [ihpot]~[iʒpot]	'without hair' 'body hair' 'my body hair' 'his body hair'
155)	a. /pupu+pumo/ b. /i-pumo/ c. /tumhuţop/ d. /tumhuţop+mi-ka	→ → → 1/ →	[pupu pumo] [i hm o] ~ [i∫mo] [tumhuፒop] [tumhuፒohmɨka]	'turtle egg' 'his egg, egg' 'without something to see' 'you jumped'

⁵² There are some cases in which the $[h]\sim[\int]/i_C$ alternation does not take place. This is the case of the borrowed word $[i\int ko\tau a]$ (* $[ihko\tau a]$) 'school', and some native words as [ihmulu] (* $[i\int mulu]$) 'his pus'. ⁵³ Jackson (1972:48) states that h 'varies freely from devoicing of the vowel of the syllable nucleus to a

fricative articulation': the bilabial fricative $[\phi]$ before [p], the interdental fricative $[\theta]$ before [m], and velar fricative [x] before [k]. Of these sounds, only $[\phi]$ is found in my data (cf. section 2.3.3 for a discussion on fricatives in coda position). Camargo (1996:128) has attested the uvular $[\chi]$ as an output of dissimilation. This sound is not attested in our data.

```
156)
         a. /ene-topo-mna/
                                        [enetopomna]
                                                                        'without something to see'
                                 \rightarrow
                                                                        'seeing'
          b. /ene-topo+pəkə/
                                        [enetohpək]
          c. /ene-topo+ke/
                                  \rightarrow
                                        [enetopke]
                                                                        'with something to see '
\bullet/t/\rightarrow[h]\rightarrow/_ [coronal] (t, n, t)
                    [-approx]
157)
         a. /ətati-mna/
                                        [ətatimna]
                                                                        'there is no hammock
                                  \rightarrow
          b. /j-etati/
                                        [jetat]
                                                                        'my hammock'
          c. /j-etati+taranme/
                                                                        'maybe my hammock'
                                        [jetahtaranme]
          d./j-etati+tətə/
                                  \rightarrow
                                                                         '(It's) really my hammock'
                                        [jetahrə]
          e. /etati+ke/
                                  \rightarrow
                                                                        'with his hammock'
                                        [etatke]
          f. /peti/
                                  \rightarrow
                                        [peti]
                                                                        'thigh'
                                                                        'I have a thigh'
          g. /i-petit-a-ja-he/
                                  \rightarrow
                                        [ipehtej]
158)
         a. /utati-ra/
                                        [utatira]
                                                                        'not lost'
          b. /j-utati-ne/
                                  \rightarrow
                                        [jutahne]
                                                                        'I got lost (distant past)'
          c. /w-epekati/
                                        [wepekahne]
                                                                         'I bought it (distant past)'
• /k/\rightarrow [h] / [velar]
159)
          a. /uməki-ra/
                                                                         'someone/something did not came'
                                  \rightarrow
                                        [uməkita]
          b. /uməki-kə/
                                  \rightarrow
                                        [məhkə]
                                                                         'come!'
          c./m-uməki-təw/
                                        [muməktəw]
                                                                         'you all came!'
          Glides never trigger or undergo dissimilation:54
```

•/ww/
$$\rightarrow$$
 [ww], /pw/ \rightarrow [bw], /mw/ \rightarrow [mw], /jj/ \rightarrow [jj]:

160)	a. /kuw-aptawə-he/	→ [kuwaptawəhe]	'when, if all of us'
	b. /oparan+ihpe+aptawə+w-itə-ja-he/	→ [oparanihpeaptawwitəjaj]	'I will go if there is an airplane'
161)	a. /hokorom/	→ [hokorom]	'paddle'
	b. /hokorom+wi-/ka/	→ [hokoromwika]	'I paddled'
162)	a. /w-ekeju/	→ [wekeju]	'I baked bread'
ĺ	b. /w-ekeju-ja-he/	→ [wekejjaj]s	'I will bake bread'

There is one exception to the pattern /jj/ \rightarrow [jj]: in the word for 'bottle' /j/ seems to undergo dissimilation, /jj/ \rightarrow [hj], in normal speech, though not in slow speech. Further investigation is necessary to clarify this.

⁵⁴ See section on the ambiguity of the phonemic status of glides.

Nasals never undergo dissimilation:

• /mp/ \rightarrow [mp], /mm/ \rightarrow [mm] ⁵⁵, /nt/ \rightarrow [nt], /nn/ \rightarrow [nn], /nr/ \rightarrow [nr]:

```
164)
       a. /təhemi+pəkə/
                            → [təhempək]
                                                 'about food'
                                                 'You paddled'
       b./sokorom+mika/
                            → [sokorommika]
       c./ hokorom+wika/
                            → [hokoromwika]
                                                 'I paddled'
       d./uru+he+man+toto/ → [uruhemantot]
                                                 'They want bread'
       e. / tawunu+n-eha/
                            → [tawunneha]
                                                 'it was the wind'
       f. /ipoke-anu+pəpə/
                            → [ipokan[ə]
                                                 'really the good one'
       e. /tawunu-ja-wə/
                            → [tawunjaw]
                                                 'in the wind'
```

In the speech of at least two young consultants living in the Suisuimïn village, the dissimilation goes farther than for other speakers. Nasals dissimilate before homorganic consonants: $/nt/\rightarrow[ht]$, $/nr/\rightarrow[ht]$, $/nr/\rightarrow[ht]$. The examples below, produced by a woman, were the consultant's spontaneous responses to the Portuguese prompt (165 a-b). When asked to repeat the phrases, however, she pronounced them sometimes without dissimilating the nasals (165 c-d).

```
a. /i-pakoţo-nu+neha/ → [ipakoţohneha] 'It was my house'
b. /i-pakoţo-nu+naj+neha/ → [ipakoţohnai neha] 'It was my abandoned house'.

c. /i-pakoţo-nu+neha/ → [ipakoţonneha] 'It was my house'
d. /i-pakoţo-nu+naj+neha/ → [ipakoţonnai neha] 'It was my abandoned house'.
```

In Renato's speech the deletion was more systematic, with no variation:

```
166) a. /əməṛə+ken+ṛep/ → [əməkehṛep] 'It is up to you'
b. /i-pakoṛo-nu+neha/ → [ipakoṛohneha] 'It was my house'
c. /i-pakoṛo-nu+naj+neha/ → [ipakoṛohnaineha] 'It was my abandoned house'.
```

It is interesting that though the dissimilation occurs in /nn/ sequences, it did not in /mm/, /mw/, /nt/:

```
167) a. /ʃokorom+mi-ka/ → [ʃokorommika] 'You paddled'
b. /ʃokorom+wi-ka/ → [ʃokoromwika] 'I paddled'
c. /i-pakolo-nu+t-əne-he / → [ipakolontənej] 'Someone saw my house'
```

Though I present the output with doubled consonants, all geminates (mm, nn, etc) are pronounced short. Thus $/\text{mm}/\rightarrow$ [m]: /i-mine[umi+me/ \rightarrow [imne\taume].

It seems that dissimilation is starting to encompass segments other than stops.

However, since nasal dissimilation was attested in only two younger speakers of the same village, further investigation is needed.

To conclude, assimilation and dissimilation depend to some extent on the speed of speech. In normal speech, they take place in all environments (root internally, at morpheme boundary and at word boundary). In slow speech, however, there is an asymmetry:

i) Voicing: voicing of stops only occurs in normal speech:

```
NORMAL SPEECH

a. /təkçeweje/
b. /tumhuţop+wi-ka/
c. /i-kaneti+w-ene/
d. /iniki+τρτρ/

SLOW SPEECH

*slippery'
*c [tam.hu.τop.wika] 'I jumped'

[tum.hu.τop.wika] 'I jumped'

[ikanedwene] ~ [i.ka.net.we.ne] 'I saw the hammock string'

- [inigτρ] ~ [inik.τρ] 'Who really?'
```

ii) Nasality: root-internally assimilation of nasality occurs consistently in slow as well as in normal speech (examples 169 a-d). At morpheme and word-boundaries, however, there is no nasal assimilation in slow speech (examples 169 e-g).

```
SLOW SPEECH
       NORMAL SPEECH
169)
       a. /emna/
                           → [emna]
                                                                'we (exclusive)
                                             ~ [em.na]
                           → [kunmə]
       b./kunma/
                                             ~ [kun.mə]
                                                                'we (dual)'
       c./tekme/
                           → [tenme]
                                             ~ [ten.me]
                                                                'heavy'
                           → [wipananma]
                                             ~ [wi.pa.nan.ma]
                                                                'I heard it'
       d./w-i-panakma/
                           → [papanneha]
                                                                'It was my father'
       e./papako+neha/
                                             ~ [pa.pak. ne.ha]
       f. /tumhurop+ni-ka/
                           → [tumhuromnika] ~ [tumhorop. nika] 'S/he/it jumped'
                           → [itənnaj]
                                             ~ [i.tək. naj]
                                                                'Don't' go'
       g./itə-kə+naj/
```

iii) Dissimilation: root-internally there is never variation between [h] and a stop; the realization is [h] in both normal and slow speech. At morpheme boundaries also, though there is clearly dissimilation, [h] occurs in both normal and slow speech. At word boundaries, however, the realization of stops depends on the phonological status of the

following words: preceding postpositions and particles. Both in normal and in slow speech stops are realized as [h]. If the word following is phonologically independent, [h] occurs in normal speech while a stop occurs in slow speech:

```
NORMAL SPEECH
                                SLOW SPEECH
170)
       a. /i-pupoti/
                             → [ihpot]
                                               ~ [ih.pot]
                                                                      'we (exclusive)
       b./j-utati-ne/
                            → [ju.tah.ne]
                                                  (*ju.tat.ne)
                                                                      'I got lost'
       c./məki-kə/
                            → [məh.kə]
                                                  (*mək.kə)
                                                                      'come!'
                            → [jeramukuhkep]
       d./j-eremuku-kepi/
                                                  (*je.ra.mu.kuk.kep) 'I am sweaty'
       e./ene-topo+pək/
                            → [enetohpək]
                                               ~ (*ene.top.pək)
                                                                      'about seeing'
       f. /j-etati+rərə/
                             → [ie.tah.rə]
                                                  (*jetat.p)
                                                                      'It's really my hammock'
       g./ipoke+ka+mane/ → [ipohkaman]
                                                                      'Are you good?'
                                                  (*i.pok.ka.man)
       h./tumhurop+mi-ka/ → [tumhurohmika]~[tum.hu.rop.mika]
                                                                      'You jumped'
       i. /j-etati+taranme/
                            → [jetahtaranme]
                                              ~ [je.tat. tə.ran.me]
                                                                      'maybe my hammock'
```

2.3.2.4. Denasalization. Nasals tend to be denasalized before voiceless consonants. The denasalization, however, is not complete. It does not result in a voiceless stop such as [p] or [t], but instead in a segment characterized by a transition from a nasal at the beginning to a more stop-like articulation with no voice, no friction coming through the nose, and no tension, in the end. In these cases, the preceding vowels are strongly nasalized: ⁵⁶

$$/vm/\rightarrow [\tilde{v}^{m}p] \qquad /vn/\rightarrow [\tilde{v}^{n}t]$$
171) a. /mita/ \rightarrow [mita] 'mouth' b. /i-mita- τ i/ \rightarrow [τ mpta] 'my mouth' c. /kanpə/ \rightarrow [k τ npə] 'roasted fish' d. /kun-ka/ \rightarrow [k τ nka] 'Someone said it'

Besides this general pattern, some variation is observed among speakers. Some speakers have only the nasalization:

⁵⁶ Speakers have corrected me when I tried to pronounce these examples with plain stops.

In the dialect of some older speakers, nasals can be pronounced as voiceless (it is possible to hear the friction coming from the nose), with the preceding vowel strongly nasalized.

```
173) a./munpə/ → [műnpə] 'rat'
b./ankə/ → [ãnkə] 'fish (sp.)
```

This seems to be a recent process in the language. Though the post-oralized pronunciation is found in the speech of all speakers, there also exists significant variation in the way speakers articulate particular words. The best example to illustrate this is the word for 'woman's son'. Some speakers alternate between the full nasal and the post-oralized pronunciation, some alternate between the post-oralized and the deletion of the nasal consonant with nasalization of the preceding vowel, and one speaker (AW) produces this word only with [h]:

```
174) a. /i-mumuku-ta/ → [imumukta] 'I have sons'
b. /i-mumuku/ → [imumuku] 'my son' (NW)
 → [imumuku] 'my son' (all including NW, except AW)
 → [imumuku] 'my son' (RW, MW, RW)
 → [imumuku] 'my son' (AW only)
```

Different processes of denasalization seem to have been affecting morphemes in the language already for some time. There exist a good number of allomorphs showing an alternation between a nasal and a stop: -mphak(ə)/-phak(ə) 'Modifier adverbializer', -hpe/-hme 'Existential', po/mo 'on', -tom(o)/-nom(o) 'Collective', -me/-pe 'Attributive', -min(i)/-pin(i) 'Privative Nominalizer', and -npə/-tpə 'Devaluative'.

2.3.2.5. The */pt/ constraint. We have seen above that all [pt] clusters result from morphophonological alternation (across morpheme and word boundaries), and that such a

cluster is not found root-internally. Morphophonological alternations taking place in a few examples help to clarify this:

In the examples above, when vowel deletion takes place, a /pt/ consonant cluster is created root-internally. The output is interesting, /p/ seems to undergo a change, being either changed into [k] or deleted altogether leaving compensatory lengthening on the preceding vowel.⁵⁷

The same seems to hold for */pj/ (another cluster never found root-internally).

This is the only example attested:

⁵⁷ Loss of /pV/ word-initially is common across the Cariban family (Gildea, PC.).

2.3.3. The phonological status of fricatives in coda position. As seen in section

2.3.2.3, stops dissimilate before homorganic consonants. The result is a fricative in coda position. In the cases where there are no morphophonological alternations between a stop and a fricative, it becomes difficult to determine whether the segment in question is the realization of a stop or of /h/. In order to discuss this point, it is necessary to first describe the occurrences of fricatives in coda position root-internally.

Coda consonants occur root-internally as follows: [h] occurs between a vowel (other than [i]) and a consonant; ⁵⁸ The voiceless labial fricative [ϕ] occurs between [u] and [p] where it is in free variation with [h].⁵⁹

```
178) / V_C
a. [aṭahpa] 'parakeet', b. [ahto] 'cough', c. [wapodahkon] 'firewood'
d. [tahmekantaj] 'queasy', e. [ehnaj] 'corn', f. [ahnep] 'peanut',
g. [əṭiwehṭe] 'alligator (sp.)', h. [tɨhwa] 'again', i. [weṭəhweṭə] 'flute (kd.)',
j. [təhjekaj] 'to extract teeth', k. [təhjomtəj] 'to wrap'.
179) [φ]~[h] /u_p
a. [aktuφpoj] ~ [aktuhpoj] 'up river',
b. [uφpλk] ~ [uhpλk] 'a long time ago'.
```

In the environment between [i] and a consonant, [ʃ], [3] and [h]alternate freely:

⁵⁸ Between a vowel (other than [i]) and a consonant, the voiceless glottal fricative [h] and the voiced glottal fricative [h] vary freely independent of the context (cf. [afinep] ~ [ahnep] 'peanut'). For the sake of simplicity, only [h] is presented in the examples.

⁵⁹ It occurs only between [u] and [p], so in the absence of either sound [φ] fails to occur: [nətuhmo] 'He/She/it fell' (*nətuφmo), [alahpa] 'parakeet' (*alaφpa).

The major question concerning fricatives in coda position is how their phonemic representation can be determined. It is clear that /h/ can occur in coda position.

Examples such as

181) [tɨhwə] 'different', [werəhwerə] 'flute (kd.)', [təhjekaj] 'to extract teeth', [təhjomtəj] 'wrap', and [ihjan] ~ [izjan] 'new'

prove this. Since glides do not trigger or undergo dissimilation, [h] (also [ʃ] and [ʒ]) in these examples must be a realization of /h/. Thus, in coda position, both stops and /h/ can be realized as [h].

In order to solve this matter, it is necessary to recall how vowel deletion takes place. Consonant-vowel sequences delete differently from /h/-vowel sequences. All consonants can become coda segments after vowel deletion. /h/, however, almost never does. Normally, in /h/-vowel sequences, if there is deletion, it is /h/ (i.e., the consonant) that undergoes it. The only situation in which the vowel is deleted in a /h/-vowel sequence is when it is followed by a glide or vowel (i.e., by a [-consonant] onset), as the examples below show:

```
182)
        a. /h-apəhi-j/
                          → [hapə[ij]
                                               'Let's get it'
        b./apəhi-ta/
                          → [apəjta]
                                               'Go get it'
        c./w-apəhi-ne/
                          → [wapəjne]
                                               'I got it (long ago)'
                                               'Get it!'
        d. /apəhi-kə/
                          → [apəjkə]
        e. /n-apəhi-ja/
                          → [napəhja]
                                               'He will get it'
        f. /w-apəhi-əmə/ → [wapəhəmə]
                                               'I got it again'
```

Note that while /h/ deletes preceding /t/, /k/, and /n/ ([+consonant]) as onsets (examples 182 b-d), it is retained preceding /j/ ([-consonant]) as onset (182 e, f). The answer, then, seems to be that /h/-vowel sequences undergo /h/ deletion whenever preceding [+consonant] segments, but undergo vowel deletion when preceding [-consonant] segments. In this case, whenever [h] (also [\$\phi\$], [\$\frac{1}{2}\$] and [\$\frac{1}{2}\$]) occurs preceding

obstruents and nasals it is the realization of a stop, whenever preceding a glide, it must be the realization of /h/:

```
CODA STOPS
183) a. /arappa/
                         → [arahpa]
                                              'parakeet',
      b./ipme/
                         \rightarrow [ihme] ~ [i\( \)me] 'to exist'
      c./atto/
                         → [ahto]
                                              'cough'
      d./etnahi/
                         → [ehnaj]
                                              'corn'
                        → [aktuфpoj]
      e. /aktuppoje/
                                              'up river
      f. /ikkə/
                         → [ihkə] ~ [i∫kə]
                                              'skin worm'
        CODA /h/
184) a. /tihwa/
                         \rightarrow [tihwa]
                                              'again'
      b./t-əh-je-ka-he/ → [təhjekaj]
                                              'pull teeth'
      c./werəhwerə/
                        → [werəhwerə]
                                              'flute (kd.)'
      d. / t-əh-jomtə-he/ → [təhjomtəj]
                                              'wrap oneself'
      e. /ihjanu/
                         → [ihjan]~[iʒjan]
                                              'new'
```

2.3.4. The phonological status of nasals in coda position. Similar to the problem of fricatives in coda position is the problem of nasals in coda position: how to determine when a root-medial nasal in coda position preceding a nasal consonant is the realization of a nasal segment or of a stop undergoing nasal assimilation. [ŋ] is clearly the realization of /k/, since [ŋ] does not exist elsewhere in the language (cf. section 2.6, however, for a different phonological status of [ŋ] in sound symbolic words).

[m] and [n], however, present a problem. Preceding a nasal consonant root-internally, they may be the realization of either /m/ or /n/, or of /p/ or /t/ undergoing nasalization. The language does not offer a way to disambiguate this. Thus, the best solution is to state that preceding nasals /p/ and /m/, and /t/ and /n/ become neutralized.

2.3.5. Consonant-vowel sequences at morpheme boundaries. Stops become voiced at morpheme and word-boundaries in stop-vowel sequences. This phenomenon takes place only in normal speech.

In compound-like nouns, the voiceless realization is not an option:

```
186) a. /wapoto/ → [wapot] 'fire'
b. /wapoto+akkonu/ → [wapodahkon] 'firewood' (*wapotahkon)
c. /i-peti/ → [ipet] 'my thigh'
d. /peti+emo/ → [ipedemo] 'upper thigh' (*ipetemo)
```

In some cases, [d] can be substituted by [τ] (rhotacism?). Thus, $t \rightarrow d \rightarrow \tau$:

2.3.6. The phonological status of glides. Glides seem to have the same syllabic distribution as other consonants, occurring both in onset and in coda positions. The different (morpho)phonological processes, however, treat glides sometimes as a consonantal and sometimes as a non-consonantal segment.

,

In possession, nouns starting with glides (188) bear the same allomorphs of person marking prefixes as nouns starting with other consonants (189).

```
188)
             a. /jaramata/
                                    → [jaramata] 'chin'
                                                                a. /wahi/
                                                                                  → [wasi] 'lower leg'
                                                                b. /i-wahi-ri/
1
             b. /i-jaramata-ri/
                                    → [ijaramata]
                                                                                  → [iwasi]
2
             c. /ə-jaramata-ri/
                                    → [əjaramata]
                                                                c. /ə-wahi-ri/
                                                                                  → [əwaʃi]
3
             d. /i-jaramata-ri /
                                    → [ijaramata]
                                                                d. /i-wahi-ri/
                                                                                  → [iwaſi]
1+2
             e. /ku-jaramata-ri/ → [kujaramata]
                                                                e. /ku-wahi-ri/ → [kuwasi]
3Reflx
             f. /ti-jaramata-ri/
                                    → [tijaramata]
                                                                f. /ti-wahi-ti/ \rightarrow [tiwafi]
189)
             a. /pa/
                                    → [pa] 'shoulder blade' a. /omo/
                                                                                  → [omo] 'hand'<sup>60</sup>
             b. /i-pa/
                                    \rightarrow [ipa]
                                                                                  → [jamo]
1
                                                                   /j-amo-ti/
2
             c. /a-pa/
                                    → [əpa]
                                                                . /\text{aw-amo-}/\text{i}/ \rightarrow [\text{awamo}]
3
             d. /i-pa/
                                    \rightarrow [ipa]
                                                                  /\varnothing-amo-ri/ \rightarrow [amo]
1+2
             e. /ku-pa/
                                    → [kupa]
                                                                   /k-omo-ri/
                                                                                  \rightarrow [komo]
3Reflx
             g. /ti-pa/
                                    → [tipa]
                                                                   /t-omo-ri / \rightarrow [tomo]
```

Another indication that glides function as consonants is that glides pattern with $/\tau$ / (the only other non-nasal voiced consonant) not with vowels in the process of voicing. In this process, stops are voiced preceding voiced consonants, i.e., preceding $/\tau$ /, /w/, and

```
190)
/pw/
         (no attested cases)
        a. /t-ət-uwə-he/
                                    [tədwəi]
                                                    '(He/she) killed himself'
/tw/
        b. /tuna+kuwa-wə
                                    [tungwaw]
                                                    'in the water'
/kw/
        c. /aw-ereepi/
                                → [awereteb]
                                                    'You got scared'
/pj/
                                → [əwererebjaj] 'You will be scared'
        d. /aw-ererepi-ja-he/
/tj/
        f. /n-ekrəti/
                                → [negrat]
        g. /n-ekrəti/
                                → [negrəd³ja]
                                                    'He will cross'
                                                    'I came'
/kj/
        h. /w-uməki/
                                → [umək]
                                                    'I will come'
        i. /w-uməki-ja-he/
                                → [uməgjaj]
        j. /ti-pupu-re/
                                → [tipubre]
                                                    'having foot'
/pr/
        (cf. consonant dissimilation in section 2.3.2.3.)
/tr/
/kt/
        k. /məkçəçə/
                                [cggcm] ←
                                                    'that one'
```

/j/.⁶¹

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⁶⁰ Words starting in vowels present ablaut on their first vowel (cf. section 2.3.8).

⁶¹ There is, however, one environment in which vowels also condition voicing of consonants. The final consonant of words are optionally voiced if preceding a word starting in a vowel (section 2.3.5 for the specifics).

Reduplication is another process that treats at least /j/ like other consonants deleting it from the reduplicant (2.3.7). Unfortunately, no equivalent examples with /w/ are attested:

```
191) a. /w-ekeju-ne/ → [wekewekejne] 'I made bread again and again' b. /w-epajṛa-ma-ja-he/ → [wepawepajṛamej] 'I get drunk again and again' → [wenewenebjai] 'I bring it again and again'
```

Conversely, dissimilation treats glides differently from other consonants. Though only stops undergo dissimilation, all consonants, including /t/, /m/, n/ trigger dissimilation. Glides, however, never trigger dissimilation (section 2.3.2.3).⁶²

```
192) a. /w-ekeju-ja-he/ → [wekejjaj] 'I will make bread' b. /ihme+aptawə+w-itə-ja-he/ → [ihmeaptawwitəjai] 'If there is one, I will go' c. / hokoţom+wi-ka/ → [hokoţomwika] 'I paddled'
```

An interesting case is that of syllable reduction. Words ending in consonants present an extra vowel when followed by a *CCV* particle ([papak] 'father', [papakomna] 'without a father'), being thus represented phonemically with that vowel (/papako/ 'father'). Many words ending in glides present equal behavior:

193)	a./aptawə/	\rightarrow	[aptaw]	'when, if'
	b./aptawə-ţa	\rightarrow	[aptawəra]	'when, if (it is) not'
	c./tuna+kuwa-wə/	\rightarrow	[tunagwaw]	'in the water'
	d./tuna+kuwa-wə-ʈa/	\rightarrow	[tunagwawəra]	'not in the water'
	e./aktuppoje/	\rightarrow	[aktuфpoj]	'up river'
	f. /aktuppoje-ţa/	\rightarrow	[aktuфpo je ŗa]	'not up river'
	g./təkŢeweje/	\rightarrow	[təkrewej]	'slippery'
	h./təkleweje+psiky/	\rightarrow	[təgrewe je p∫ik]	'really slippery'

The great majority of words ending in glides on the surface, however, behave quite differently. In these cases, coda glides resyllabify as nucleus when followed by

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⁶² In Kaxuyana (Cariban) glides behave just like other consonants both undergoing and triggering dissimilation (Spike Gildea, PC., Tavares 1996).

CCV morphemes (here psik(i) 'little' and -mna 'without'): w \rightarrow u /_CCV and $j\rightarrow i$ CCV. (Examples are presented as they were produced in slow speech)

194) a. [kə.məm.təw] 'we all sank'

b. [kə.məm.tə.up.[ik] 'we all almost sank'

c. [pi.rəw] 'arrow'

d. [pɨ.τ̞ə.um.na] 'with no arrow' e. [hag.τ̞aw] 'bird.sp'

f. [hag.ra.um.na] 'with no haklau'

195) a. [i.joj] 'lizard'

b. [i.jo.im.na] 'with no lizard' c. [o.roj] 'cashew fruit'

d. [o.ro.im.na] 'with no cashew fruit'

This process results in onsetless syllables resembling the case of glide deletion in words such as /kumawu/ \rightarrow [ku.ma.u] 'papaya' and /weji/ \rightarrow [we.i] 'summer'. They are distinct however in that the latter always present [u] and [i] as syllable nucleii, and as a V syllable due to the deletion of onset glide (*wu/*ji constraint discussed in section 2.2.3).

Thus, the question is how to represent examples in (194) and (195)? One could speculate that the cases ending in [w] underwent syllable reduction, with the deletion of the last vowel (thus, /wu/ \rightarrow [w]), and that when followed by a *CCV* particle, the vowel was retained but the *wu constraint applied (thus /pitəwu-mna/ \rightarrow [pitəumna]. On the other hand, the fact that /kumawu/ does not undergo syllable reduction is explained by the process of lexical diffusion which dictates that not all forms undergo a same process at once.

Unfortunately, such analysis is not easily appliable for the examples ending in [j]. They cannot be said to have undergone vowel deletion, since /i/ is found to undergo deletion in very few words and only under a very specific circumstance: in /hi/ syllables

and only when this syllable is followed by a non-consonantal segment (see section 2.2.3). /i/ never deletes at the end of words.

It seems, then, that in order to cover both cases, the best analysis is to consider glides as an ambiguous category that can be construed sometimes as consonants and sometimes as vowel-like segments. As a matter of fact, phonologists have stated that glides have exactly the same feature matrix as their corresponding vowels, /i/ and /u/ (Kenstowicz 1994:37):

According to Kenstowicz the only difference between [i]/[j] and [u]/[w] is the position they occupy in the syllable: vowels occupy syllable nucleus, while glides occupy onset and coda positions.⁶³ The Wayâna morphophonological alternations between [j]/[i] and [w]/[u] confirm this idea:

v.Cvj i•joj [ijoj] 'lizard'	→	v.Cv.iC.Cv i.jo.im.na [ijoimna] 'with			
CV.CVw	→	CV.CV.uC.C\	I		
wej.iq	-	pɨ.rə.um.na			
[pɨ[əw] 'arrow'		[pɨrəumna]	'without arrow'		

Finally, the reason for both [j] and [w] resyllabify is that they are like a consonant in coda position and a *CCC* cluster is not permitted in the language. Wayâna, thus, provides evidence on the close relationship between glides and their corresponding vowels [i] and [u] (see Kenstowicz 1994:37 for a discussion on a similar pattern in Arabic).

_

⁶³ Once it is in onset position, glides are subject to the properties of this position. Thus, the hardening: $[w]\sim[\beta]$ and $[j]\sim[j^3]$.

2.3.7. Reduplication. Only three languages have been reported as presenting any pattern of reduplication in the Cariban family: Tiriyó (Meira 1999), Aparai (Meira p.c.), and Wayâna (Jackson 1972) for Wayâna. The only detailed description of reduplication processes made to this point about a Cariban language is Meira's work.

There are two patterns of reduplication in verbs in Wayâna. The external reduplication, which takes place in the beginning of the word, and the internal reduplication, which takes place within the root, similarly to an infix. Reduplication was first reported in Wayâna by Jackson (1972:57-58). The limited data he presents (four examples) do not reflect all the possibilities (only examples of external reduplication are shown). In Tiriyo there are both internal and external reduplication, both occurring differently in Wayâna. (The meaning of reduplication is discussed in more detail in section 5.8.)

2.3.7.1. Left edge reduplication. Very productive, this type of reduplication takes place at the leftmost edge of the verbal word. The phonological template of the reduplicant (shown underlined) can be described as the copying of the first two syllables of the verbal word (independently of morphemic boundaries, and the syllable type of the first syllable), with the exclusion of all existing coda consonants from the second syllable.

196)	(C)V(C).CV			\rightarrow	(C)V.CV	
•	a. /w-əh-amo-ja-he/	\rightarrow	[wəhamojaj]	\rightarrow	[wəhawəhamojaj]	'I cry'
	b. /n-upo-ma/	\rightarrow	[nupoma]	\rightarrow	[nuponupoma]	'He undressed'
	c. /w-i-panakma-ja-he/	\rightarrow	[wipananmej]	\rightarrow	[wipawipanaŋmej]	'I listen'
	d. /n-epi-ja/	\rightarrow	[nepɨja]	\rightarrow	[<u>nepi</u> nepija]	'He/she bathes'
	e. /upɨ/	\rightarrow	[upɨ]	\rightarrow	[<u>upi</u> upi]	'H/she gave a bath'
	f. /amik-kə/	\rightarrow	[amihkə]	\rightarrow	[<u>ami</u> amihkə]	'Get it!'
	g. /kuh-epɨ/	\rightarrow	[kuhepi]	\rightarrow	[kuhekuhepi]	'We ate fruit'
	h. /j-emnamohukta-he/	→ [jé	mnamohuktej]	\rightarrow	[j <u>ēmna</u> jēmnamohuktej]	'My nose is running'

```
i. /n-ujka/
                                                                                     'He/she defecated'
                              \rightarrow [nujka]
                                                           [nujkanujka]
        j. /ni-pta/
                              → [niptə]
                                                           [niptonipto]
                                                                                     'He/she went up'
197)
        (C)V(C).CVC
                                                 → (C)VC.CV
        a. /kun-upka/
                               → [kunupka]
                                                  → [kunukunupka]
                                                                          'He beheaded people'
                                                                                                   (p \rightarrow \emptyset)
        b. /mure+eweti/
                               → [mureewet]
                                                  → [muτε<u>εwe</u>εwet]
                                                                          'He fed a child'
                                                                                                   (t→Ø)
                               → [jinigjaj]
                                                                          'I will sleep'
        c. /j-iniki-ja-he/
                                                  → [jinijinigjaj]
                                                                                                   (k→Ø)
        d. /w-əməmə-ja-he/
                               → [wəməmjaj]
                                                  → [wəməwəməmjaj
                                                                          'I go in'
                                                                                                   (m \rightarrow \emptyset)
        e. /ti-menka-he/
                               → [timenkaj]
                                                  → [timetimenkai]
                                                                          'chosen'
                                                                                                   (n \rightarrow \emptyset)
        f. /i-kohmami/
                               → [ikohmam]
                                                  → [ikoikohmam]
                                                                                                   (h→Ø)
                                                                          'I stretch a bow'
        g. /ti-pohnəpi-he/
                               → [tipohnəphe]
                                                  → [tipotipohnəphe]
                                                                          'think/miss someone'
                                                                                                   (h→Ø)
        h. /w-apəhi-ja-he/
                               → [wapəhjaj]
                                                  → [wapəwapəhjaj]
                                                                          'I fight'
                                                                                                   (h→Ø)
        i. /w-epajra-ma-ja-he/ → [wepajramej]
                                                  → [wepawepajramej]
                                                                          'I get drunk'
                                                                                                   (i→Ø)
        j. /w-ekeju-ne/
                               → [wekejne]
                                                  → [wekewekejne]
                                                                          'I made manioc bread'
                                                                                                  (j→Ø)
```

In the dialect of at least one speaker from Bona village, all second syllable coda consonants are deleted, as in the examples above, with the exception of /h/:

Other cases with /h/ coda in the second syllable were not accepted by the same speaker (maybe for semantic reasons), but produced by him with /h/. I take from this that other examples will have /h/ in his dialect:

```
199) a. /ikohmami/ 'I spent the night' \rightarrow (*) [ikohikohmam] b. /n-amati-ta/ 'The tree got branches' \rightarrow (*) [namahnamahta]
```

The verb /ujka/ 'defecate' constitutes an exception: can be reduplicated in two ways. In example (200 a) below, only one syllable is copied, in example (200 b) the first two syllables are copied.

Reduplication involving long vowels shows that the scope of reduplication is the two first syllables of the stem (with the deletion of any coda consonant of the second syllable). A moraic analysis, such as the one done for Tiriyó (Meira, 1999), in which the

bases for reduplication can be stated as the copy of the first two moras of the stem, does not apply to Wayâna. In Tiriyó, stems starting in long vowels have only its first syllable copied (/j-eerana/→[jεε-jεετana]). In Wayâna, the two first syllables of the stem are copied independently of vowel length: (Examples (201 c-d) show /w/ deletion resulting in a long vowel (2.5.1). Examples (201 e-g) show /r/ deletion (2.3.1.2)).

```
201)
        a./t-iitə-he/
                               → [tiitəj]
                                               → [tiitətiitəj]
                                                                      'go'
        b./t-aata-he/
                               → [taatai]
                                               → [taatataatai]
                                                                      'fall from a tree (fruit, flower)'
        c. /tə-w-ət-upo-ma-he/ \rightarrow [təətupomaj] \rightarrow [təətutəətupomaj] 'dress'
        d./tɔ-w-ət-uhmo-he/ → [təətuhmoi] → [təətutəətuhmoi] 'hit oneself'
        e./w-ewaru-ja-he/
                               → [wewaajaj] → [wewaawewaajaj] 'I burn it'
        f. /w-ikiri-ne/
                               → [wikiine]
                                               → [wikiiwikiine]
                                                                      'I take it from something'
                               → [wipuune]
        g./w-i-puru-ne/
                                               → [wipuuwipuune]
                                                                      'I baked it'
```

2.3.7.2. Right edge and root internal reduplication. In addition to the left edge reduplication, there are two other types, both taking place within the root: a) reduplication of the two last syllables of the root (202); and b) reduplication of one of the medial syllables of the root without coda consonants (203).

```
202)
        a./w-i-pkərə/
                            → [wipkərəkərə]
                                                  'I cut it in small pieces'
        b. /w-i-pkərə-ja-he/ → [wipkərəkərəjaj] 'I will cut it in small pieces'
        c./w-apkərə/
                            → [wapkərəkərə]
                                                   'I broke it in small pieces'
        d./w-apkərə-ja-he/ → [wapkərəkərəjaj] 'I will break it in small pieces'
203)
        a. /w-i-murikma/
                            → [wimuririnma]
                                                   'I made it really uneven'
        b./wiwipka/
                            → [wiwiwipka]
                                                   'I scratched someone else again and again'
                                                   'I rubbed myself' 64
                            → [we<u>ha</u>haka]
        c./wehahaka/
                                                   'I rubbed someone else'
        d./wihahaka/
                            → [wisasaka]
```

A summary of reduplication:

Left edge: very productive. (C)V(C).CV \rightarrow (C)V(C).CV \downarrow 1st type

⁶⁴ The equivalent non-reduplicated forms are unattested.

$$\begin{array}{cccc} (C)V(C).\mathbf{CVC} & \rightarrow & (\underline{C})V(\underline{C}).\mathbf{CV} & 2^{\mathrm{nd}} \text{ type} \\ (C)V(C).\mathbf{CVh} & \rightarrow & (\underline{C})V(\underline{C}).\mathbf{CVh} & 3^{\mathrm{rd}} \text{ type} \\ \\ \textbf{Root internal: rare.} & & & & \\ a) CV.CV & \rightarrow & \underline{CV.CV} & 4^{\mathrm{th}} \text{ type} \\ \\ b) CV(C) & \rightarrow & [CV] & 5^{\mathrm{th}} \text{ type} \end{array}$$

Finally, reduplication seems to be a late phonological process. Example (204 b) shows that the copy is done after vowel f deletion takes place, and example (204 d) shows that the copy is done after the rule f applies.

204) a. /n-ewaru/
$$\rightarrow$$
 [newaru] \rightarrow [newanewaru] 'He burned it again and again' b. /n-ewaru-ja-he/ \rightarrow [newaajaj] \rightarrow [newaanewaajaj] 'He will burn it again and again' c. /w-e-hahaka/ \rightarrow [wehahaka] 'I rubbed myself' 'I rubbed someone else'

2.3.8. Ablaut. This phenomenon, characteristic of nouns, verbs and postpositions, affects the initial vowel of stems. Meira (1999:261), in his discussion for the same phenomenon in Tiriyó, uses the terms *back grade* for allomorphs starting with /ə/ or /o/ and *front grade* for allomorphs beginning with /e/ or /a/. The back grade forms occur only when inflected by *k*- or *t*- prefixes or, in the case of nouns, in non-possessed forms. The front grade forms occur elsewhere. All forms beginning with /e/ alternate with /ə/. Forms beginning with /a/, however, only alternate with /o/ or /ə/, if either of these are the second vowel of the root. Table 13 summarizes this:

Table 13
Ablaut

front grade		back grade
/e/	~	/ə/
/aCo/	~	/oCo/
/aCə/	~	/əCə/

Examples of the alternation $/e/\sim/ə/$ are given in (205), of $/a/\sim/o/$ in (206), and of $/a/\sim/ə/$ in (207) (for more specific examples see section (4.1.1.1.2) on nouns, (5.1.1) on verbs, and (6.1.1.3) on postpositions):

```
205)
        a./əkunu/
                             → [əkun]
                                                'hips'
        b./j-ekunu-ri/
                             → [jekunu]
                                                'my hips'
        c./əw-ekunu/
                             → [əwekun]
                                                'your hips'
        d./Ø-ekunu/
                             → [ekun]
                                                'his/her hips'
        e. /k-əkunu-ri/
                             → [kəkunu]
                                                 'our (dual) hips'
        f. /t-əkunu-rɨ/
                             → [təkunu
                                                'his own hips'
206)
        a./omo/
                             \rightarrow [omo]
                                                 'hand'
                             → [jamo]
                                                 'my hand'
        b./j-amo-ti/
                             → [əwamo]
                                                 'your hand'
        c./əw-amo-tɨ/
                             → [amo]
                                                 'his/her hand'
        d./Ø-amo-ri/
                             → [komo]
                                                 'our (dual) hand'
        e./k-omo-ri/
                             → [tomo]
                                                 'his own hand
        f. /t-omo-ti/
207)
        a./mule+arə/
                             → [mulearə]
                                                 '(He/she/it) took a child'
        b./w-arə/
                             [cjsw] ←
                                                 'I took (him/her/it)'
                             → [jarə]
        с. /ј-агә/
                                                 '(He/she/it) took me'
        d./k-əτə/
                              (ejek) ←
                                                 '(He/she/it) took us'
        e. /t-əӷэ-he/
                              → [təʈəj]
                                                 'taken'
```

The examples below show some forms starting in /a/ or /ə/ without ablaut:

208)	a.	/j-ahikapamɨ/	>	[ja∫ikapam]	'I got upset'
	b.	/k-ahikapam i /	\rightarrow	[ka∫ikapam]	'We (dual) got upset'
	c.	/t-ahikapami-he/	\rightarrow	[tasikapamhe]	'upset'
	d.	/j-akpiram i /	\rightarrow	[jakpiram]	'I became red'
	e.	/k-akpitami/	\rightarrow	[kakpiram]	'We (dual) became red'
	f.	/t-akpirami-he/	\rightarrow	[takpiramhe]	'red'
	g.	/j-akinta/	\rightarrow	[jakinta]	'I worked hard'
	h.	/k-akinta/	\rightarrow	[kakinta]	'We (dual) worked hard'
	i.	/t-akinta-he/	\rightarrow	[takintai]	'having worked hard'
	j.	/n-akrama /	\rightarrow	[naklama]	'He put it away'
	k.	/t-akrama-he/	\rightarrow	[takʈamai]	'put away'
	l.	/j-akowa/	\rightarrow	[jakowa]	'(He/she) washed me'
	m.	/k-akowa/	\rightarrow	[kakowa]	'(He/she) washed us (dual)'
	n.	/t-akowa-he/	→	[takowaj]	'washed'
209)	a.	/w-əməmɨ/	\rightarrow	[wəməm]	'I entered'
ŕ	b.	/k-əməm i /	\rightarrow	[kəməm]	'We (dual) entered'

- c. /t-əməmi-he/ \rightarrow [təməmhe] 'entered'
- **2.4. Prosody.** As far as we can tell, Wayâna's prosody is characterized by very simple patterns. The most interesting statements that may be made about it are those referring to what Wayâna lacks rather to what it presents. Thus, in the next sections, we argue for the absence of stress, even at a surface level, and for the absence of a phonological word, and we describe Wayâna's main intonational pattern as well.
- **2.4.1. Intonational units and the lack of stress.** Though a more detailed investigation on intonational units is in order, we can say that a non-falling or rising intonation is usually found in questions and in words or group of words not at the end of an utterance, while a falling intonation usually indicates the end of an utterance:
- 210) Mene ka?
 m-ene-Ø ka
 2A3O-see.O-RecPst Quest
 'Did you see?'
- 211) Mëjela aptau, witëjai.
 mëje-la wapta-wë w-îtë-ja-he
 NspcDistLoc when-in 1SA-go-NPst-SapAff
 'When (he) is not far, I will go.'

This simple organization is the most basic suprasegmental pattern found in Wayâna, applying even at the word level. This means that Wayâna prosody there exist no properties that systematically isolate more prominent syllables in a word. As a consequence, we state that stress does not exist in the Wayâna words.⁶⁵

Stress is usually defined as a group of properties that make a particular syllable to be perceived as more salient than others in a word. The phonetic correlates of stress are length, pitch, and intensity, with the potential inclusion of vowel quality (crosslinguistically, stressed syllables tend to present full vowels, and unstressed syllables tend to present reduced vowels--see Ladefoged 1993:249). Some languages like English and Spanish present contrastive stress, with the selection of a single prominent syllable in the word: systematically, the greatest length, pitch, and intensity fall on the same syllable. Others, like Tiriyó (Meira 1999) present a rhythmic stress in which syllables in a word are grouped into prosodic feet, with stress taking place in the head of every foot (i.e., every other syllable).

Wayâna seems to be a language of a rarer type. None of the known four phonetic correlates of stress clearly isolate a unique syllable within a word. There are no cases of vowels being systematically reduced in any environment (though onomatopoeic words, still under investigation, may prove to present exceptional cases). As for the other three phonetic correlates, length, pitch, and amplitude, there is a more or less a random distribution of them, as they may not necessarily occur all together on a same syllable. It is easy to find words in which the highest pitch, the greatest amplitude and the greatest

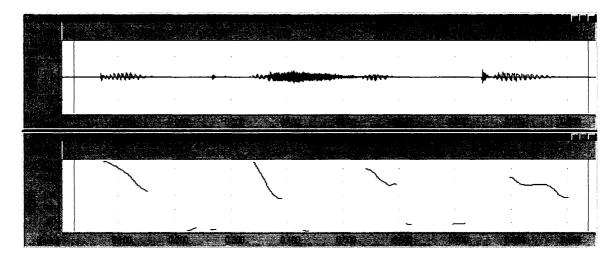
-

⁶⁵ An investigation on sound symbolic words may reveal stress to operate in that domain (cf. 2.6)

⁶⁶ In Tiriyó, from left-to-right, syllables are arranged into iambic feet, with each head of a foot receiving lengthening and to some extent high pitch (cf. Meira 1999:60).

lengthening do not fall over the same vowel. In the graphic in (212), for instance, we see a four syllable word where the vowel of the fourth syllable is considerably the longest. In terms of frequency, however, it is the one that presents that lowest pitch (here the numbers indicate the highest and the lowest frequency of a vowel in the graphic). In terms of amplitude, all vowels present basically the same value. Thus, it is not possible to isolate one syllable as the stressed one: the fourth syllable is the lowest in frequency, but it is the longest.

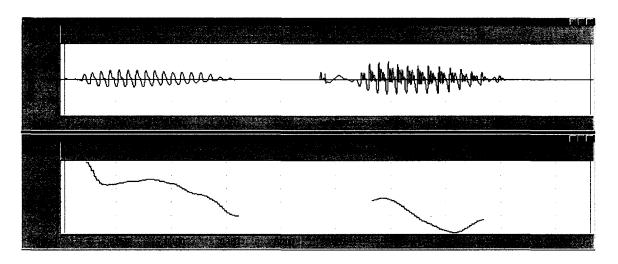
212) aki \int ita 'reumatism' Length: 846/563/724/1159. Pitch:152-111/146-97/140-118/124-98; Amplitude: none really intense, all about the same.



In (213), the first vowel is the longest, but it presents the smallest amplitude, while the second is the shortest, but with the most amplitude. The lowest pitch falls on the second vowel.

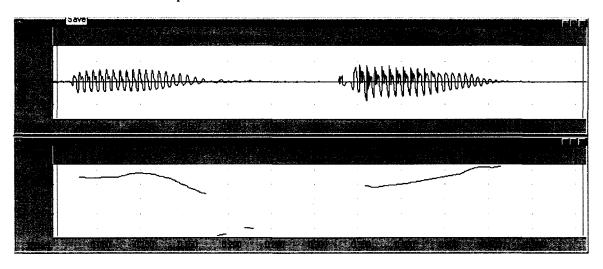
213) umpoj 'cause'

Length: 1351/866; Pitch: 129-125-110/116-100; Amplitude: 2>1.



There are cases in which the most prominent pitch, length and amplitude fall on the same vowel: in (214) they fall on the second syllable.

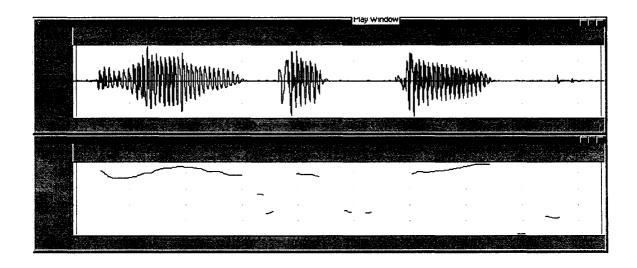
214) imta 'his mouth' Length:1176/1681; Pitch: 136/144; Amplitude: 2>1.



Usually, final syllables ending in a rising pitch, as the one above, tend to be the longest. The example in (215) also presents this pattern. The last syllable ends in a rising

pitch and it presents the longest vowel. Nonetheless, the amplitude is basically equal to that in other syllables, and the pitch is the same as in the first syllable:

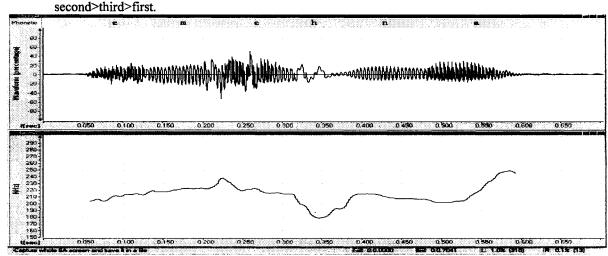
215) jempatak 'in front of me' Length: 1380/619/1539. Pitch: 130/120/130. Intensity: basically the same in all three syllables.



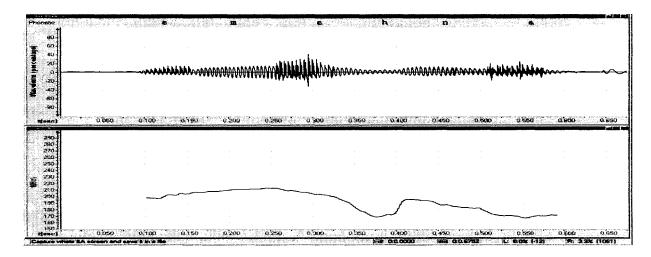
The most systematic pattern in Wayâna supra-segmental phonology seems to be that all utterances end either with a rising pitch (whenever the speaker has not finished his speech) or with a falling pitch (whenever the speaker has concluded his speech or a section of his speech). Thus, the end of a statement, the last item in a list, the repetition of a vocative word, etc., all end in a falling pitch. On the other hand, questions, the non-final forms in a list, clauses that are followed by others in the same sentence, etc., all occur with a steady or rising pitch. This is to say that, in Wayâna, whenever utterances end in a steady or rising pitch it is to be understood that there is more to be said, while utterances ending in a falling pitch indicate that there is not.

For example, in examples (216) and (217) below, the same word is repeated twice by the speaker. Using the listing intonation, she utters the first example ending with a rising pitch and the second ending with a falling pitch.

216) emehna 'his fist' Length: 703/934/1239; Pitch: 208/216/205-256; Intensity:



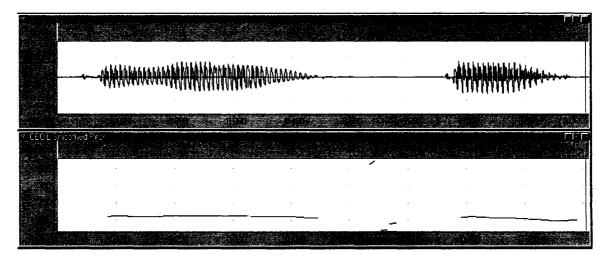
217) emehna 'his fist' Length: 646/729/1021; Pitch: 195-205/209/171-151; Intensity: second>third>first.



Note that in the examples above, the other variables occur independently of pitch. The greatest length and intensity do not correlate with the highest pitch. The greatest variation in terms of pitch occurs in the last syllable, which bears either the highest or the lowest pitch.

It is not always the case, however, that the last syllable bears the lowest or the highest pitch. In (218), the frequency value is virtually the same in all three syllables, but falling in the third syllable.

218) tijomtaj Length: 1136/1036/1009 (this is not clear because of surrounding glides). Pitch: 125/124/120-113. Intensity: third>second>first, clearly energy on third, but the difference is not very salient in the raw wave representation.



In the example above we see that the third syllable is the one that presents the lowest pitch, it is shortest, but it is the one that presents the most amplitude.

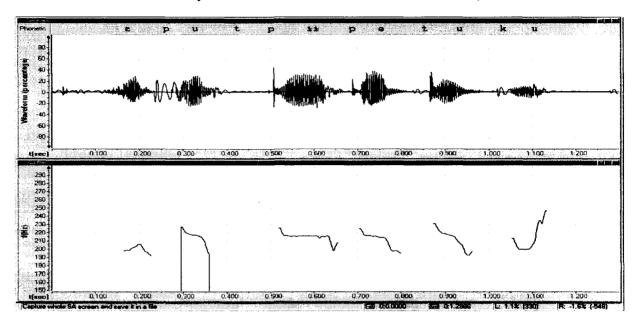
In phrases, the same phenomenon is observed. In the examples below, the phrase eputpii pətuku 'good seed' ends with a rising pitch the first time it is said and with a falling pitch on the second time. In (219) all vowels present a falling intonation, with the exception of the first vowel of the first word, presenting a rising intonation and the last vowel of the second word, also presenting a rising intonation. The two words behave as a single unity, there are no supra-segmental features pointing to a boundary between the two. The same is observed in example (220).

219) eputpiipətuku

length: 480/452/912(/t/deletion)/602/600/685.

Pitch: 186-207/225-197/230-216/220-105/246-227/220-198-327.

Intensity: third of the first word and first of the second word, rest about the same.

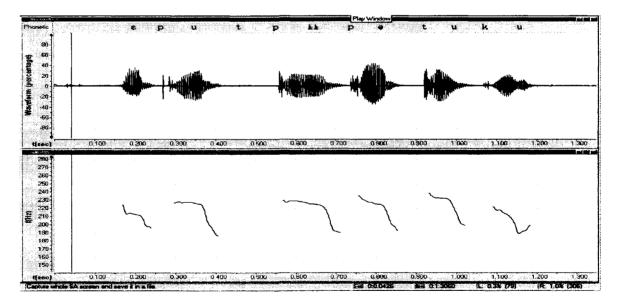


220) eputpiipətuku

Length: 485/669/1087/621/690/821;

Frequency: 233-207/226-2219/228-223/229-213/257-233/234-188.

Intensity: highest in the first two syllables of pətuku.



This shows that a phrase and a word have a similar organization in terms of intonation. While English and Tiriyó present prominent stressed syllables, Wayâna does

not seem to do so, as the variation between syllables is very small, and no particular syllable in a word is consistently prominent.

- 2.4.2. The grammatical and the phonological word. While the grammatical word is defined basically in morphological terms, the phonological word is basically defined in prosodic terms. For instance, in Meira's definition for the phonological word in Tiriyó 'is the grammatical word combined with cliticized material' (1999:38). His criteria are based on phonological processes such as stress and syllable reduction taken place in there. This means that the phonological word is a particular domain where some phenomena will take place. In Wayâna, no patterns pointing to the existence of a domain extending beyond the grammatical words have been found. Thus, a grammatical and a phonological word are considered here one and the same.
- **2.5. Marginal Cases.** Some phonological changes affect just a small portion of Wayâna phonology or particular morphemes. These are /w/ deletion, metathesis, vowel harmony, a fricative infix, a morpheme with a floating mora, and morphemes with unexpected extra phonological material.
- **2.5.1.** /w/ deletion. The deletion of /w/ is a phonological change that is in its initial stages in the language. Again as in the case with fricatives, the change affecting /w/ is working its way across the lexicon in one domain at a time. The change is taking place only in the first syllable (in stems with two syllables or more) or in the second syllable of a stem (in stems with three syllables or more). The lack of examples suggests, it has not

yet reached final syllables. The examples below show that in two domains the deletion is nearly completed: the first person prefix w- and the marker of Sa verbs w- both alternate with \emptyset -, with the latter being the most frequent form.

```
221) a./w-ene/ → [wene] ~ [ene] 'I saw it' b./w-ekəpə-ja-he/ → [wekərəjaj] ~ [ekəpəjaj] 'I will give it' c./w-i-panakma/ → [wipananma] ~ [ipananma] 'I heard it'
```

/w/ may be lost in the participial form t-V-(h)e. All cases the allomorphs ∂t - or eof the detransitivizing suffix (nor /w/ or compensatory vowel length occur with allomorph ∂h -). ⁶⁷

```
222) a. /tə-w-ət-uhmo-he/ → [təwətuhmoj] ~ [təətuhmoj] 'fallen' b. /tə-w-ət-apuwa-he/ → [təwətapuwaj] ~ [təətapuwaj] 'open' c. /tə-w-e-pi-he/ → [təwepihe] ~ [təepihe] 'bathe'
```

The change may affect some roots, as in the case of some nouns losing their initial [w], which is kept when the noun is possessed

```
223) a. /woka/ \rightarrow [oka] 'fishook' b./i-woka-nu/ \rightarrow [iwokan] 'my fishhook' c. /womi/ \rightarrow [omi] 'language' d./i-womi-ti/ \rightarrow [iwomii] 'my language' e. /əwtə/ \rightarrow [əwtə]~[əətə] 'land'
```

or of some adverbs (the examples below shows homophonous forms).

```
224) mëwihnë ~ mëwinë 'a lot; very' 225) mëwihnë ~ mëwinë 'nearby'
```

Not all nouns or adverbs undergo /w/ deletion, as the examples below attest:

⁶⁷ There exist at least two cases of S_A verbs with vowel lengthening in a t-V-(h)e 'participle'. These examples cannot be synchronically attributed to /w/ deletion, since the two morphemes do not present /w/ in any of their other forms (see section 4.1.2 for a more detailed discussion):

```
b./wohi/ → [woʃi] 'skin fungus'
c./wətihi/ → [wətij] 'woman'
d./wantətə/ → [wantə] 'later; afterwards'
e./wijome/ → [wijome] 'crooked'
```

2.5.2. Metathesis. Some morphemes have two allomorphs which differ in the sequencing of the segments in different dialects:

```
227)
        a. [apukuita]
                             'paddle'
                                           (Speakers from the Paru River)
         b. [akupuita]
                             'paddle'
                                           (At least one speaker from Surinam)
228)
        a. [kawemhakan]
                             'the tall one'
                                           (Speakers from the Paru River)
                             'the tall one'
         b. [kawehmakan]
                                           (At least one speaker born in the Jari River and one from
                                            Surinam)
229)
                             'bird (sp.)'
        a. [mamhari]
                                           (Speakers from the Paru River)
         b. [mamhari]
                             'bird (sp.)'
                                           (At least one speaker born in the Jari River and one from
                                            Surinam)
         c. [jumhet]
                             'hair'
                                           (Speakers from the Paru River)
         d. [juhmet]
                             'hair'
                                           (At least one speaker born in the Jari River and one from
                                            Surinam)
```

2.5.3. Vowel harmony. Only one morpheme, the possessive suffix -*ti*, clearly undergoes vowel harmony (see section 2.1.1 for cases of phonetic vowel harmony of the allophones of /o/ and /e/).

```
230)
        a./j-eta-ri-mna/
                             \rightarrow
                                    [jeta-ri-mna]
                                                       'without my kidney'
         b./j-apə-ri-mna/
                                    [japərimna]
                                                       'without my arm'
         c. /i-wahi-ri+phiki/ →
                                    [iwasiripsik]
                                                       'my little lower leg'
         d./i-nu-ri-mna/
                                    [inurumna]
                                                       'without his tongue'
         e. /i-pupu-ri-mna/ →
                                    [ipupurumna]
                                                       'without his foot'
         f. /i-miwu-ri-mna/ →
                                    [imiurumna]
                                                       'without his blood'
```

The only other indication that vowel harmony has happened somewhere else in the language are cases of nouns taking the devaluative suffix -tpə/-npə and a few other roots. In all these cases /ə/ seems to have changed historically into /i/ or /u/:

231) a. /pana-npə/ → [pananpə] 'ear severed from the body'

```
'his fomer ear'
        b./i-pana-ti-npə-ti/ →
                                   [ipanarinpi]
         c./pupu-tpə/
                            \rightarrow
                                   [puputpə]
                                                     'footprints, former foot'
         d./i-pupu-tpə-tɨ/ →
                                   [ipuputpi]
                                                     'his former foot'
232)
        a. [ərek]
                                   'wound'
         b. [əτekəmna]
                                   'no wound'
        c. [jerekit]
                                   'my wound'
         d. [jerekitimna]
                                   'without my wound'
```

e. [jakon+mumkə]	'my sister's son'
f. [imumku]	'my son'
g. [ɨmumk uru p∫ik]	'my little son'

h. [ərinat]	'plate'
i. [ərinatəmna]	'without a plate'
j. [jerinatu]	'my plate'
k. [jerinaturup[ik]	'my small plate'

l. [əţimak]	'baking plate'
m. [ərimakəmna]	'without baking plate'
n. [jeţimakɨ]	'my baking plate'
- [:1::-:1	6

o. [erimakirimna] 'without his/her baking plate'

One example looks idiossynchratic:

233)	a. [wapot]	'fire'
·	b. [wapotomna]	'without fire'
	c. [iwaptə]	'his/her fire'
	d [iwantarimna]	'without his/her fire'

2.5.4. The fricative infix -h. The intensifier infix /-h-/ occurs after the first open syllable of adverbial roots.

234)	a. [ipok]	'bad'	i.	[i∫pɔk]	'very bad'
	b. [upak]	'long time ago'	j.	[uфpak]	'very long time ago
	c. [mɨja]	'far'	k.	[mɨhja]	'very far'
	d. [pətuku]	'well'	1.	[pəhtuku]	'really well'
	e. [hɛmaʈə]	'now'	m.	[ejsmdad]	'right now'
	f. [warunak]	'evening	m.	[wahrunak]	'really in the evening
	g. [kɔʈe]	'many'	n.	[kohte]	'a lot'
	h. [jahpine]	'shallow'	o.	[jahpihne]	'very shallow'

2.5.5. The emphatic particle *mə*. The emphatic particle *mə* can be represented as having an extra-mora. It prevents syllable reduction and causes lengthening on words ending in a vowel.⁶⁸ This particle is represented phonemically as /^umə/.

235) a./wi-ka-jmə-ja-he+umə/ [wikajməhahemə] 'I will talk for sure' b./məki+nma+umə/ \rightarrow [emakinmaamə] 'It's really that one' \rightarrow c./məhemə+umə/ [məheməəmə] 'It's really that one' d./akuwa+pəkə+umə/ \rightarrow [akuwapakaama] 'It's really that one'

2.5.6. Morphemes with unexpected extra phonological material. Some sequences of nouns present unexpected extra segments. Some cases with the word /itu/ present an extra w or h, others do not: together with /ace/ 'leaf' it turns out as [ituhace] 'leaf', (lit.: 'jungle's leaf'), and with /aki/ 'breed' it turns out as [ituwaki] 'Indian' (lit.: 'jungle's breed'). Other combinations do not present w or h: [mekuaki] 'monkey's breed', [macipaace] 'leaf of malipa tree'. One other example is / ace/ 'leaf' plus /pacucu/ 'banana' which turns out as [pacuwace] 'banana leaf', but no w is found in other combinations, [uruace] 'leaf of manioc tree'.

Next, a discussion of sound symbolic words is presented. This word class represents a special domain in the Wayâna lexicon. Thus, it is presented last in this chapter.

 $^{^{68}}$ -mə has different properties than the negative -[a], the privative nominalizer -[a]/min and the dative postposition [a]. These morphemes prevent syllable reduction but do not cause vowel lengthening (cf. section 2.3.1).

2.6. Sound symbolic words. These forms seem to be grammatically nouns with an onomatopoeic origin. Some, however, encode meanings (such as 'to think') which are difficult to express in terms of a particular sound (cf. 4.4.4).

Sound symbolic words present some important phonological differences from others belonging to the main lexicon. For instance, the nasal velar [ŋ], which occurs elsewhere only as a realization of /k/ (2.3.2.2), appears in these words without phonological conditioning (examples in 236). [ŋ] never occurs here, however, as syllabic onset or without a conditioning nasal as coda word medially. Note that since all three nasals (/m/, /n/ and /ŋ/) occur word-finally, they present a contrastive distribution.

Furthermore, there are minimal pairs for /ŋ/ and /m/ (example 236 f-g), and /ŋ/ and /n/ (example 236 h-i). (example 236 h-i).

```
236)
        a. [kutoŋ tɨkaj]
                          '(Someone) drank.'
        b. topon tikaj]
                          '(Someone) droped fishhooks.'
        c. [ton tikaj]
                          '(Someone) shot something.'
        d. [tan tikaj]
                          '(Someone) threw something.'
        e. [toton tikai]
                          '(Someone) swam.'
        f. [pom tikaj]
                          '(Someone) laid down.'
        g. [põŋ tɨkaj]
                          'It rained.'
        h. [wen tikaj]
                          'The walami bird sang.'
                          'The wamu bird sang.'
        i. [weŋ tɨkai]
```

Concerning fricatives, sound symbolic words represent an interesting exception to the pattern discussed in the previous sections of this chapter for the following reasons:

a) the postalveolar $[\int]$ occurs adjacent to vowels other than [i].

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⁶⁹ Jackson (1972:48) states that [n] tends to occur before pause and before k. This pattern is found in our data, with [n] occurring before pause only in sound symbolic word.

```
237) a. [wipʃaŋ] 'jump'
b. [ʃaktikip] 'cut wood'
c. [ʃom] 'stand up'
d. [ʃegʈaʈaj] 'slide'
e. [ʃajʃaj] 'cicada'
f. [atʃu] 'sneeze'
```

b) [ʃ] and [h] freely alternate in the beginning of at least two sound symbolic words (in example 238), (with one speaker from Bona also alternating /h/ with /t/ in example (238 a)). This alternation does not occur in other sound symbolic words as those in example (237 b-e) above and example (239) below.

c) the glottal [h] occurs at the end of at least two sound symbolic words (example (238 a-b), a constraint against this exists for all other words in the language (cf. 2.2.1)

The examples above indicate that fricatives in sound symbolic words pattern in a somewhat unusual way: [ʃ] and [h] present both contrastive distribution and free variation. Thus, though not totally convincing, it seems that the best way to represent sound symbolic words is to say that they present two distinctive fricatives /ʃ/ and /h/, which may be neutralized in some words. Fricatives in sound symbolic words are in an intermediate stage between being or not contrastive.

⁷⁰ Sound symbolic words commonly end in consonants. To this point, it was not possible to know whether there exists or not a context in which the potentially deleted vowels are retained. No suffix or particles have been found following these forms in texts and in elicitation such arrangements have not been accepted.

This analysis creates two different domains in the language: the *main* vocabulary, which encompasses all other word classes, and the *sound symbolic words* vocabulary.

The former has a single distinctive fricative /h/ and the latter two, /ʃ/ and /h/.

One special case, however, is that of animals, especially birds and insects, which are named with a sound symbolic word mimicking the sounds they make. Some examples are given below:

```
241)
         a. [ʃuwiʃuwi]
                                'bird (sp.) that sings at night'
         b. [súwisúwi tikaj] 'suwisuwi sang'
         c. [mutu]
                                'bird (sp.)'
         d. [mút<sup>u</sup>mút<sup>u</sup> tɨkaj] 'mutu sang'
         e. [riwriw]
                                'insect (sp.)'
         f. [riwriw tikaj]
                                'riwriw sang'
         g. [kəţinkəţi]
                                'insect (sp.)'
         h. [kərinkəri tɨkaj] 'kərinkəri sang'
         i. [siwet]
                                'insect (sp.)'
         j. [siwet nika]
                                'fiwet sang'
         k. [kotkotoro]
                                'insect (sp.)'
         l. [kotkotoro nika] 'kotkotoro sang'
```

These forms operate grammatically as nouns, in an apparently exceptional realization of /h/in that class, since in all other nouns the occurrences of [ʃ] are conditioned by an adjacent alveolar segment (2.1.2.2.2).

In Tavares (1999a), I argue that Wayâna is at the end of a phonological change that turned [s]'s into [h]'s and that sound symbolic words are the last niche of the Wayâna lexicon to be affected by the change. Elsewhere in the language [s]'s turned into [h]'s, except in contexts adjacent to some alveolar segments where they palatalized into [s].

The basic aspects of the change are represented in figure 2:

Figure 1
The *s to h Phonological Change

In sound symbolic words this change is still in progress.

Finally, the present study is lacking a discussion on stress patterns in sound symbolic words. Examples such as (241 b and d) above suggest that there may be a fixed position for a most prominent syllable. This investigation, however, was not carried out in the work.

3. INTRODUCTION TO MORPHOLOGY.

Morphological processes present the most extensive aspect of the Wayâna grammar. This language possesses a myriad of affixes (prefixes, suffixes, ambifixes, and an infix) forming a system that marks person, TAM distinctions, number, and word class changing processes, valence changing processes, and other kinds of meaning change.

Person and detransitivization are marked by prefixes, all the rest by suffixes.

Person is marked on all major speech classes (nouns, verbs, and postpositions), with the exception of adverbs and particles. TAM and valence changing suffixes occur with verbs. Number suffixes occur with nouns, verbs, and postpositions (section 4.1.2, section 5.3, and section 6.1.2.2, respectively). Class change and meaning change are marked by suffixes and ambifixes. Intensity is marked, by the only attested infix, on adverbs (*cf.* section 7.2.2).

The occurrences of these affixes distinguish unambiguously between five speech classes, nouns, verbs, adverbs, postpositions and particles. With the exception of particles, which bear no morphology, each class presents specific morphologic properties. Thus, in order to occur in a different morphological function any given root/stem must bear, with rare exceptions, a class changing morpheme. Thus, class changing process are abundant. They are of four types: nominalizations (nouns can be derived from verbs, adverbs, and postpositions (*cf.* section 4.2.2), verbalization (verbs can be derived from nouns (*cf.* section 5.6.1)), adverbialization (adverbs can be derived from nouns and verbs (*cf.* section 7.2.1)), and postpositionalization (postpositions may be derived from verbs (*cf.* section 5.6.1)).

The following sections discuss some important morphological aspects of Wayâna.

3.1. Particles versus suffixes. It is not always straightforward to distinguish between a particle and a suffix. Neither phonological nor morphophonological processes may stand as criteria for establishing a distinction between the two classes in the language. The syllabic shape of a morpheme does not identify its class since both particles and affixes may be of CV, CVC, or CCV syllabic type. For example, the devaluative suffix *-tpë* and the admirative particle $pk\bar{e}$ have the same syllabic shape. In the same way, size cannot be a criterion since both suffixes and particles can be one syllable long, as for example the suffix $-k(\bar{e})$ 'Proximal Imperative', or several syllables long, as for example the particle *hemele* 'now; soon' and the Habitual past suffix $-(j)(\bar{e})m\bar{e}hneja$. Likewise, stress patterns do not help to classify one form as belonging to one class or another, since stress is not detectable even as a surface phenomenon in the language.

There are, thus, no morphophonological processes occurring with regard to a stem that indicates that adjacent forms are morphologically bound to it. Certain phonological processes, such as assimilation and dissimilation, happen in basically all environments in the language: internal to the root, on a morpheme boundary, and on a word boundary.

Syntactically, however, particles and suffixes behave differently. Particles possess a mobility that is non-existent with suffixes, *i.e.*, suffixes may not be separated from morphophonological words while particles may. In terms of distribution, a given particle may co-occur either with a specific speech class or various speech classes, while suffixes co-occur solely with a specific speech class (in section 3.1 below, however, we see that a few prefixes may occur with more than one speech class).

There are about a hundred particles in Wayâna expressing many different meanings such as evidentiality, negation, quality, number, emotivity, emphasis, etc. (cf.

appendix C). Below, we show examples of one of them, of the scope particle *psik(i)* 'small, 'little' which follows all major speech classes. In (1) it follows a verb, in (2) a noun, in (3) an adverb, in (4) a postposition, and in (5) it follows another particle:¹

- 1) Emna kunëtuku psik..
 emna kun-ëtuku phikï
 1+3ExclPro 3SADistPst-have.a.meal little
 'We ate a little.'
- 2) Pakolo psik neha.
 pakolo phikï n-eha-Ø
 house small 3SA-be-RecPst
 'It was a small house.'
- 3) Timile psik neha.

 timile phiki n-eha-Ø

 bloody small 3SA-be-RecPst

 'There was a little bit of blood.'
- 4) Mëklëë uhpolo psik lëken.
 mëklëlë uppo-lo phikï lëken
 DemAnmMed on.top.of-along little only
 '(He was) a little bit taller than that one.' (Ëkëi 072)
- 5) Uwa hnë psik ïu.
 uwa tnë phikï ïwu
 Neg still little 1Pro
 'I still did not (sleep).' (Pëne 071)

This particle is useful for testing whether a particular morpheme is morphologically bound or not. Comparing example (6) with (7), we see that the negative morpheme tapek may be displaced by psik(i). This is not the case of the possessive -n(u) (8-10). Thus, tapek is a particle, and -n(u) is a suffix.

- 6) Malija tapek. 'It is not a knife.'
- 7) Malija psik tapek. 'It is not a small knife.'

¹ Hereafter, examples are presented mostly in the Wayâna written system used in the translation of the New Testament by Schoen and Schoen (1979). We depart from that system in two aspects: surface forms of morphemes undergoing / τ / deletion are represented as if ending with long vowels (/epe τ i τ i/ \rightarrow [epe τ i], epelii 'fruit'). Examples of contrastive occurrences of the velar nasal / η / are represented by kn (/ta η / \rightarrow [ta η], takn 'far away').

- 8) ïmalijan 'my knife'
- 9) ïmalijan psik 'my small knife'
- 10) * Malija psikin

Rarely, in elicitation, the devaluative suffix -tpë (section 4.2.1.1), the existential suffix -hpe/~hme (section 7.2.1.1.1.2), and with the negative suffix -mna (section 7.2.1.1.1.3), were accepted separated from their stems by psik or ptile. Such arrangements, however, constitute unreliable data, since they were rejected in many other instances, all the examples produced by the speakers show the forms immediately following nouns, and no such examples occur in texts.

The case of the attributive suffix -me is an interesting one. In the great majority of examples in our database, it occurs immediately after nouns where intervening particles were not accepted in elicitation (e.g., * malija psik me neha 'It was my small knife'). However, in texts, some examples occurred following speech classes other than nouns. In (11) and (12) the attributive follows another particle, in (13) it follows a postposition, and in (14) it follows another particle and an adverb. In (15), it is separated from a pronoun by a particle. Given the fact that some forms cognate to -me are postpositions, as is the case in Tiriyó (Meira 1999:426), and given the fact that some pairs of postpositions and adverbs seem to present forms that are parallel in meaning and in form (cf. section 6.1), what we see in the examples below might be an adverbial me. This hypothesis, however, was not investigated in our study. Though there exists some ambiguity about the morphological status of -me, examples where a particle was placed between a noun and -me were never accepted; also, in the very vast majority of examples, it follows a nominal. Thus, we classify it here as a nominal suffix (cf. section 7.2.1.1.1.1):

- 11) Moloinë, të lëken me hapon.
 molojinë të lëken me haponu
 then be.stopped.snd only Attrb like
 'Then, he (was just) standing like that.' (Pear 010)
- 12) Tëi pa lëë me lëken pïlëu tiîhe tëë-je pa lëlë me lëken pïlëw t-ïlï-he where-away pa Emph Attrb only arrow Prtc-make.O-Prtc imnetamulu ja.

i-mïnetamulu-Ø ja
3-male's.father.in.law-Pss Erg
'Go figure why his father-in-law made arrows.' (Tukusimule 007)

,

Wajana anuktaa he me esike.
wajana anukta-Ø-lï he me ehike
person transform.into.animal-SpcEvntNmlz-Pss Des Attrb because
'Because people wanted to transform (themselves) into animals.' (Stair 029)

tuno nma me m-ëtïlï-ja-he fearful Intens Attrb 2SA-become-NPst-SapAff 'You will become feared.' (Walema 095)

15) Inëlëë le mela hnë wai.
inëlëlë le me-la tnë wahe
3AnphPro Intens Attrb-la still 1be
'I am still not like him (a true pastor).' (Walema2 129)

One other argument in favor of considering -me, and also -hpe/-hme, and -mna, as suffixes is the fact that they are all derivational. In general, particles do not perform class changing processes which are carried out by suffixes.

One of the criteria for the existence of phrases (postpositional phrase, genitive phrases, and verbal phrases) in the language is the fact that their members cannot be separated by an intervening form (*cf.* section 8.1.1). A few scope particles, *psik(i)*, *ptile*, *lë*, *lihle* and *tapek*, however, can occur between the two members of a phrase, in which case they seem to display suffix-like behavior:

[OV]
Pilasi lëë kap toma eluwa.
pilahi lëlë kapi-Ø toma eluwa.
basket Emph hand.craft.O-RecPst Verit man
'A basket really a man truly crafted.'

- [OV]
- 17) Pïlasi **psik** kap eluwa. pïlahi phikï kapï-Ø eluwa basket small hand.craft.O-RecPst man 'A man crafted a small basket.'
 - [OV]
- 18) Pïlasi hle kap Anakali.
 pïlahi tle kapï-Ø anakali
 basket authentic hand.craft.O-RecPst Anakali
 'Anakali crafted an original basket.'

[OV]

- 19) Televisao tapek ene Anakali.
 televisao tapek ene-Ø anakali
 television NominalNeg see.O-RecPst Anakali
 'Anakali saw not television.'
 - [OV]
- 20) Ka ptile ekalë Pilasisi. ka ptile ekalë-Ø pilahihi fish tiny give.O-RecPst Pilasisi 'Pilasisi gave a small fish.'

[PP]

- 21) Malija psik ke tokoi.

 malija phikï ke t-oko-he
 knife small Instr T-cut.O-He
 '(He/she) cut it with a small knife'
 - [Possessor-Possessed]
- 22) Eluwa psik pakolon.
 eluwa phikï pakolo-nu
 man small house-Pss
 'house of the small man'
- 3.2. The third person prefixes. Third person prefixes occur in complementary distribution with free dependent nominals (possessors (23), objects of postpositions (24), or direct objects (25)) (Gildea 1998:34 refers to these morphemes as pronominal clitics). Given the fact that they behave, however, like other prefixes in that their occurrences are restricted to the classes they inflect and that they cannot be separated from their stem, we consider them to be prefixes:
- 23) a. i-kopu-n b. Alina kopu-n 'his/her cup' 'Alina's cup'

24) a. e-po 'on it.'

- b. ahmit po.
 'on the shelf'
- 25) a. **n**-ene 'He/she/it saw it.'
- b. Opolana ene 'He/she/it saw Opolana.'
- **3.3. The speech classes.** There are five major speech classes in Wayâna: nouns, verbs, postpositions, adverbs and particles. Some of the most important aspects of each class are introduced in the next sections.
- **3.3.1.** Nouns. Nouns bear personal prefixes, possessive suffixes, derivational suffixes (class and meaning changing suffixes), and number. Nouns are of central importance to the grammar in that they may be derived from every major speech class: verbs, adverbs and postpositions (the reverse is not true for other speech classes). Moreover, most classes may be derived from nominal stems. Verbalization is all a de-nominal process, and the great majority of adverbials, as well as many modern postpositions, come from nouns. Some examples of inflected nouns, both derived and non-derived, are given below:
- 26) tïwalamalinkom tï-walamali-nu-komo 3Refl-mask-Pss-Coll 'their own mask'
- 27) ipatatpyykom i-pata-tpïlï-Ø-komo 3-homeland-Dvl-Pss-Coll 'their former homeland'
- 28) iwëhanuktopkom i-w-ëh-anuku-topo-Ø-komo 3-SA-Det-put.O.up -CircmstNmlz-Pss-Coll 'their going up'

- **3.3.2.** Verbs. There are two systems of verbal morphology in Wayâna. In the first one, labeled Set I (Gildea 1998), verbs take personal prefixes and suffixes (TAM suffixes, number suffixes. Set I verbs bear three sets of personal prefixes, prefixes marking the S on S_A verbs, marking the S on S_O and marking both the A and the O in transitive verbs. Some of these affixes are exemplified here:
- 29) Këhepematatën.

 k-ëh-epe-ma-ta-tën
 1+2SA-Det-friend-GiveVrblz-HortAblat-HortColl
 'Let's be friends.'
- 30) Wikloimë.
 w-i-klo-jmë-Ø
 1A3O-Them-mix.O-Resumpt-RecPst
 'I mixed it.'
- 31) Mëmëm. m-ëmï-Ø 2SA-enter-RecPst 'You entered.'
- 32) Kutuwe ka? kut-uwa-ja ka 1+2SO-dance-NPst Quest 'Are we going to dance?'

The t-V-(h)e set is characterized by the ambifix t(i)--(h)e and by ergative case marking: the S and the O occur unmarked, and the A is marked by ja 'Ergative.'

- A O

 33) Ilimona ja ëkëi tuhmoi.
 ilimona ja ëkëhi t-upmo-he
 Ilimona Erg snake T-kill.O-Prtc
 'Ilimona killed a snake.'
- Talanme triëmëphe ijum.

 talanme triëmëpi-he i-jumr-Ø

 maybe T-die-He 3-father-Pss
 'Maybe his/her father died.'

S

Valence changing morphemes (a valence decreasing prefix and several valence increasing suffixes (*cf.* section 5.4.2)) occur in both sets. Some examples are given below:

- 35) Welepjai. w-elepï-ja-he 1A3O-make.O.afraid-NPst-SapAff 'I make him/her/it afraid.'
- 36) Wëhelepjai. w-ëh-elepï-ja-he 1SA-Det-make.O.afraid-NPst-SapAff 'I got afraid.'
- 37) Kunutat inëlëë. kun-utatï inëlëlë 3SODistPst-be.lost 3AnphPro 'He got lost (a long time ago).'
- 38) Kahulu utatka inëlëë.

 kahulu utatï-ka-Ø inëlëlë

 beads be.lost-Transvzr-RecPst 3AnphPro

 'She lost beads.'

Verbs also present gerundive forms, which are discussed in section (5.3.5).

3.3.3. Postpostions. Similarly to nouns and verbs, postpositions may take pronominal prefixes (with particular allomorphs), the reciprocal prefix $\ddot{e}h(e)$ -, and number, which is expressed by the collective suffix -he. In addition, they bear spatial suffixes indicating position, goal, and path of a referent.

39) tënawëhe t-ëna-wë-he 3Refl-in.middle.of.supported-in-PColl 'in their lap'

40) jeuu jak j-ewu-lï ja-kë l-eye-Pss inside.of-into 'into my eye'

They also take nominalizing suffixes (discussed in section 4.2.2.2.1).

3.3.4. Adverbs. Adverbs do not take any prefixes, and the only suffixes found with adverbs are the nominalizing suffixes -an(u), and its allomorphs (section 4.2.2.2.2), the

privative suffix $-p\ddot{\imath}n(\ddot{\imath})$ (section 4.2.3), and the negative suffix -la (section 7.2.1.3). Adverbs are the only category that takes the intensifying infix -h- (section 7.2.2).

- 41) Sin ipokela, kaneta.
 hinï ipoke-la kaneta
 DemInanProx good-Neg pen
 'This one (is) not good, a pen.'
- 42) Sin ipokan, wïwï.
 hinï ipoke-anu wïwï
 DemInanProx good-PtNmlz ax
 'This one (is) the good one, an ax.'
- 43) Ihpoke nma kan womii.
 ipoke-h nma kanu womili-Ø
 good-AvIntens Intens God word-Pss
 'God's word is truly wonderful.'
- **3.3.5.** Particles. Particles take no morphology. Depending on the position in which they occur in the clause, they may be classified into several groups: first positions particles, those which may occur sentence initially (44), second position particles, those which occur after the first constituent in the clause (45) and scope particles, those without a particular position in the clause occurring after a particular element they modify (46), *etc.*
- 44) Moloinë emna kunïnïk.
 molojinë emna kun-ïnïkï
 then 1+3ExclPro 1+3SODistPst-sleep
 'Then, we slept (a long time ago).' (Pëne 067)
- 45) Ulu hek henepta Jamai.
 ulu hek h-enepï-ta jamai
 manioc only 1+2A3O-bring.O-HortAblat Jamai
 'Lets go get only manioc, Jamai.' (Kaikui2 003)
- Kunumusimanmela haponu hnë lep wai lep. kunumuhi-me-anu-me-la haponu tnë lep wahe lep old.woman-Attrb-PtNmlz-Attrb-Neg like still Advrs 1be Advrs 'I am still not unfortunately quite like an old woman, unfortunately.'

Particles are not discussed further in this work.

3.3.6. Ambivalent Roots. Unlike the overwhelming majority of roots in the language, some root cannot be clearly classified as a member of a particular class. Some roots may

undergo morphological processes that characterize two distinct speech classes. For instance, in the examples below we see three roots that may function either as nouns or as verbs.

```
47)
                'sing; song'
        elemi
        a. jelemijai
                         "I sing."
        b. elemiphak
                         'good at music'
48)
                 'tie O; string'
        рїтї
        a. Wipymyjai;
           w-i-pïmï-ja-he
           1A3O-Them-tie.O-NPst-SapAff
           'I am going to tie it.'
        b. ipïmït
           i-pïmï-tï
           3-string-Pss
           'its string.'
49)
        awaina 'to come into the morning/to down; morning'
           ïnïkï-la
                       j-awajna-Ø
           sleep-Neg 1SO-come.into.the.morning-RecPst
           'I came into the morning without sleeping.' (Jolokoc 530)
        b. Emna
                        nipanakmei
                                                             awaina
                                                                      kuptë.
                                                                      kuptë
                        n-i-panakma-ja-he
                                                             awajna
           emna
           1+3ExclPro 1+3A3O-Them-hear.O-NPst-SapAff morning each
           'We hear this every morning.' (Walema 048)
50)
           tïpï 'end; end O'
        a. Nitïpjai.
           n-i-tïpï-ja-he
           3A30-Them-end.O-NPst-SapAff
           '(He/she) will end it.'
        b. Helë
                      wapot ahkon,
                                         itïp.
                                         i-tïpï-Ø
           helë
                      wapoto akkonu
           PrsntvPro fire
                              firewood 3-end-Pss
           'This is the firewood, the end of it.'
```

Some other roots may function as nouns or postpositions. The form pata, for instance, behaves as a noun in that it has an unpossessed form (ëutë), it occurs with t-N-ke denominal adverbializer, it takes the devaluative suffix -tpi(li), and it does not require a nominalizer in order to occur as a core participant. However, it can also undergo some morphological processes that are characteristic of postpositions, such as

the bearing of spatial suffixes such as $-k(\ddot{e})$ 'goal' (Jalaki patak' 'to Jalaki's village') and $-w(\ddot{e})$ 'in' ($\ddot{e}patau$ 'in your village'), and take the nominalizer $-l\ddot{\imath}(l\ddot{\imath})$, in this case bearing some sort of meaning changing morphology (Jahelai patal $\ddot{\imath}$ 'the Jahelai villagers'). In this regard, it resembles postpositions ending in /ta/ (cf. section 6.2.1.1).

Finally, some very idiosyncratic roots are the numerals pëkänatpë 'one', hakëne 'two', ëheluwau 'three', and ëhepitihnë 'four'. Considering the available data, they apparently are not nouns, as they may not take some nominal morphology (examples with the possessive prefixes and the attributive -me were not accepted) and do not occupy some of the syntactic positions characteristic of nouns. Examples preceding the particle tapek 'Nominal negation', which must follow nouns, and examples in which numbers were positioned in the syntactic slot for the possessor or for the O (cf. section 8.1.1 and 8.3.1.2) were not accepted. However, like nouns, numbers occur with demonstrative pronouns (51), as the object of postpositions (52-53), and as the modifier of nominal objects (54-55) (adverbs must be nominalized in such contexts (cf. section 8.1.2)).

- 51) mëlë pëkxnatpë mëlë pëkënatpë DemInanMed one 'that one'
- Éheluwauponatawainaiinëlëëokïpëk.ëheluwawpo-nat-awajna-heinëlëlëwokïpëkëthreeon-supported-toT-come.into.the.morning-He3AnphPro drinkabout'He went up to three days and three nights on the drink.' (Walema 106)
- 53) Moloinë hakëne pona tawainai.
 molojinë hakëne po-na t-awajna-he
 then two at-to T-come.into.the.morning-He
 'Then, he spent two more nights.' (Walema 105)
- 54) Pïlasi **ëheluwau** wene.
 pïlahi ëheluwawë w-ene-Ø
 back.carrier three 1A3O-see.O-RecPst
 'I saw two baskets.' (Pear 007)

Pëkënatpë nene.

pëkënatpë n-ene-Ø

one 3A30-see.O-RecPst

'He/she/it saw only one.'

Clearly, more conclusive investigation is in order here.

In the following chapters, particular classes of words are described more fully in turn.

4. NOUNS.

The criteria distinguishing nouns from other speech classes are a) syntactic: nouns occur as subject, as direct object (occupying the O slot in Set I verbs), as object of postpositions, as the possessor in genitive constructions, as vocatives, and under the scope of specific particles; and b) morphological: nouns take affixes for person, number, and specific derivational suffixes. A rough diagram of noun morphology is shown below:

[Personal Prefixes-Noun-Meaning changing suffixes-Possessive Suffixes-Collectives]

- **4.1. Inflection.** Nouns are inflected by personal genitive prefixes, possessive suffixes, and collective suffixes.
- **4.1.1. Possession.** Wayâna exhibits only one strategy for possessing nouns. As in many Cariban languages (cf. Gildea 1998:104 for an overall discussion), the possessor, expressed either by personal prefixes or by a full (pro)noun, immediately precedes the possessed noun.³ The occurrence of both a full noun and a prefix is not accepted (1 d). All possessed nouns are inflected by possessive suffixes. The structure of possession is depicted in Table 1 (adapted from Meira 1999).

¹ Prototypical possession (as in Jeff's book) as well as other relations such as part-whole (the root of the house) and personal relationships (Ada's friend) are all encoded by the same grammatical structure. A relation such as thing-substance (which in languages like Portuguese are encoded by a possessive structure as in faca de madeira 'knife of wood' which is parallel to faca de João 'John's knife'), is not encoded by

possessive morphology in Wayâna.

² Only third person pronouns may occur as the possessor, with the exception of *emna* 'first person exclusive' which may be historically derived from a noun (cf. section 4.3.1 for a discussion on this form). ³ A few particles, however, may intervene between a nominal possessor and the possessed noun (cf. section 3.1).

Table 1
Structure of the possessed noun

Person prefix or	NOUN	Possessive suffix
(Pro)Noun	STEM	
(expressing the possessor)		

- 1) a. i-malija-n 'His/her knife'
 - b. Nila malija-n'Nila's knife'
 - c. emna malija-n 'our (exclusive) knife'
 - d. *Nila i-malija-n

4.1.1.1. Possessive prefixes. Nouns are inflected by 1st, 1st dual, 2nd, and 3rd person prefixes. The selection of allomorphs of personal prefixes depends on whether the nominal root starts with a vowel or with a consonant (roots starting in /w/ present extra complexity when inflected by third person reflexive prefix). Table 2 summarizes these prefixes.⁴

Table 2 Nominal personal prefixes

	/_V	/_C	/w
1	j-	ĭ-	ï-
2	ëw-	ë-	ë-
1+2	k-, ik-	ku-	ku-
3	Ø-	i-	i-, a-, e (?)
3 Refl.	t-	tï-	tï-
			(V-harmony)

Examples of speech act personal prefixes (heareafter SAP) are presented below: 5

2) a. pakolo 'house'

b. **I-pakolo-n**

2 c. **ë-pakolo-n**

1+2 d. ku-pakolo-n ⁶

g. apukuita 'paddle'

h. j-apukuita-n

i. **ëw-apuk**uita-n

j. k-apukuita-n

⁴ In this section the possessive prefixes are shown only on non-derived nouns. However, the occurrence of these prefixes is the same for all nominalizations that take prefixes (see section 4.2.2.1 on nominalization from verbs and section 4.2.2.2.1 for nominalizations from postpositions), with the exception of the allomorphs of third person prefixes for roots starting with /w/ which do not occur with derived nouns.

⁵ From this point, all long vowels at the end of words indicate the underlying occurrence of either the possessive suffix $-l\ddot{\imath}$ or of a /l $\ddot{\imath}$ / syllable (cf. section 2.3.1.2 on / τ / deletion).

⁶ A few speakers also accept $k\ddot{\imath}$ — as the dual prefix: $k\ddot{\imath}$ - $m\ddot{\imath}uukom$ 'the blood of us all', $k\ddot{\imath}$ -maulunkom 'our cotton', but older speakers suggest that this is an influence from Aparai's dual prefix ky-.

```
3) a. wosi 'skin fungus' g. wëlïsi 'male's sister'
1 b. ĭ-wosii h. ĭ-wëlïsii
2 c. ĕ-wosii i. ĕ-wëlisii
1+2 d. ku-wosii j. ku-wëlisii
```

Two nouns present the idiosyncratic dual prefix *ik*-:

```
4) a. ulu 'manioc bread' h. otï 'meat'

1 b. j-uu i. j-ot

2 c. ëw-uu j. ëw-ot

1+2 d. ik-uu k. ik-ot

3 e. Ø-ulu l. Ø-otï

3 Refl.f. t-ulu m. t-otï

Pro+Ng. mëklëë ulu 'his (medial) bread' n. emna otï 'our (exclusive) bread'
```

The third person personal prefixes are i-/ \emptyset - 'his/hers/its' and the reflexive t(i)-

'his/hers/its own'.

```
5)
3 a. i-pakolo-n 'his house' c. Ø-apukuita-n 'his paddle'
3 Refl. b. tī-pakolo-n 'his own house' d. t-apukuita-n 'his own paddle'
```

Nouns starting in /w/ take either *i*- or *a*- for the third person prefix. The allomorphs for the third person reflexive prefix are selected according to some sort of vowel harmony: *të*- and *to*- if the first vowel of the root is /ë/ or /o/, respectively, and tï-elsewhere.⁷

```
6)
3 a. a-wosii 'his skin fungus' c. a-wëlisii 'his sister'
3 Refl. b. to-wosii 'his own skin fungus' d. të-wëlisii 'his own sister'
3 e. i-watkiï 'tail' g. i-wewe 'his wood'
3 Refl. f. tï-watkiï 'his own tail' h. tï-wewe 'his own wood'
```

Two roots starting with /w/ are exceptional: wasi 'lower leg' and walehna 'back of knee'. They present e-, a unique allomorph for the third person prefix (which, like all other allomorphs of the third person prefix, is in complementary distribution with a full nominal possessor, and $t\ddot{e}$ - also a unique allomorph for the third person reflexive prefix (not resulting from vowel harmony as $t\ddot{e}$ - presented above):

```
'lower.leg'
                                       8)
                                                               'back of knee'
        a. wasi
                                            a. walehna
                                             b. ï-walehnaa
         b. ï-wasii
2
        c. ë-wasii
                                             c. ë-walehnaa
1+2
                                             d. ku-walehnaa
        d. ku-wasii
        e. e-wasii
                                             e. e-walehnaa
3 Refl. f. të-wasii
                                             f. të-walehnaa
        g. mesa wasii 'leg of the table'
N+N
                                             g. eluwa walehnaa 'back of knee of a man'
```

A unique case is that of the noun for 'arrow', which occurs with the lengthening of all prefixes. This is accounted for in phonological terms: $p\ddot{\imath}le$, the possessable allomorph, undergoes syllable reduction when possessed by prefixes and becomes ple. However, a *pt constraint exists in the language (cf section 2.3.2.5), and p is deleted leaving compensatory lengthening on the preceding vowel which is that of the prefixes. This is the only attested case in the language:

```
9) a. přlěu 'arrow'

1 b. ïï-le

2 c. ëë-le

1+2 d. kuu-le

3 e. ii-le

3 Refl. f. tïï-le

N+N g. Anakali přle 'Anakali's arrow'
```

4.1.1.1.1. The relational prefix *j-? There seems to exist a few remnants of an old possessive construction distinct from the type operating in the language today (which has a possessive prefix or full noun immediately preceding the possessed noun). In a few examples, it is possible to detect an extra /j/ between what seems to have been the possessor and the possessed:⁸

⁷ All other examples in the database take a- for the third person prefix: wo 'uncle', wotpë 'aunt', (w)okï 'beverage', wono 'bead', wïpïlï 'sin', (w)ohanë 'suffering', (w)omi(lï) 'language'. The third person possessed form of wïwï 'ax' is unknown.

⁸ Gildea (1998:113) has reconstructed a *y- 'Relator' prefix adjoining the possessor and the possessed noun for Proto-Cariban.

```
10)
                         'caterpillar (sp.)'
                                                                 < *sikale+j-ot(ï) 'food of a sikale'
        a. sikalejot
        b. sikale
                         'bird (sp.)'
        c. otï
                         'meat food'
                                                                 < *okomë+j-ot(ï) 'food of a wasp'
        d. okomëjot
                         'wasp (sp.)'
11)
        a. helijek
                         'bird (sp.)
                                                                 < *heli+j-ek(ï)
                                                                                     'heli's associate'
        b. heli
                         'ant (sp.)'
        c. ekï
                         'pet; parasite'
                         'bird (sp.) (flies at the river's surface) < *pëne+j-ek(ï)
                                                                                     'piranha's associate'
        d. pënejek
        e. pëne
                         'piranha'
                                                                 < *wapot+j-ekï
                                                                                     'fire's associate'
        f. wapotjek
                         'bird (sp.)'
        g. wapot
                         'fire'
        h. kulum
                         'vulture'
        i. kulumjek
                         'bird sp.' (frequently used as pet)
                                                                 < *kulum+j-ekï
                                                                                     'kulum's associate'
12)
        a. kulumjēlukē 'mythological caterpillar-like vulture' < *kulum+j-ëlukē 'vulture's caterpillar'
                         'vulture'
        b. kulum
        c. ëlukë
                         'caterpillar'
```

The examples shown above seem to refer to a relationship similar to that found with specifically possessed nouns, where there exists some kind of intrinsic relationship between the possessor and the possessed. However, synchronically, although one can isolate what might have been the parts, all the forms are analyzable as roots, and not as genitive phrases, all encoding animal names which are not possessable today.⁹

4.1.1.1.2. Ablaut. Some roots present two allomorphs that have different first vowels. The allomorphs are conditioned by the presence or absence of certain possessive prefixes. Meira (1999:74), in his discussion for the same phenomenon in Tiriyó, uses the terms *back grade* for allomorphs starting with /ë/ or /o/ and *front grade* for allomorphs beginning with /e/ or /a/. The *back grade* forms occur whenever roots bear the morpheme *k*- 'first person dual' or *t*- 'third person reflexive', or are in their unpossessed form; the *front grade* forms occur elsewhere (including forms possessed by

⁹ One speaker suggested that a look at myths and historical narratives might clarify why some animals came to be named as such. Maybe the animal named *pënejek*, for instance, had some important relationship with a mythological *pëne* 'piranha'. Unfortunately, no such texts are attested in the present database, and all attempts to obtain such information from speakers were unproductive. In most cases, the composing parts are not transparent for the speakers. In one particular case, a speaker parsed *sikalejot* as *sikale*, *jot* 'my meat, the sikale', and quickly added: 'But we do not eat Sikale'.

(pro)nouns). Table 3 depicts the three sets of alternating allomorphs (C = consonant); examples are presented in (13) to (15).

Table 3 Ablaut

front grade		back grade
/e/	~	/ë/
/aCo/	~	/oCo/
/aCë/	~	/ëCë/

		ĕ/e ¹¹			o/a ¹²				ë/a ¹³	
13)	a.	ëtat 'hammo	ck' 14)	a.	omo	'hand'	15)	a.	ë pë	'arm'
1	b.	j-etat	-	b.	j-amoo		-	b.	j-apëë	
2	c.	ëw-etat		c.	ëw-amoo			c.	ëw-apëë	
1+2	d.	k-ëtat		d.	k-omoo			d.	k-ëpëë	
3	e.	Ø-etat		e.	Ø-amoo			e.	Ø-apëë	
3 Refl.	f.	t- ë tat		f.	t-omoo			f.	t- ë pëë	
(Pro)N	g.	emna etat 'our han	ımock'	g	mule amoo	'child's h	and'	g.	mule apëë	'child's arm'

Nouns that are always possessed (cf. 4.1.1.3.3) lack, obviously, an unpossessed

back grade form: (roots in (19) have only a third person possessed form)

	ë∕e ¹⁴		o/a 15			ë/a
17)	'name'	18)	'sibling of same sex'	19)		'dorsal fin'
	a. (*ëhet)	a	. (*okon)		a.	(*ëpletï)
1	b. j-ehe-t	b	. j-akon			
2	c. ëw-ehe-t	c	. ëw-akon			
1+2	d. k-ëhe-t	d	. k-okon			
3	e. Ø-ehe-t	e	. Ø-akon		b.	Ø-apletï
3 Ref	l.f. t -ë he-t	f.	t-okon		c.	t- ë pletï

The noun for 'scissors' presents an idiosyncratic *front grade* unpossessed form.

ë/e

20) a. elasi 'scissors' (*ëlasi)

b. j-elasi-n

c. ëw-elasi-n

1+2 d. k-ëlasi-n

e. Ø-elasi-n

3 Refl.g. t-ëlasi-n

¹⁰ Ablaut is a widespread morphophonological phenomenon affecting both nouns and verbs. See section 2.3.8 for a discussion on this pattern.

¹¹ Nouns like *ëtat* are: *ëmna* 'nose', *ëu* 'eye', *ëlek* 'wound', *ëlimak* 'plate', *ëhema* 'path', etc. 12 Like *omo* is *opoto* 'bread holder'.

Nouns like *ëpë* are *ëpëjepi* 'hunger' and *ëwëm* 'penis'.

Like ehet 'his name' is emsii 'his daughter' (*ëmsi), elemi 'song' (*ëlemi 'song').

¹⁵ Like akon is anon 'body paint'.

Ablaut is, thus, restricted to roots beginning with vowels, either /e/ alternating with /ë/ or /a/ alternating with /ë/ or /o/. All other roots present the same first vowel in all environments.16

In addition to ablaut, possession presents other morphophonological patterns. Almost all possessable nouns starting with /e/ are related to the body (body-parts, body products or diseases). The few exceptions attested are:

		UNPOSSESSED		POSSESSED (Ø- '3 rd ')
21)	a.	ëhema	b.	Ø-ehema	'his/her trail'
•	c.	ëkep	d.	Ø-ekepiï	'his/her deceased relative'
	e.	ëlai	f.	Ø-elasii	'his/her fear'
	g.	ëlimak	h.	Ø-elimakïï	'his/her plate'
	i.	ëlinat	j.	Ø-elinatuu	'his/her baking plate'
	k.	ëpïi	Ī.	Ø-epïi	'his/her stair'
	m.	. ëtat	n.	Ø-etat	'his/her hammock'
	0.	ëwa	p.	Ø-ewaa	'his/her child net'
	q.	ëpi	r.	Ø-epi-t	'his/her medicine'

Finally, there are no attested cases of roots starting with /i/ or /i/ bearing possessive morphology.

4.1.1.2. Possessive suffixes. The possessive suffix presents four allomorphs, -n(u), -(li), -t(i), and $-\emptyset$. The full form of all suffixes appears in certain conditioning environments. as for instance when followed by a CCV particle like psik 'small; little':¹⁷

	-n(u) ¹⁸	-(lĭ) 19	-t(ï)	-Ø ²⁰
22)	a. ëmeku 'wrist.	e. ëpë 'arm'	i. ëpi 'medicine'	m. ëli 'cowlick/top.of.head'
	b. ëmeku psik	f. ëpë psik	j. ëpi psik	n. ëli psik
	c. j-emeku-n	g. j-ap ëë	k. j-epi-t	o. j-eli -Ø
	d. j-emeku-nu psik h.	h. j-apë-lï psik	l. j-epi-tï psik	p. j-eli- Ø psik

¹⁶ Examples with no ablaut are: apukuita 'paddle', anapëmii 'paddle', oti 'meat', akena 'first', aki 'pet', anekatop 'beer mixer', ahmit 'holder', etc.

¹⁷ This is the case for all forms that undergo syllable reduction with the deletion of their last vowel or final /TV/ syllable (cf. section 2.3.1.2). In certain cases, emphatic intonation is enough to stop vowel deletion (see example (170b) below)

¹⁸ Nouns like *ëmeku* are, to name a few, *holoto* 'lock', *apukuita* 'paddle', *aluwa* 'mirror', *anapamii* 'fan', apoto 'bread holder', hapa 'machete', manale 'sieve', malija 'knife', etc.

19 Nouns like ëpë are ëpëlesi, ëhema 'path', ëhehmu 'knee', ëlamuk 'sweat', ële 'liver', ëlinat 'baking

plate', etc.

20 Other examples are amole 'shadow', amï 'blanket', ëwam 'penis', jelï 'tooth', palum 'son in law', etc.

-n(u) is the most productive form of the possessive suffix, being the one extended to borrowed nouns: (Examples below are all borrowings from Portuguese):²¹

23) a. hapatu 'shoe' c. kopu 'glass' e. kuje 'spoon'
b. \(\text{i-hapatu-n}\) my shoe' d. \(\text{i-kopu-n}\) (Port. \(\text{copo}\)) (Port. \(\text{colher}\))
(Port. \(\text{colher}\))

The least productive allomorph of the possessive suffix is -t(i), which occurs unambiguously in only three stems (22 i-l) above and (24) (but see (27-30) below).

24) a. ĕmï 'face' d. ĕlek 'boil'
b. Ø-emï-t 'his/her face' e. Ø-elekï-t 'his/her boil'
c. Ø-emï-tĭ psik 'his/her small face' f. Ø-elekï-tī psik 'his/her small boil'

Possessable nouns ending with /tpë/ or /npë/ in the unpossessed forms and forms possessed by a (pro)noun take possessive suffix -Ø, along with the change in their endings to /tpïlï/ or /npïlï/. The most obvious source for the endings, the devaluative suffix (with exactly the same allomorphy), is no longer parseable (cf. section 4.2.1.1):

25)	a. epetpi	'payment'	b. j-epe tpïï-Ø	'my payment'
	c. jet pë	'bone'	d. j-etpiï-Ø	'my bone'
	e. pitpë	'skin; scales; she	ll' f. ï-pi tpïï-Ø	'my skin'
	g. uputp	ë 'head'	h. j-uputp ïi-Ø	'my head'
	i. kanpë	'my smoked mea	nt' j. ï-kan pïï-Ø	'my smoked meat'
			k. eputpiï-Ø	'its seed'
26)	a mulei	mutnë-Ø 'child's head'		

a. mule uputpë-Ø 'child's head'
b. anakali jetpë-Ø 'Anakali's bone'
c. manka putpë-Ø 'mango's seed'

It is not always easy to to determine the shape of the allomorph of the possessive suffix. For the nouns starting with vowels and with no ablaut, or without an unpossessed form that would clearly show that the possessed forms bear a possessive suffix (section 4.1.1.3.4), and all inherently possessed nouns, for the few examples where there is

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²¹ Other examples are: pola 'ball' (from bola), mesa (from mesa), kateila (from cadeira), kaneta (from caneta), hapeu (from chapéu), hadio (from rádio) fita (from fita), pila (from pilha), oliu (from óleo), lata (from lata), etc. Borrowed nouns, mostly from Portuguese, are incorporated into the language with varying degree of adaptation into the phonological system of the language. Old borrowings have accommodated to the phonological system of the language. New borrowings are so close phonologically to their Portuguese version that it difficult to distinguish them from cases of code switching.

evidence elsewhere in the language indicating that the last syllable of the noun may be the gentive suffix, that syllable is parsed as such (examples (27) to (30), all examples of -ti). All other cases are analyzed as bearing $-\mathcal{O}((31)$ to (33)).

27) a. ehet b. weheptëjai w-ehe-ptë-ja-he Ø-ehe-tï 3-name-Pss 1A3O-name-ModVrblz-NPst-SapAff 'his/her name' 'I will call his/her name' 28) a. ïpït b. tïpïtai ï-pï-tï tï-pï-ta-he 1-wife-Pss Prtc-wife-PssNIntrVrblz-Prtc 'my wife' (Alawaka 057) 'married to a woman' 29) a. ikat b. ikaphakan i-ka-tï i-ka-phakë-anu 3-fat-Pss ModAvlz -fat-ModAvlz-PtNmlz 'his/her/its fat' 'the fat one' 30) a. jumhet b. umhetpë j-umhe-tï umhe-tpë 1-hair-Pss hair-Dvl 'My hair' 'hair severed from the body' 31) 33) iletï anon Ø-anonu-Ø i-letï-Ø 3-body.paint-Pss 3-horn-Pss 'his/her body paint' 'its horn' 32) ipaa i-palï-Ø 3-granddaughter-Pss 'his/her granddaughter'

Since inherently possessed nouns lack an unpossessed form, it is not possible to clearly determine the shape of the possessive suffix. For the sake of parallelism with other possessed forms, they are analyzed as taking $-\emptyset$.

In at least one morphological context, the distinction between the four allomorphs of the possessive suffix is lost. All stems bearing the allomorphs $-tp\ddot{e}/-tp\ddot{i}(l\ddot{i})$ or $-np\ddot{e}$ of the devaluative suffix are inflected by $-\varnothing$: ²²

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It seems that historically, the sequence $/l\ddot{\imath}/$ in the devaluative suffix was in fact $-l\ddot{\imath}$, with $-tp\ddot{e}$ occurring on non-possessed forms and $-tp\ddot{\imath}-l\ddot{\imath}$ on possessed forms (see Gildea, 1998:119). In Wayâna today, both forms

35) a. ëhema 'trail; way'

36) a. hapapatu 'shoe'

b. ehemalī psik 'his small trail'

- b. ihapatunu ptile 'his tiny shoe'
- c. emna ehematpë emna ehema-tpë-Ø 1+3ExclPro trail-Dvl-Pss 'our former trail' (Pëne 016)
- c. emna hapatutpë emna hapatu-tpë-Ø 1+3ExclPro shoe-Dvl-Pss 'our old, useless shoe'
- d. ehematpiï
 Ø-ehema-tpiïi-Ø
 3-trail-Dvl-Pss
 'his former trail' (Mopelu 022)
- d. ihapatutpii
 i-hapatu-tpili-Ø
 1-shoe-Dvl-Pss
 'my old, useless shoe'

In nominalized verb forms only -(li) and $-\emptyset$ occur, with their distribution conditioned by the nominalizing affixes: -(li) occurs after n- 'Object Nominalizer' and $-\emptyset$ 'Specific Event', (in the cases where the full allomorph of -(li) does not occur, compensatory lengthening may remain (37 a), or not (37 b))²³

- 37) a. tulii epīī pëk tulihi epī-Ø-lī pëkë fruit.sp eat.vegetable-SpecEvntNmlz-Pss about '(He was) eating tulii.' (Alawaka 027)
 - b. kapu nak ëhanuku he lep tot kapu na-kë Ø-ëh-anuku-Ø-lï he lep toto sky in boundless.loc-into 3-Det-put.O..up SpecEvntNmlz-Pss Des Advrs 3Coll 'They wanted to go up to the sky.' (Lit.: 'They wanted their going to sky') (Stair 004)
 - c. tulii epïlï htau tulihi epï-Ø-lï tta-wë fruit.sp eat.vegetable- SpecEvntNmlz -Pss among-in 'when (he was) eating tulii'

of the devalutative, $-tp\ddot{e}$ and $-tp\ddot{i}(l\ddot{i})$ may occur with possessed stems. For this reason, nouns inflected with $-tp\ddot{e}/-tp\ddot{i}(l\ddot{i})$ are here analyzed as bearing $-\emptyset$. A few forms with $l\ddot{i}-np\ddot{i}\ddot{i}$ were attested in elicitation, $\ddot{e}watp\ddot{e}$ 'old rope', $ewallinp\ddot{i}\ddot{i}$ 'string thrown away; old rope', $pananp\ddot{e}$ 'ear severed from the body', $ipanal\ddot{i}np\ddot{i}\ddot{i}$ 'his/her/its former ear', but the reliability of such examples must be investigated. However, if these forms are proven to be correct, they would show the possessive $-l\ddot{i}$ occurring before the devaluative $-np\ddot{i}(l\ddot{i})$.

23 Note that syllable reduction is prevented any time a stem is inflected by a / $l\ddot{i}$ shaped suffix (cf. /i-w- $l\ddot{i}$ -anuku-topo- $l\ddot{i}$) ' $l\ddot{i}$ shaped suffix ($l\ddot{i}$). The suffix itself may undergo syllable reduction, leaving behind in some cases compensatory lengthening on the last vowel of the preceding syllable (37 a). This is usually the case whenever the suffix precedes some CV(C) morphemes, as $p\ddot{e}k\ddot{e}$ 'about', -kom(o) 'Collective', -me 'Attributive, etc., though in some cases the vowel lengthening disappears leaving behind no traces of the suffix, as when the suffix precedes l 'Desiderative' and $-p\ddot{i}n(\ddot{i})$ 'Privative Nominalizer'.

38) a. moloinë pëinëkë, ïnenepiïme, wiine molojinë pëjnëkë "-n-enep"-l"-me w-ïlï-ne wild.pig 1-ObjNmlz-bring.O-Pss-Attrb 1A3O-make.O-DistPst 'Then, I brought the pig' (Lit.: Then I made the pig as my bringing (thing)') (Mopelul 055)

b. inenepilimna ï-n-enepï-lï-mna 1-ObjNmlz-bring.O-Pss-without 'without the thing that I brought'

and -Ø occurs after -top(o) 'Circumstantial', -tpon(u) 'Past Agent', -ne 'Agent Nominalizer' ((39) to (40)), with any of the nominalizers plus the devaluative -tpë/-tpï(li) ((42) to (44)) (with the exception of -tpon(u) which does not occurs with the devaluative),²⁴ and with nominalized forms of postpositions (45).

- 39) jiniktop 40) jepatpon j-ïnïkï-topo-Ø j-epa -tponu-Ø 1-sleep-CircnstNmlz-Pss 1-teach.O-PstAgtNmlz-Pss 'my object for sleeping; my blanket' 'my ex-teacher' (Walema 020) (Jolokoc 488)
- 41) jepane, j-epa-ne-Ø 1-teach.O-AgtNmlz-Pss 'my teacher' (Walema 019)
- 42) ipkëlëtpïlï psik i-pîkëlë-Ø-tpîlî-Ø phikï 3-cut.O-SpecEvntNmlz-Dvl-Pss little 'the (piece of wood) they had done small cuts on' (Pëne 093)
- 44) emna 43) inekalëtpir ïtëtoponpë ï-n-ekalë-tpïlï-Ø îtë-topo-npë-Ø emna 1-ObjNmlz-tell.O-Dvl-Pss 1+3ExclPro go-CircnstNmlz-Dvl-Pss 'the story told to me' (Iguana 008) 'our going; our trip' (alawaka 002)
- 45) itu htaliï itu tta-lîlî-Ø jungle among-PtNmlz-Pss 'one in the jungle'

The distribution of all the allomorphs of the possessive suffix is summarized in

Table 4.

²⁴ No examples of *-ne* with the devaluative are found in the database.

Table 4
The distribution of the allomorphs of the possessive suffix

	-n(u)	-t(ï)	-(lï)	-Ø
Nominal roots	i-pakolo-n 'his	j-epi-t 'my	ku-tamu-(lu) 'our	j-ekï-Ø 'my pet'
	house'	medicine	grandfather'	
Nominalizations			n- 'ObjNmlz, -Ø 'SpecEvntNmlz'	-top(o) 'CircnstNmlz', -tpon(u) 'PstAgtNmlz', -ne 'AgtNmlz', • All cases of inherently possessed nouns, nouns starting with vowels (without an unpossessed allomorph distinct from 3 rd person) • Nominalized postpositions. • Nouns ending with /tp'll'/.
Devalutative			-tpë/-tpï(lï) 'Dvl'	
Į.	<u> </u>		-tpe/-tpI(II) DVI	

4.1.1.3. Possessibility. The grammar of possession distinguishes three noun classes: i) unpossessable nouns, ii) optionally possessed nouns, and iii) inherently possessed nouns. Since only one grammatical strategy for possession exists in the language (as seen in Table 1 above), each class is defined not by a different grammatical structure, but by how possessable nouns are. This is to say that native speakers easily accept some nouns with possessive morphology (*i-kanawa* 'my canoe'), but not others (**ikan* ('my fish')). Class membership is, thus, determined largely by the semantics of the nominal root.

4.1.1.3.1. Unpossessable nouns. These nouns do not bear any possessive morphology (possessive prefixes or suffixes). This class includes most elements of the natural world, animals, plants and fruits, items gathered from the forest (wild fruits and honey), places,

pronouns and proper names, kinship vocative terms, labels for human groups, descriptive nouns, ²⁵ and possibily borrowings. Short illustrative lists is given below:

46)	element	s/phenomena of nature	47)	place/loc	ations	public buldings
	a. sisi	'sun'	a.	ona		'field'
	b. nunuwë	'moon'	b.	sikola		'school'
	c. tawun	'wind'	c.	tukusipar	1	'the village hall'
	d. talala	'lightning'		Asiki		'Creek Asiki'
	e. aklo	'foam'	e.	Suwisuw	imïn	'a village's name'
	f. eklot	'cloud'	f.	Ajamuwa	ıka	'a village's name'
		ai 'rainbow'		Bona		'a village's name'
	h. kapu	'sky'	J			J
	i. kopë	'rain'				
	k. weju	ʻlight'				
	l. ïpï	'mountain'				
48)	animal	names/categories	49)	plants/fri	uits/ve	getables
.0)	a. pëlëë	'frog'	,	wapu		tree (sp.)'
	b. pëne	'piranha'		oloi	-	ew fruit'
	c. kaikui	'jaguar; dog'		pelesina		
	d. kulasii	'chicken'		hakula		to (sp.), beer'
	e. uluma	'duck'		maja	'man	
	f. akuli	'agouti'	f.	_	'corn	_
	g. tolopït	'bird'		kumu		n tree (sp.)'
	h. ka	'fish'	_	ekuu	'flow	
	i. meku	'monkey'	i.		'pum	
	j. pëinëkë		i. j.	alesi	'rice'	
	j. pomone	h.2	J.	41051	1100	
50)		s names, human groups or categories	s, 51)	vocative	form o	f kinship terms and
	superna	itural entities		pronouns	3	
	a. Anakali	(a man's name)	a.	papak	'f	ather'
	b. Pikala	(a woman's name)	b.	kuni	'g	randmother'
	c. Alinawa	ale (a man's name)	c.	kami	'y	ounger relative'
	d. Pintutu	(a woman's name)	d.	kono	'b	rother-in-law'
	e. kalajuw	a 'Brazilian'	e.	aimo	'у	ounger male relative'
	f. palasisi	'French'	f.	ïu	'I'	,
	g. kalipon	o 'Non-Wayâna'	g.	ëmëë	'у	ou'
	h. eluwa	'man'	h.	mëk	'tl	hat one far away'
	i. mule	'child'	i.	mësin	'tl	his one'
	j. wëlïi	'woman'				
	k. jolok	'evil spirit'				
	l. ipoo	'mythical river being'				
	m. waluhm					
	n. kan	'God'				

²⁵ Wayâna lacks a coherent category for adjectives. Noun modification is carried out by nominal roots or de-adverbial nominalization. Thus, meanings typically endoded cross-linguistically by a class of adjectives, are in Wayâna encoded by adverbs (*kawë* 'tall; high', *pëtuku(lu)* 'beautiful, well', *apsik* 'small, a little', etc.) or nouns (*pepta* 'big', *sitpīlī* 'ugly', *ihjan(u)* 'new', *jaime* 'male', etc.) (*cf.* 7.1.1.1).

```
52) descriptive nouns
a. jakin 'bit'
b. këmïi 'cold'
c. sitpïlï 'ugly, old, bad'
d. pepta 'big'
e. hapon 'alike'
f. ihjan 'new'
```

It is not clear whether borrowings (mostly from Brazilian Portuguese) are possessable or not. In elicitation, possessed forms of borrowings are accepted and produced, but no examples are found in texts, and in daily language they are not heard. New cultural items tend to be referred to by means of generic terms. For instance, possessed examples of *pola* 'ball' were all accepted in elicitation, but while playing volleyball games, when the Brazilians would cry *nossa bola* 'our ball' when getting control of the ball, the Wayâna would cry *emna kiliï* 'our thing', instead of the possessed form *emna bola-n*. It is difficult to test the reliability of elicited responses including possessed borrowings, since the answer to a requested possessed form comes invariably inflected with *-n(u)*, the most productive allomorph of the possessive suffix: ²⁷

		Wayâna			Portug	uese	Dutch
54)	b.	ï-kamisa-n ï-hapatu-n ï-papila-n	'my (male's) clothe; cloth' 'my sandals; shoes' 'my paper; my book'	< <	camisa sapato	'shirt' 'shoes'	< ?'paper'
	d.	ï-kopu-n ï-kuje-n	'my glass' 'my spoon'	< <	copo colher	ʻglass' ʻspoon'	· pupoi

Younger speakers, all fluent in Portuguese, are more accepting of possessed forms of borrowings, but tend to recognize that the alternative with a classifying generic term 'sounds better' (cf. 4.1.1.3.5). In any case, there are apparently three examples of

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²⁶ In several months of fieldwork, we were not able to note any usage of possessed borrowings. However, further research is needed to confirm such claim.

²⁷ In fact, testing the possessibility of certain forms in elicitation is a very difficult task. In many instances, some speakers accepted and produce (to later reject) even upossessible forms such as ka 'fish', ipi 'mountain' and kopin 'grass' (though other nouns like sisi 'sun', $nunuw\ddot{e}$ 'moon', tawun 'wind' were more systematically refused). All such cases were produced with -n(u). Thus, in order to arrive at the different

borrowings that seem to be truly possessable: *kamisa*, *hapatu*, and *pampila* (54 a-c). Siuka (a 28 year old speaker) asserts that these forms are truly possessed because they "feel old" in the language, while other forms, as in (54 d-e), do not.²⁸ Koehn (1994:46-7) reports a similar pattern for Aparai where old speakers are less likely to use possessed forms of borrowings than young speakers, and depending on the 'progress of the objects into the culture.'

4.1.1.3.2. Optionally possessed nouns. Semantically, optionally possessed nouns are the most diverse class. They refer to man made objects (instruments, utensils, tools, artifacts), to most human body-parts and body products, to a few plants, to a few elements of nature, to a few places, to a human category (*shaman*), and to a few processable items gathered from the forest. Morphologically, they occur with or without possessive morphology, i.e, they occur either in a possessed or in an unpossessed form. The presence or absence of possessive morphology may determine the phonological shape of the roots, which can be futher divided into three classes:

(i) roots with two allomorphs due to ablaut (nouns presenting alternations in their first vowel)²⁹ (see discussion above in section 4.1.1.1.2).

categories presented here (unpossessed noun, optionally possessed nouns, inherently possessed nouns) it was necessary to considered how systematically possessed forms were accepted or rejected.

²⁸ See (56.q-r) below for an example of a borrowing falling on the optionally possessed class, with the borrowed noun occurring only as the unpossessed form, and a native noun occurring as the possessed allomorph.

²⁹ Third person forms of optionally possessed nouns (especially nouns referring to body-parts) are sometimes used in a generic way. In elicitation, for instance, the third person form is the most frequent answer to Portuguese prompts with unpossessed forms (as an example, the first answer for *olho* 'eye' is *euu* (possessed by \emptyset –'3rd') instead of $\ddot{e}u$ (the unpossessed form)). This may mean that the original unpossessed forms are losing space to forms that are morphologically possessed (the more frequent ones), though in elicitation the unpossessed forms are also easily accepted and produced.

```
UNPOSSESSED
                         POSSESSED
55) a. ëlai
                         b. j-elasii
                                        'fear'
                                        'hammock'
     c. ëtat
                         d. j-etat
     e. ëlimëk
                         f. j-elimakiï
                                        'plate'
     g. ëpë
                                        'arm'
                         h. j-apëë
                         j. j-amoo
     i. omo
                                        'hand'
     k. opoto
                         l. j-apoto-n
                                        'bread holder'
     m. ëmeku
                         n. j-emeku-n
                                        'wrist'
```

(ii) roots with an unpossessed suppletive allomorph.³⁰

```
UNPOSSESSED
                          POSSESSED
56) a. kahulu
                     d. ï-tupi
f. ï-pataa
h. ï-ïle
j. ï-waptëë
                          b. ï-wono
                                      'bead'
     c. ïmë
                                      'farm'
                                     'village'
     e. ëutë
     g. pîlëu
                                      'arrow'
     i. wapot
                         j. ï-waptëë 'fire'
     k. pïlaku
                         l. ï-klaku-n 'ankle'
                         n. ï-wet 'feces'
     m. watë
     o. pïlolo
                          p. ï-klolo-n 'yard'
     q. alakapuha
                         r. ï-ïle
                                      'shotgun'
     s. akawale
                          t. ï-wakïmït 'the cover of my waist'
```

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(iii) roots with only one allomorph, i.e., with no root alternations between possessed and unpossessed forms. For the nouns starting with vowels, the only overt distinction between the third person and the unpossessed form is the possessive suffix (59): (nouns referring to goods gathered from the forest are shown in (58))

	UNPOSSESSED	POSSESSED	
57)	a. mota	b. ï-motaa	'shoulder'
	c. mïta	d. ï-mïtaa	'mouth'
	e. pïmï	f. ï-pïmïï	'neck'
	g. napi	h. ï-napii	'potato (sp.)'
	i. pakolo	j. ï-pakolo-n	'house'
	k. tuna	l. ï-tunaa	'water' (i.e. the water in a pan)
	m. tëpu	n. ï-tëpuu	'stone' (i.e. a stone used as a tool)
	o. patu	p. ï-patu-n	'pan'
	q. asii	r. j-asilï-n	'pepper'
	s. paluu	t. ï-palulu-n	'banana'
	u. apukuita	v. j-apukuita-n	'paddle'
	w. aluwa	x. j-aluwa-n	'mirror'
	y. anapëmii	z. j-anapamïsi-n	'fan'
	aa. napëk	ab. ïnapëkëë	'my potato (sp.)'

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³⁰ Though the historical relationship between the possessed and the unpossessed forms of some of these nouns is clear, the two allomorphs cannot be derived by a synchronic rule. Thus, they are analyzed here as a case of suppletion.

		UNPOSSESSED	PC	SSESSED	
58)	a.	palakta	b.	ï-palakta-n	'rubber sap'
	c.	waama	d.	ï-waama-n	'plant (sp.)'
	e.	kulaiwat	f.	ï-kulaiwatï-n	'sisal'
	g.	halihali	h.	ï-halihali-n	'poisonous liana'
	i.	ajawa	j.	j-ajawa-n	'dark sap'
	k.	malamala	ĺ.	ï-malamala-n	'seeds used to make artcrafts'
59)	a.	apukuita-n		'his paddle'	
		aluwa-n		'his mirror'	
	c.	anapëmïsi-n		'his fan'	

4.1.1.3.3. Inherently possessed nouns. The members of this class denote entities that stand in a stable, intrinsic relationship with another entity. These are kinship terms, some animal body-parts, parts of plants (i.e., nouns denoting part-whole relationships), a few objects with a particular possessor, and, surprisingly, a few human body-parts (as seen above, most nouns denoting human body-parts are optionally possessed).

The inherently possessed noun class has two sub-classes: nouns that are possessed by all persons of the paradigm and nouns that are only possessed by a third person.

4.1.1.3.3.1. Nouns possessed by all persons. These refer to kinship terms and a few body parts.

4.1.1.3.3.1.1. Kinship terms. With the exception of corresponding vocative forms (shown in (51) above), kinship terms are always possessed (but, see examples in (62) below). In some contexts, however, a third person form may also refer to a unpossessed referent:

60) a. ïjum b. ijum tapek

i-jumï-Ø tapek

1-father-Pss 3-father-Pss Neg

'my father' 'He is not his father; he is not a father.'

(Lit: 'he is not one's father')

61) a. ĕje b. ije tapek

ĕ-je-Ø i-je tapek

2-mother-Pss 3-mother-Pss Neg

'your mother' 'She is not his/her mother; she is not a mother.'

(Lit.: 'She is not one's mother)

There exist two unpossessed forms of kinship terms, the word for *widow* and for *widower* (62 a-b). These forms are based on /pi/ 'wife' and /minelumi/ 'husband', and take the devaluative suffix -tpë which indicates a no longer existing condition. No other kinship term, however, presents this pattern.

62) a. přtpě 'widow' b. mřnelumřnpě 'widower''

Kinship terms resemble optionally possessed nouns because they have equivalent vocative forms that are unpossessed. However, though it is the case that many kinship terms have an exclusive corresponding vocative form, many do not: pa(li) 'granddaughter', wali(s)i 'male's sister', and akon(o) all have kami 'younger relative' as their vocative correspondent. In addition, while optionally possessed nouns present unpossessed allomorphs that indicate the absence of a relationship (as the absence of ownership, for instance) vocative terms always encode a relationship between the speaker and the hearer.

Thus, kinship terms are best analyzed as having two forms, which are not determined by possessibility, but by two distinct discourse situations. Citational kinship forms, which are always possessed, are used in talking about a third person with an intrinsic relationship with the speaker or with another participant, while vocative terms are used by the speaker to address the hearer.

4.1.1.3.3.1.2. Body parts. The great majority of body parts belong to the class of optionally possessed nouns (i.e., nouns with both a possessable and an unpossessable

allomoph). However, a few are obligatorily possessed:³¹ (examples are shown with third person prefix)

```
63)
                        'his/hers/its body fat'
         a. i-ka-t
                        'his/hers/its body hair'
        b. i-hpo-t
         c. i-sit
                        'his/hers/its capillary vein'
        d. i-mi-t
                        'his/hers/its vein'
                        'hers/his/its flesh'
         e. i-pun
                        'his/hers/its shoulder blade'
        f. i-pa
                        'his/hers/its leg/thigh'
         g. i-pet
                        'his/hers/its tongue'
        h. i-nuu
        i. i-ponïï
                        'his/hers/its belly button'
                       'his/hers/its forehead'
        j. i-pehnaa
```

There is no apparent semantic motivation for the existence of this group. One may be tempted to analyze its members as referring to body-parts that are distributed along the body (as for instance *fat* and *vein*), but nouns like *pa* 'shoulder blade', *potï* 'lips', and the optionally possessed *mïwu* 'blood' and *jetpë* 'bone' make this implausible. It is possible that the explanation lies in their reduced form (almost all monosyllabic), but this is a subject for futher investigation.

Another interesting aspect of these nouns is that their third person possessed forms can also be used to refer to an unpossessed referent. One possibility is that their unpossessed forms disappeared, and their possessed forms were reanalyzed with an ambiguous meaning, i.e., with a morphologically possessed third person form referring to both possessed and unpossessed items (*ikat* 'fat; his (body) fat'). The most interesting example is the word for *egg* whose already possessed form can be further possessed by a noun: (/i-pumo/>[ihmo]due to syllable reduction)

³¹ See section 4.1.1.3.3.2 for yet another group of nouns denoting body-parts that can be possessed only by a third person.

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4.1.1.3.3.1.3. Other. There are inherently possessed nouns that do not refer to either body part or kinship terms. Two examples are *womi* 'language' and *pata* 'land/village'.

4.1.1.3.3.2. Specifically possessed nouns. Members of a small sub-class of nouns, referred to as 'specifically possessed nouns' are always inflected by a third person possessor (referring either to a specific entity or class). In all cases, the possessed noun has an intrinsic relationship with the possessor (part-whole or thing-substance relationships, or even a common association). The nouns that belong to this class denote body-parts, parts of plants, parts of a hammock, parts of a canoe, the nest of a bird, etc. Examples are given in Table 5. (Like other inherently possessed nouns, specifically possessed nouns may refer to an unpossessed item)

Table 5
Specifically possessed nouns

Specifically Possessed	Possessor
i-malet '(its) lower side fin'	paku malet 'lower fin of a paku (fish sp.)'
i-mkoo '(its) gills'	ka miko 'gills of a fish'
i-watkiï '(its) tail'	kaikui watkii 'dog/jaguar's tail'
i-letiī '(its) tail; horn'	kunolo letï 'macaw's tail'
	kapau letiï 'deer' horn'
ihpot '(its) feather; body-hair'	tolopït pupot 'bird's feather'
i-hmo '(its) eggs'	kulasii pumo 'the chicken's egg'
imit '(its) root'	wewe mit 'root of a tree'
i-mun '(its) edible root'	ulu mun 'manioc's root'
i-mïn '(its) nest'	tolopït mïn 'a bird's nest'
i-mït '(its) trunk; stem'	wewe mit 'stem of a tree'
i-jomït '(its) wrapping'	<i>ï-pet jomït</i> 'my leg's wrapping'
i-kanet '(its) string'	j-etat kanet 'my hammock's string
i-jehtalan '(its) coals'	wapot jehtalan 'the fire's coals'
i-lihlin ' (its) flame'	wapot lihlin 'fire's flame'
i-wena '(its) shore'	tuna wena 'the river's shore'
i-potiï '(its) tip; edge'	susu potiī 'tip of breasts; nipple'
i-japoo '(its) gums'	<i>ï-jee japo</i> 'my teeth's gums'

The fact that these nouns are specifically possessed is worroborated elsewhere in the grammar. When taking -ka 'Privative Verbalizer' the syntactic object of the derived verb must be the notional possessor:

- 65) a. ka tïmaletkai
 ka t-maletï-ka-he
 fish T-lower.fin-PrivVrblz-He
 '(He/She) removed the fish's lower fin.'
 - b. *mule timaletkai

(He/She took the lower fin from the child; i.e., if he was holding it)

66) a. kunolo watkika kunolo watki-ka-Ø

macaw tail-PrivVrblz-RecPst '(He/She) removed the tail off of a macau.'

b. *eluwa watkika

(He/She took the (bird's) tail from the man; i.e., if he was holding it)

- 67) a. tolopït tïmïnkai
 tolopïtï tï-mïnï-ka-he
 bird T-nest-PrivVrblz-He
 '(He/She) removed the nest from the bird'
 - b. *mule tïmïnkai (He/She took the nest from the child; i.e., if he was holding it.)

Some inherently possessed nouns have developed from polysemous roots. In one meaning the (historically?) same root takes all persons of the paradigm as possessors and in another sense, it takes only a third person possessor. 'Rope' and 'child net' also originated from a polysemous root, but they are optionally possessed nouns (72).

	All p	persons		Third person only
68)	b. 1	ihpot	'body-hair' 'my body hair'upot 'a bird's feather'	
69)	b	j-eukuu	'sperm' 'my sperm' iku 'rubber tree sap'	` <i>'</i> •
70)	b	jetpii	'lips' 'my lips' 'htau 'at the edge of the villa	(*my edge)
71)	b. 1	ïmit	'vein' 'my vein' 'a potato's root'	

72) a. ewaa 'child net'......(its) rope'
b. j-ewaa 'my child net'.....(*my rope)
c. ewa 'child net'.....'rope'
d. upo ewaa 'a rope to hang clothing'

4.1.1.3.4. Problematic roots starting with vowels. Class membership is defined for all nouns on the basis of the possessive morphology they may or may not bear. Thus, unpossessable nouns are those that do not bear any possessive morphology, optionally possessed nouns are those that bear possessive morphology, but also present an unpossessed form, and inherently possessed nouns are those that occur only with possessive morphology.

However, detecting possessive morphology in a stem is not always straightforward. The possessive morphology of nouns starting with a consonant is clear because all the allomorphs of the personal prefixes are overt before consonants (including third person prefix i-). Nouns starting with a vowel, however, bear \emptyset - as the allomorph of the third person prefix, which creates ambiguity between \emptyset - possessed forms and unpossessed forms. For a sub-set of nouns beginning with a vowel, there exists a clear distinction between third person and unpossessed forms because of ablaut, suppletion or of a clearly segmentable possessive suffix on the third person possessed form. For the rest, no such formal distinctions exist. Thus:

i) Vowel-initial roots that take SAP prefixes, without a distinction between a third person and a potentially unpossessed form, are classified as possessable, but cannot be classified as either optionally possessed or inherently possessed. The non-SAP forms can be translated as either possessed or unpossessed (indicating that third person and unpossessed forms are homophonous, and thus the noun in question must belong to the class of optionally possessed nouns). However, it is equally possible that these forms are

potentially possessed by a third person with a generic meaning, which would characterize the noun in question as inherently possessed.

```
73) a. j-uu
                                                             'manioc bread; his/her manioc bread'
                    'my manioc bread'
                                                b. ulu
      c. j-ot
                    'my meat food'
                                                d. otï
                                                             'meat food; his/her meat food'
      e. j-ekï
                    'my pet'
                                                f. ekï
                                                             'pet; his/her pet'
                    'my parasite (lice, ect.)'
                                                             'parasite; his/her/its parasite'
      g. j-akïï
                                                h. akïï
                                                             'support; his/her/its support'
      i. j-ahmit
                   'my support (i.e, a bench) j. ahmit
                                                             'friend; his/her friend'
      k. j-epe
                    'my friend'
                                                l. epe
```

ii) roots that do not take SAP prefixes cannot be classified at all. No criteria can decide on whether they are un-possessable or inherently possessed by \emptyset - 'third person prefix'.

```
74) a. ale 'leaf' ('its leaf'?)
c. amat 'branch' ('its branch'?)
e. epï 'tree' ('its tree'?)
d. enï 'container' ('its container?)
```

Some of these nouns can be preceded by specific nouns, with translations given in Portuguese in the form of a possessive phrase ('árvore da laranja', 'galho da árvore', 'árvore da banana', etc.). However, translation alone cannot be trusted since two juxtaposed nouns where one restricts the other is,in fact,a possible feature of the Wayâna grammar (see section 8.1.2).

```
a. pelesina ale 'orange leaf (tree)' (orange tree's leaf (?))
c. wewe amat 'tree branch' (a tree's branch' (?))
e. paluu epï 'banana tree' (a banana's tree' (?))
f. tolopït enï 'bird cage' ('a bird's cage' (?))
```

In looking at verbalizations with -ka 'Privative Verbalizer', one notes a pattern that is parallel to that of the specifically possessed roots starting with consonants: the only accepted direct object corresponds to the semantic/notional possessor. (The example in (76 d) shows some lexicalization):

76) a. kailen tatenkai

kajlen t-atenu-ka-he

mosquito.net T-mosquito.net.stick-PrivVrblz-Prtc

'(He/She) removed the stick from the mosquito net.'

- b. kulasii tënïkai eja
 kulahilï t-ënï-ka-he e-ja
 chicken T-container-PrivVrblz-He 3-Erg
 'He/She removed the chicken from its cage.'
- c. wewe tamatkai wewe t-amatï-ka-he

tree T-branch-PrivVrblz-He '(He/She) removed the branch from the tree.'

- d. ulu tumkai
 ulu t-umï-ka-he
 manioc T-root-PrivVrblz-He
 '(She/He) unearthed manioc'
- e. epï tëpelïkai eja
 epï t-ëpelïlï-ka-he e-ja
 tree T-fruit-PrivVrblz-He 3-Erg
 'He/She removed the fruit from the tree.'
- f. paluu aleka palulu ale-ka-Ø

banana leaf-PrivVrblz-RecPst

'(He/She removed the leaf from the banana (tree).'

g. ka tëpletikai ka t-ëpletili-ka-he

 $fish \qquad \quad T\text{-}dorsal. fin\text{-}PrivVrblz\text{-}He$

'He/She removed the dorsal fin from the fish.'

It is not clear, however, that this is enough to determine whether these roots are in fact 'possessed' when occurring in isolation. A more convincing test would be to have these nouns inflected with the devaluative suffix (-tpë/-npë or -tpïï/-npïï). Unfortunately, the data resulting from such attempts were inconsistent to the point of being considered unreliable, and thus are not presented here. Future research is needed to clarify the issue.

Thus, for all vowel initial nouns without SAP prefixes (including those presented as unpossessed in section 4.1.1.3.1: elements of nature, animals, plants, etc., which were listed as unpossessable because no 'possessor' has been observed for them (though they potentially exist)), the question of their classification in the possessibility scale is open: (a few unpossessable nouns are repeated below):

```
77) a. aklo 'foam'
c. eklot 'cloud'
e. ona 'field'
f. ahmomta 'island'
g. ahnep 'peanut'
h. onot 'fruit (sp.)'
i. oloi 'cashew fruit'
j. alesi 'rice'
```

4.1.1.3.5. Generic terms. In many Cariban languages (Tiriyó (Meira 1999), Panare (Carlson and Payne 1989), Aparai (S. Koehn 1994), etc.), nouns that cannot be morphologically possessed may be semantically possessed with the help of an obligatorily possessed generic term. Table 6 shows a list of similar terms in Wayâna.

Table 6
Generic terms in Wayâna

ot(ï)	'animal based food'
kaimo	'game'
akïï	'farm animal; parasite; breed'
anon(u)	'body painting'
(w)okï	'beverage'
ekï	'pet
kïlïï	'thing'
muhunu	'bait'
pataa	'place, village'
kanpë	'smoked animal based food'
nepïï	'soft vegetable food'
neme	'juicy fruit/food'
ka-top	'thing'

Such terms have been labeled *genitive classifiers* for Cariban languages due to their function in the possessive system of the language, which is said to be parallel to cross-linguistically genitive classifier systems (Carlson & Payne, 1989; but see a different account for Panare in Derbyshire and Payne 1990:263-264). In these systems, the genitive classifiers iconically occur with alienable possessed elements specifying their their function (Craig 2000). While inalienable elements are directly possessed, alienable

elements can be possessed only with the help of classifiers which are themselves directly possessed like inalienable elements. In languages with classifiers, *all* nouns should be 'possessable': classifiers "are required with (some subset of) alienably possessed nouns, often with items which would otherwise be unpossessible" (Carlson & Payne 1989:69).

While the Wayâna case *looks* parallel, there are many reasons for not considering examples in Table 6 as classifiers. First, the generic terms are not themselves always possessed. Of the elements in Table 6, only two (*kaimo* 'game' and *kïliī* 'thing') are inherently possessed, while four others are optionally possessed (*(w)okī* 'beverage, *muhunu* 'bait', *pataa* 'village'and *kanpē* 'smoked game food'), and four others are roots starting with a vowel for which possessibility is difficult to determine (*otī* 'meat food', *akīī* 'farm animal; parasite; breed', *anon* 'body paint', *ekī* 'pet'). The last three nouns in the table, *nepīī* 'soft vegetable food', *neme* 'juicy food/fruit', and *katop* 'thing', are inherently possessed only because they are nominalized verb forms with *n*- 'Object Nominalizer' and *-top(o)* 'Circumstantial Nominalizer', which derive obligatorily possessed nominal stems (*cf.* section 4.2.2.1).

Second, cross-linguistically, the classifier and the possessed element are under the same intonational contour (Carlson & Payne 1989:12). In the Wayâna cases, there exists an obligatory pause between the generic term and the 'possessed' element, which is not the case in canonical genitive clauses:

```
78) a. ï-muhunu, okopi 'my bait, okopi (fruit.sp)'
b. j-ekï, pakila 'my pet, wild pig (sp.)'
c. ï-wokï, hakula 'my beverage, hakula (beer (kd.)'
```

Third, both the generic and the 'possessed' element may occur separated by other words, and in different orders relative to each other. In (79) and (80) the 'possessed' terms occur at the end of the sentence separated from the generic term by other speech

classes, the same being true for the generic term in (81). This is different from genitive clauses where with few exceptions (cf. section 3.1) no intervening material is allowed, and the order Possessor-Possessed is rigid. In the cases below, the last element in the sentence seems more like an afterthought.

- 79) . Tëkî tëlëi, kujali.

 t-ëkî-Ø t-ëlë-he kujali

 3Refl-pet-Pss T-take.O-He bird.sp

 '(She) took her pet along, a macaw.' (Sulalapana 095)
- 80) . malonme, jekï ïja tëlëj, kaikusi psik; malonme j-ekï-Ø ï-ja t-ëlë-he kajikuhi phikï then 1-pet-Pss 1-Erg T-take.O-He dog small 'Then, I took my pet along, a small dog.' (Kaikui 028)
- 81) . kaikui kuu tikai leë lep, jeki; kajikuhi kuu ti -ka -he lele lep j-eki-Ø dog growling.snd T-say-He Emph Advrs 1-pet-Pss 'The dog really growled, my pet.' (Kaikui 039)

Fourth, it seems that any noun generic enough, any superordinated term, can function as a *generic term*. The optionally possessed *paluu* 'banana', for instance, can co-occur with a generic term (82 a), and with a non-possessable item (82 b-d). In both cases, the most specific element qualifies the most generic term:

82) a. ïnepi, palu 'my food, banana' b. ïpalulun, satume c. ïpalulun, kujali d. ïpalulun, kajan 'my banana, kajan'

Finally, many unpossessable nouns cannot co-occur with a classifying generic term (sisi 'sun', tapala 'grasshopper', kopin 'grass', aglo 'foam', hamut 'sand', ipi 'mountain', etc.). (See also Meira 1999, for a somewhat similar analysis for Tiriyó.)

Thus, the Wayâna case looks more like apposition, with the 'possessed' noun qualifying the generic rather than the generic term occurring to possess and specify the 'possessed' noun's function. In systems with typical genitive classifiers, their function is

related to the alienable-inalienable distinction that is a commom feature of genitive constructions. Such a dichotomy, however, is not relevant in Wayâna's genitive system.

4.1.1.3.6. A conclusion to possessibility. Table 7 summarizes the semantic subcategories of nouns belonging to the different genitive noun classes.

Table 7
Genitive nouns classes

Unpossessable	Optionally possessed	Inherently	possessed
		Forms w/ SAP	3 rd Only
 elements or 	 utensils, tools, objects, and 	 kinship terms 	- part-whole
phenomena of nature;	artifacts.	– a few human	relationships
- animals;	 body-parts, body products 	body-parts	(parts of a plant,
- plants, fruits, and	and body fluids.	- the words for	animal body-
vegetables;	- a few elements/phenomena	game, and thing.	parts; parts of a
- names, human	of nature: wood, water, stone,		hammock; etc.).
groups, supernatural	and fire.		– intrinsic
entities.	a few fruits/vegetables:		associations:
– wild,	pepper, banana, and three		bird's nest, teeth's
unprocessable goods	edible roots (ulu, napi and		gums, hammock's
(fruits, roots, honey).	napëk).		string, fire's
- places, locations,	 wild processable goods. 		flame, fire's coals,
public buildings.	at least three borrowings:		river's shore, etc.
- vocative form of	kamisa 'cloth', pampila ', and		
kinship terms.	hapatu 'sandals'.		
 descriptive nouns 	- the word for <i>shaman</i> .		
and pronouns;	- the word for <i>farm</i> , the word		
borrowings.	for village.		

The table above offers a short overview of the complex genitive system of Wayâna. However, it is enough to help one understand that there are two primary features underlying the system.

The first feature is the degree of relationship with a possessor. Items that never have a possessor are treated accordingly, and cannot bear possessive morphology. Items that most commonly have a possessor, but that can exist without one (they can be abandoned, or exchanged, etc.), may occur with or without possessive morphology. Finally, items that are conceived of as always having a possessor occur only with

possessive morphology. The odd class is, thus, that of body-parts, which belong to the optionally possessed class (with only a small residue in the inherently possessed class possibly due to phonological reasons). One possibility is that some forms are inherently relational, and thus cannot occur without the item they relate to. This is the case of kinship terms and all the other terms under the column of inherently possessed nouns. Body-parts are not inherently relational, and thus, may be optionally possessed.

This alone can not account for many of the items in the unpossessable and optionally possessed categories. Most items referring to elements of nature, plants and vegetables, goods gathered from the forest, and borrowings belong to the class of unpossessable nouns. However, a few are exceptional in that they also belong to the optionally possessed class: wood, water, stone and fire; pepper, banana, and three potato roots, ulu, napi and napëk; rubber sap, aluma (a plant used for making baskets), sisal, poisonous liana, malamala seed; and the borrowings kamisa, pampila, hapatum. While some variation is to be expected, this calls for an explanation.

The second feature is degree of incorporation of an item into the cultural/everyday life: all possessable items that refer to elements of nature show an interesting and consistent semantic characteristic. 'One's fire' means the fire where one cooks, 'one's water' means the water one carried from the river in her pan, 'one's stone' means the stone one uses for processing manioc, and 'one's wood' means the wood one processed to make a house or some other object.

As for possessable items referring to goods brought from the forest, they all refer to items that are usable only after being modified or processed: *rubber sap*, *sisal*, *poisonous liana* (beaten and made into a pillow-like object before being put into the

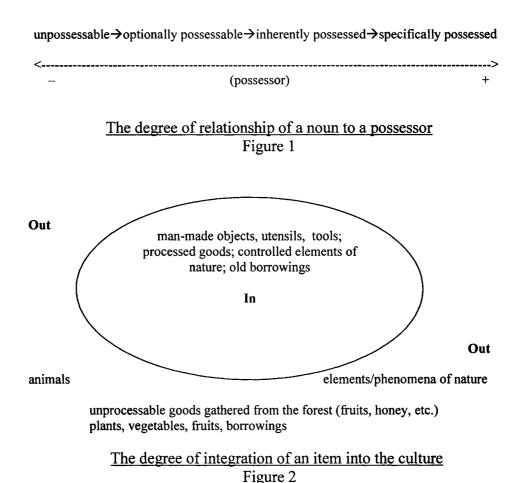
water to kill fish), dark sap (after heated and made into a paste used to paint handicrafts), malamala (a type of seed that is cooked and then painted to be finally used to make handicrafts), and aluma (a plant whose barked is sliced and dried, sometimes painted, and finally used to make woven objects).

The possessable vegetables are three edible roots (napi, ulu and napëk), which can all be made into either a beer or a bread (the main base for meals), pepper which is usually consumed smoked, and banana which, however, is usually consumed as is.

In the case of possessed borrowings, they all refer to now basic items in the culture, *paper*, *sandals*, and *cloth*, and according to speakers they now 'feel' as if part of the language.

What can be abstracted from these 'exceptional' examples is that as long as an item can be controlled (especially in the case of elements of nature), made into a basic cultural item (as in the case of plants and goods from the forest, and borrowed items), and used ordinarily, it becomes possessable. This means that it has somehow been incorporated into the culture by the way humans act upon it. Things that come from the outside world may take a long time or may never become part of the culture. Note the suffix -imë 'Extraordinary' marking unpossessable names for non-wild/foreign edible animals. Some variation will always occur as things are pulled in, as in the case of younger speakers being more accepting of borrowings. In the same way, in such a dynamic system, there will always be some degree of arbitariness in the placement of an item into one category or another (kasili is also an edible root which is commonly used to make beer, but it is unpossessable).

Two figures summarize the two features underlying possession in Wayâna: Figure 1 shows the degree of relationship of an item to a possessor (see items in Table 7) and Figure 2 shows the degree of incorporation of an item into the culture.



A residue: the word for shaman, the only label for a human category other than kinship terms that can be possessed, remains unexplained.

4.1.2. Number. Wayâna lacks a category for plural (one versus more than one). All morphemes for number (including non-nominal collectivizers) refer to the collectivity ('a great number' or 'all of them') of a referent (a cross-Cariban phenomenon, *cf.* Meira 1999:139 and Gildea 1998:116-117). Thus, it is possible for a noun to lack any marking

for number and still refer to more than one entity (cf. hakëne kaikui 'two dogs' where kaikui 'dog' is unmarked for number). Likewise, it is also possible for a noun referring to only two entities to receive a collective mark if they are the only members of a group (cf. amotom 'his hands').³²

A noun may be inflected by one of the eight different allomorphs of the nominal collective suffix, shown in Table 8. No difference in meaning is detected among the different forms. All end with /mo/.

Table 8

Collective suffixes on nouns

-tom(o)
-kom(o)
-nom(o)
-anom(o)
-am(o)
-jam(o)
-tonom(o)
-om(o)

Collective suffixes are distributed in a complex manner, with predictable and non-predictable occurrences. Some of the occurrences are conditioned lexically, while others depend on derivational morphology or on certain morphosyntactic environments.

Most non-derived nouns take -tom(o), but a few take -kom(o), -am(o), -jam(o), or -nom(o) (with some irregular roots such as patum(i), palum(i), and peito, which seem to lose their last syllable altogether when taking the collective (83 g-i)). Proper names take -tom(o) with a very specific meaning (83 a).

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³² It is interesting that besides marking number, collective morphemes have other functions as for instance to indicate distance or respect between the hearer and the speaker: *ëhehe* '(She) wants you all' (son-in-law addressing his mother-in-law in a story (Tamopoale 072). Some nouns cannot take collective morphemes: *iwetepuu tom (his bellies).

```
83)
           Mopelutom 'Mopelu's folk'
           pakolotom
                        'the houses'
           eluwakom
                        'the men'
       C.
       d.
           wëlïham
                        'women'
           ipilam
                        'her brothers'
       e.
       f.
           tïpajam
                        'his own grandchildren'
           ïpatunom
                        'my nephew'
           kupalunom
                        'our sons-in-law'
           ïpëinom
                        'my children'
       i.
           ipalenom
                        'his/her daughter-in-law'
           kupahenom 'his/her niece'
                        'my pets'
           jeknom
```

84)

sinkom

kunmëlamkom

Some pronouns take -kom(o) (84), some take -jam(o) (85), some take -am(o) (86b), and some take a sequence of two that can be obligatory (86 a, c) or not (85):

(Demonstrative Inanimate Proximal)

	b.	helëkom	(Presentative)
	C.	mëlë kom	(Demonstrative Inanimate Medial)
	d.	mïnkom	(Demonstrative Inanimate Distal)
	e.	ëtïkom	('What?')
85)	a.	ënïkjam ~ ënïkjamkom	('Who?')
,	b.	•	(Demonstrative Animate Medial Collective)
86)	a.	ëmëlamkom	(2 nd Collective)
/	b.	mëham	(Demonstrative Animate Proximal)

(1st Collective)

In genitive constructions, the collective suffixes -tom(o), -am(o), -jam(o), or -nom(o)) modify the possessed noun (87). The collective of the possessor is -kom(o) if it is expressed by pronominal prefixes (89). In the cases where both the possessor and the possessed noun are collective, -kom(o) occurs following the other collective suffixes (88) and (89)), with the exception of -tom(o) which never co-occurs with -kom(o) (90). In the absence of a specific collective marker for the possessed noun, there exists an ambiguity between a collective and a non-collective meaning of the possessed noun which can be resolved by the placement of an adverbial such as kole 'many' (90 b) (cf. Jackson 1972:64-5).

87)	a. b. c. d.	janapamïsintom tïpilam tïpajam tïpëinom	'my paddles' 'her own brothers' 'his/her own grandchildren' 'his/her own children'
88)	a. b.	kupilamkom tïpajamkom	'the brothers of us all' 'their own grandchildren'
	c.	kupalunomkom	'the sons-in-law of us all'
89)	b. c. d.	kupatunomkom kupëinomkom kupalenomkom kupahenomkom ëweknomkom	'the nephews of all of us' 'the children of all of us' 'the daugters-in-law of all of us' 'the nieces of all of us' 'the pets of all of you'
90)	b.	kupakolonkom kole kupakolonkom * kupakolontomkom	'the house(s) of all of us' 'the many houses of all of us'

Possessors expressed by a (pro)noun are not collectivized by -kom(o) suffixed to the possessed noun, but by their respective collective suffixes.

91)	a.	wëlïham pakolon	'the women's house'
	b.	eluwakom pakolon	'the men's house'
	c	ipa jam pakolon	'his grandchildren's house'
	d.	ipatunom pakolon	'his nephews' house'
	e.	ipëinom pakolon	'his children's house'
	f.	kujumkom pakolontom	'the houses of our father'

Some of the same collective morphemes occur with nouns derived from verbs, adverbs and postpositions (see section 4.2.2). In the case of nouns derived from adverbs, -tom(o) occurs with the only stem derived from an adverb with the nominalizer -lo (92); -am(o) occurs with stems derived from t-V-(h)e adverbs with the nominalizer $-\emptyset$ (93); -nom(o) occurs with stems derived from adverbs with the nominalizer -at(o) (94 a). The corresponding collective form of nouns with the privative suffix pin(i)/-min(i) are not clearly parseable (94 b).

92) hemalëlotom 93) tëhamo
hemalë-lo-tomo t-ë-he-Ø-amo
today-PtNmlz-Coll
'the ones of today' 'the many things to eat'

a. ipokankom

95)

b. ulumnom
ulu-mïnï-omo?
manioc.bread-Priv-Coll
'the ones without manioc bread'

it'

-komo(o) occurs with adverbs nominalized with -an(u), -lon(u), and -n(u) (95), and with postpositions nominalized with - $l\ddot{\imath}(l\ddot{\imath})$, -no, -non(u), and -n(u) (96). The nominalized form of $p\ddot{e}k(\ddot{e})$ 'about; busy with' with -n(u) and tuwalë 'knowing' with -on(u) take either -komo(o) or -tomo(o) (97 a-d):

	mïjalonkom mononkom	'the ones moving that way' 'the ones from there'
b. c.	ahmotaliikom Apalai ponokomo ahpononkom opinënkom	'the ones in between them' 'the ones from Aparai' 'the ones placed over the back of 'the ones under it'

'the good ones'

97)

a. ĕpi pĕkĕntom
b. ikaimo pĕkĕnkom
c. ĭtuwalonutom
d. ituwalonukom

'the ones busy with medicine'
'the ones busy with game'
'my knowings'
'his knowings'

Some nominalizers deriving possessable de-verbal nouns take both -kom(o) and -tom(o) with basically the same function as when occurring with possessable non-derived nouns (where -kom(o) collectivizes the prefixal possessor and -tom(o) the possessed or unpossessed noun). These nominalizers are -top(o) 'Circumstantial' (98), n- 'Object Nominalizer' (99), and $-\emptyset$ 'Specific Event' (100). Prefixless forms of -top(o) take both -tom(o) and -tonom(o) (101) with no apparent difference in meaning.

-tom(o)

a. ïweitoptom
 "-w-ehi-topo-Ø-tomo
 1-SA-be-CircmstNmlz-Pss-Coll
 'my beings; my ways'
 (Walema 180)

-kom(o)

b. kuweitoponpïïkom
ku-w-ehi-topo-npïlï-Ø-komo
1+2-SA-be-CircmstNmlz-Dvl-Pss-Coll
'our ancient people' (Jolokod 766)
(Lit.: 'The former being of us all')

³³ There are no collective examples of the adverbial nominalizers -no, and postpositional nominalizer -ano in the database.

There are no collectivized examples with de-verbal nominalizers $-n\ddot{e}$, and $-hem(\ddot{i})$.

99) a. inepïïtom i-n-epï-lï-tomo 3-ObjNmlz-eat.soft.food-Pss-Coll 'his fruits' (Pear 030)

b. inepïikom i-n-epï-lï-komo 3-ObjNmlz-eat.soft.food-Pss-Coll 'their fruit' (Pear 035)

100) a. ikatpiitom

i-ka-Ø-tpïlï-Ø-tomo

3-do- SpecEvntNmlz-Dvl-Pss-Coll

'the things one did'

(Lit.: 'his former doings') (Jolokod 658)

b. kënatuukom k-ënatu-Ø-lï-komo

1+2-be.finished- SpecEvntNmlz-Pss-Coll 'the ending of us all' (Jolokod 632)

101) a. katoptom

ka-topo-tomo

say-CircmstNmlz-Coll

'stories; words' (Walema2 039)

b. eitoponpëtom ehi-topo-npë-tomo be-CircmstNmlz-Dvl-Coll 'ancient people' (Jolokod 725)

c. katoptonom ka-topo-tonomo say-CircmstNmlz-Coll 'the stories' (Jolokob 399) d. ïtëtoptonom ïtë-topo-npë-tonomo go-CircmstNmlz-Dvl-Coll 'the ones that went up' (Jolokob 342)

Nouns derived with -ne 'Agent Nominalizer' take -anom(o) (possibily with the same function as described above for -tom(o)). Unfortunately, no -ne forms with a collective possessor are attested.

102) a. juunanom j-ulu-ne-Ø-anomo 1-talk.to.O-AgtNmlz-Pss-Coll

pola alima-ne-Ø-anomo ball throw.O-AgtNmlz-Pss-Coll 'the ones that talked to me' 'the ball throwers' (Iguana 008) (Mopelu2 029)

b. pola alimananom

Nouns derived with -tpon(u) 'Past Agent' are collectivized with -komo(o) in an idiosyncratic way. Though all forms -tpon(u) are possessed, -komo(o) is found collectivizing the possessed noun instead of the possessor, as is the case for all other occurrences of -komo(o) in possessive constructions. To better test this pattern, examples of collective forms of the possessor are needed ('the one who taught all of you' or the 'the one that taught all of them'). Such examples, however, are not found in the present database.

103) a. ëpanakmatponkom

'those that heard you' 'those that saw him'

b. Ø-enetponkom c. imilikutponkom

'the writers; the ones who wrote it'

Some other idiosyncrasies are observed in forms with the specific event nominalizer $-\emptyset$. In examples (104 a-c) below, -tomo(o) occurs unexpectedly modifying the possessor and in free variation with -komo(o) (compare with examples (98) above). The reliability of such examples is unquestionable since they all come from texts.

- 104) a. itëtpiïtom
 i-të-Ø-tpïlï-Ø-tomo
 3-go-SpecEvntNmlz-Dvl-Pss-Coll
 'the ones that had gone' (Pëne 127)
 ('His goings'?)
 - b. ilëmëtpiïtom
 i-lëmë-Ø-tpïlï-Ø-tomo
 3-go-SpecEvntNmlz-Dvl-Pss-Coll
 'the ones that had died' (Jolok355)
 (*His deaths)
 - c. ilëmëtpiikom i-lëmë-Ø-tpili-Ø-komo 3-die-SpecEvntNmlz-Dvl-Pss-Coll 'the ones that had died' (Jolok 357)

Finally, some sequences of collectives are found with some non-possessed forms:

-am(o)-tom(o) (105a-b) and -nom(o)-kom(o) (106). This case seems to be similar to that of the pronouns that take a sequence of two collective suffixes which are obligatory in the case of \(\tilde{e}m\tilde{e}lamkom\) 'you all', and \(kunm\tilde{e}lamkom\) 'we all', but still optional in the collective forms of \(\tilde{e}n\tilde{k}(i)-jam(-kom)\) 'Interrogative animate' and \(m\tilde{e}k(i)-jam(-kom)\) 'Distal animate'. In all the examples, the second collective morpheme is optional and has no additional meaning.

- 105) a. tëwëmkamotom
 t-ëwëmï-ke-Ø-amo-tomo
 havingAvlz-penis-havingAvlz-PtNmlz-Coll-Coll
 'the naked ones'
 (Lit.: 'Ones with their penis') (Dialog)
- t-ë-he-Ø-amo-tomo Prtc-eat.meat-Prtc-PtNmlz-Coll-Coll 'foods; games' (Walema2 012)

b. tëhamotom

ihmatonomkom
ihme-ato-nomo-komo
havingAvlz -PtNmlz-Coll-Coll
'chiefs (Lit.: 'ones who have')' (Jolokoc 462)

- **4.2. Derivation.** This section discusses meaning changing morphology and the morphemes deriving nominal forms from all other major speech classes: verbs, adverbs and postpostions).³⁵
- **4.2.1. Meaning changing morphology.** Wayâna exhibits only two meaning changing derivational morphemes, *-tpë* 'Devaluative' and *-imë* 'Extraordinary'. Both suffixes have limited scope, unpredictable meaning, and some semantic extensions.
- **4.2.1.1.** The Devaluative suffix -tpë/-npë, -tpï(lï)/-npï(lï). The semantics of the devaluative suffix interacts with the semantics of the nominal root to yield meanings such as 'old' or 'abandoned' (for objects, tools, utensils, buildings, etc. (107)), 'rotten' or 'spoiled' (for organic items (108)), 'severed' or 'extracted' (for body parts (109)), 'deceased' or 'former' (for kinship terms, human relationships, and names (110)), and no longer true quality (for nouns that may denote a quality (111)).
- a. kamisatpë 'old clothes'; b. tukusipanutpë 'old/abandoned village hall'; c. hakutpë 'old bag'.
- a. wanëtpë 'spoiled honey'; b. ulunpë 'rotten manioc bread'; c. pënetpë 'rotten piranha'. 36
- a. ĕpënpë 'arm severed from the body'; b. omotpë 'hand severed from the body'; ĕunpë 'eye severed from the body'
- a. kalaiwatpë 'a deceased Brazilian'; b. ijumïnpïï 'one's deceased father'; c. ipawanatpïï 'one's ex-lover'; d. Kililitpë 'former Kilili'.
- a. ihjanutpë 'formerly new; no longer new'; b. wëlisitpë 'formerly a woman (now a monkey)'; peptatpë 'formerly big; no longer big'.

In nominalized verb forms the devaluative encodes a resultative state or a happening that already took place.

³⁶ At least one speaker did not accept animal names with the devaluative. He suggested that the animal name be followed by *mëtpë* 'bad smell': *pëne mëtpë* 'rotten piranha'.

³⁵ Nouns are also inflected by class changing morphology such as verbalizers and adverbializers (-mphak(ë)/-phak(ë), -me, etc.). In this work, class changing morphology is described in the target category; thus, verbalizers and adverbalizers are discussed in the chapters on verb and adverbs, respectively.

```
112) a. asii ajutpii
          ahili aju-Ø-tpili-Ø
          pepper dry.O.over.heat-SpcEvntNmlz-Dvl-Pss
          'dried pepper (as a result of someone drying it over heat)'
        b. ënenehpotpili
          ë-n-enepï-po-tpïlï-Ø
          2-ObjNmlz-bring.O-Caus-Dvl-Pss
          'the thing that you ordered to be brought' (Jolokoc 470)
        c. tinëmëimëtoponpii
          tï-nëmë-topo-npïlï-Ø
          3Refl-leave.O-CircmstNmlz-Dvl-Pss
          'his past being left (by someone)' (Tamo 062)
        d. emna
                       ïtëtoponpë
                       ïtë-topo-npë-Ø
          emna
          1+3ExclPro go-CircnstNmlz-Dvl-Pss
          'our past going' (Alawaka 002)
```

Not all nouns can take the devaluative suffix. Nouns that refer to perennial entities (river, forest, wind, sun, moon, etc.), nouns for which it is hard to imagine a change in its nature (*kalakulitpë but ïkalakulitpiï 'it was my money'), and pronouns cannot take the devaluative suffix.³⁷

Nouns ending in /tpë/ or /npë/ seem to take the devaluative suffix (one example is found in the texts (113 b)), but in elicitation sessions most examples were either judged unacceptable or were subject to variable judgments given at different times. Thus, further research is needed to clarify this matter. For illustration, a few accepted examples are given below: (see more on these forms in section 4.1.1.2 and section 4.4.2).

113)	a. uputpëtpë ~ uputpënpë	'head severed from the body
	b. tutpëtpë	'old vase' (Tamopoale 085)
	c. jetpët p ë	'old bone'
	d. pitpëtpë	'old skin'
	e. kanpëtpë	'old smoked meat'
	f. junutpënpë	'no longer big'

³⁷ Jackson (1972:66) states that the devaluative suffix occurs with pronouns. His examples are *helëtpë* 'formerly this (inanimate)', *sinïtpë* 'formerly this (animate)', *iutpë* 'formerly me, my former sex partner' and *ëmëlëtpë* 'formerly you, your former sex partner'. Since Jackson's examples have proved to be highly reliable, it is possible that the non-occurrence of the devaluative suffix with pronouns and the refusal of such forms in elicitation have to do with dialectal differences (Jackson conducted his studies in Surinam) or

with a failure to provide adequate context in which such forms are to be accepted.

The devaluative suffix presents four different allomorphs, as presented in Table 9.

Table 9
The allomorphs of the Devaluative suffix

Prefixless	forms
Prefixed	forms

Non-nasal	Nasal
-tpë	-npë
-tpï(lï)	-npï(lï)

Thus, prefixless forms (unpossessable nouns, unpossessed allomorphs of optionally possessed nouns, and nouns possessed by a (pro)noun) take $-tp\ddot{e}$ or $-np\ddot{e}$ ((107) to (111) above and (114 b-c) and (115 b-c) below); all prefixed forms take $-tp\ddot{i}(l\ddot{i})$ or $-np\ddot{i}(l\ddot{i})$ ((114 d) and (115 d)). Note that nouns with ablaut occur in their front grade when possessed by (pro)nouns (115 c). Of all the allomorphs of the possessive suffix only $-\varnothing$ co-occurs with the devaluative.³⁸ This distribution holds true for all nouns, derived or not (with the exception of nominalizations with n- 'Object Nominalizer', see below).

- 114) a. "i-pampila-n 'My paper, book'
 - b. pampila-tpë 'Old, useless paper, book'
 - c. Nila pampila-tpë
 d. ï-pampila-tpiï
 'Nila's old, useless, former book'
 'My old, useless, former book'
- 115) a. Ø-ehema-lï-mna 'Without his/her/its trail'
 - b. **ëhematpë** 'Old path'
 - c. **ëkëi ehema-tpë** 'Snake's trail (the marks left on the ground)'
 - d. Ø-ehema-tpïi 'His/her/its trail'

The distribution of the nasal versus the non-nasal allomorphs of the devaluative suffix is conditioned lexically on roots³⁹ and stems with the privative suffix -pin(i) (though only two examples are attested in the present corpus (116). A somewhat contrastive distribution exists for nominalized forms: the nasal allomorphs occur only with -top(o) 'Circumstantial Nominalizer' (117), and the non-nasal allomorphs occur with

³⁸ It seems that historically /lii/ in /-tpilii/ was the possessive suffix. In the present stage of Wayâna, however, no strong argument indicates that /-tpilii/ is a complex form (cf. footnote 22).

³⁹ Jackson (1972:64) states that nouns ending in /n/ and /t/ take -npë. Though the same examples are found in the present database (*jetatinpi* 'my former hammock', *ehetinpi* 'his former name', *ipununpi* his former

- \emptyset 'Specific Event Nominalizer' (118), and -m(i), -(a)nu, -n(u), -non(u), -ato, and -no 'Participant Nominalizer' (119-120).

```
116) a. ikaimopininpë 'one no longer without game' (Tukusimule 001) b. uwëtëpinitpë 'one no longer not able to kill' (Tukusimule 076)
```

117) a. emna ïtëtoponpë 'our former going' (Alawaka 002) b. ïwëtuktoponpii 'the place I ate' (Fishing 017)

a. saktîkîp katpë b. itëtpîî saktîkîp ka-Ø-tpë-Ø cut.snd do-SpecEvntNmlz-Pss-Dvl 'the thing (a piece of wood') that has been cut' (Pëne 100)

Nominalized Postpositions are possessable and thus take both -tpi(li) and -tpë; nominalized adverbs are non-possessable prefixless forms, and thus take only -tpë:

119)	a. jakëlënutpii	'one that used to be with me'
	b. Nila akëlënutpë	'one that used to be with Nila'
	c. Macapa ponotpë	'one that used to live in Macapa'
120)	a. tïpataakemïtpë	'one that used to be a chief'
	b. upakatotpë	'old, ragged, useless thing'
	c. elamhakanutpë	'one that used not to be afraid'
	d. malalonutpë	'one that used to be the same way'
	e. tënonutpë	'one originally from where?'
	f. pëtukulunutpë	'one that used to be beautiful'

The object nominalizer presents an exception to the general pattern of distribution of the devaluative suffix: it takes $-tp\ddot{\imath}(l\ddot{\imath})$ on prefixed forms and also on forms possessed by a (pro)noun (where $-tp\ddot{e}$ would be expected). The object nominalizer has no unpossessed forms.

121) a. kunitom nekalëtpii 'the (story) the grandmothers told' (Iguana 007) b. ininëmëtpii 'the thing that I brought'

flesh'), the only other nouns ending in t(V) do not occur with the devaluative suffix, and thus do not test Jackson's generalization.

There are no examples in the database with the devaluative suffix co-occurring with the following nominalizing suffixes: -ne 'Agent Nominalizer', $-n\ddot{e}$ "Generic Event Nominalizer', -tpon(u), and some of the allomorphs the 'Participant Nominalizer ($-l\ddot{v}(l\ddot{v})$, -ano, -to—lo, and -lon(u)).

4.2.1.2. The suffix -imë 'Extraordinary'. This suffix has been described at least for Tiriyó under the label of 'agumentative' because it derives a noun that is larger or more impressive than the original noun (Meira, 1999:163). A different label was chosen for its cognate in Wayâna, because it has been reduced to occurring with only a very few nouns with the meaning of augmentative (the known examples are presented in (122); with all other nouns it has aquired a very specialized meaning. In (123) its occurrence derives a noun referring to a supernatural entity, or a noun referring to a non-native item (124), and in some other cases it has undergone some lexicalization (125). A few nouns end in /imë/ with no clear indication that that is the remnant of the 'extraordinary' suffix (126). No nouns taking -imë can be possessed.

```
122)
       a. kupita 'wound'
                                    b. kupitaimë
                                                    'big wound'
                                    d. ëlekëimë
                                                    'big boil'
       c. ëlek
                  'boil'
       e. pupu
                 'foot'
                                    f. pupuimë
                                                    'big foot'
123)
       a. alawata
                     'monkey (sp.)' b. alawataimë 'a supernatural alawata monkey';
                                    d. pakilaimë
                     'peccary'
                                                    'supernatural peccary'
       c. pakila
                                    f. alimiimë
       e, alimi
                     'monkey (sp.)
                                                    'a supernatural alimi monkey'
124)
       a. kumata
                     'beans'
                                    b. kumataimë 'commercial Brazilian beans'
                     'wild pig'
                                    d. pëinëkëimë 'non-wild pig'
       c. pëinëkë
                     'bee'
                                                    'imported Italian bee'
                                    f. wanëimë
       e. wanë
                                    h. ulumaimë
                                                    'non-wild duck'
       g. uluma
                     'wild duck.
125)
       a. ëkëi 'snake'
                                    b. ëkëjuimë
                                                    'anaconda' (*big snake)
       c. mïu 'blood'
                                    d. mïuimë
                                                    'menstrual period' (*a lot of blood')
                                    f. paluluimë
                                                    'banana (sp.)' (*big banana)
       e. paluu 'banana'
       g. kanawa 'canoe'
                                    h. kanawaimë
                                                    'airplane' (*big canoe)
       i. palakta 'rubber sap'
                                    j. palaktaimë
                                                    'ball' (*a lot of rubber sap')
126)
       a. kapukapusiimë 'the name of a supernatural entity'
        b. isoimë 'monkey (sp.)'
```

4.2.2. Nominalizers. Nominal stems can be derived from verbs, adverbs and postpositions by means of several nominalizing morphemes, each with its own particular morphosyntactic properties. They derive two large classes of nouns, those that can be

possessed and those that are never possessed. The members of the possessable class show front grade allomorphs and generally refer to a specific or particular referent or event. The members of the unpossessable class, on the contrary, show back grade allomorphs (for the relevant examples) and refer to a generic referent or event. This is to say that the semantics of the nominalizers can refer to the role or quality of a participant in an event, to the circumstances of an event, or to an event itself.

4.2.2.1. Deverbal nominalization. Deverbal nominalization is the richest derivational process in the language, with seven distinct nominalizing suffixes. The nominalizers are presented in Table 10 according to whether they derive a possessed or unpossessed stem and to whether they refer to a participant or to an event. Exceptionally, the semantics of the 'Circumstantial' nominalizer -top(o), which has both possessed and unpossessed forms, encompasses a wide range of usages varying from event-like to more participant-like meanings.⁴¹

Table 10 Verbal Nominalizers

Participant	Event		
possessed	possessed	unpossessed	
-ne 'AgtNmlz'	-Ø 'SpcEvntNmlz'	-në 'GenEvnttNmlz'	
n- 'ObjNmlz'			
-hem(ï) 'PatModNmlz'			
-tpon(u) 'PstAgtNmlz'			
-top(o) 'CircnstNmlz'			

4.2.2.1.1. *n*- 'Object Nominalizer' and -*ne* 'Agent Nominalizer'. As one can infer from the glosses, these morphemes occur only on transitive verb roots. They stand as the 'mirror image' of each other, with *n*- being a prefix deriving nouns that refer to a

⁴¹ The nominalized verb forms referring to an event account for almost all cases of subordinated clauses in the language (cf. section 8.3.2).

participant that is the notional object, and taking personal prefixes (127) that refer to the notional A; and with - ne being a suffix that refer to a participant that is the notional subject, and taking personal prefixes that refer to the notional O(128). As with other nominalizations, prefixes are in complementary distribution with full (pro)nouns. Both suffixes are very productive.

```
127) a. moloinë pëinëkë ïnenepiïme
                                                       wiine,
        molojinë pëjnëkë ï-n-enepï-lï-me
                                                       w-ïlï-ne
                  wild.pig 1-ObjNmlz-bring.O-Pss-Attrb 1A3O-make.O-DistPst
        'Then I made the pig as my thing to bring.' (Mopelul 055)
      b. tulakanumhamo
                                          nipkëlëtpïï.
        t-ulakanumï-he-Ø-amo
                                         n-i-pïkëlë-tpïlï-Ø
        Prtc-hunt/fish-Prtc-PtNmlz-Coll ObjNmlz-Them-cut.O-Dvl-Pss
        'the thing the hunters cut' (Pëne 100)
128) a. jepane
        j-epa-ne-Ø
        1-teach.O-AgtNmlz-Pss
        'my teacher' (Walema 019)
      b. wajana epane
        waiana epa-ne-Ø
        person teach.O-AgtNmlz-Pss
         'the teacher of the Wayana' (Walema 133)
```

4.2.2.1.2. - \mathcal{O} 'Specific Event' and- $n\ddot{e}$ 'Generic Event'. Both nominalizers occur with front grade allomorphs, but they display different morphological properties. - \mathcal{O} derives prefixed forms, and - $n\ddot{e}$ only prefixless forms. The possessor of - \mathcal{O} forms an absolutive category. With transitive verbs, it is possessed by the notional object, and with intransitive verbs, by the notional S. In forms with - \mathcal{O} , the participants are clearly specified:

```
129)
          Talanme lomok kunehak
                                                                pëk
                                              ëtï
                                                     pena
          talanme lomoke kun-eha-kë
                                              ëtï
                                                                pëkë
                                                     pena
          maybe low
                           3DistPst-be-DistPst what Hesitative busy.with
          tulii epiï
                                               pëk
          tulihi epï-Ø-lï
                                               pëkë
          fruit.sp eat.soft.food-SpcEvntNmlz-Pss busy.with
           'Maybe (it) was low (on the tree), busy with something,... eating tulii.' (Alawaka 027-026)
```

-në occurs only with intransitive (or detransitivized) verbs, referring to events in which the participants are unknown or unimportant.

130) a. Tonk kanë ke hek mëkjaa emna pëk tonk hek mëkjalë pëkë ka-në ke emna shoot.snd do-GenEvntNmlz Instr only DemAnmMedColl 1+3ExclPro about itëtpiïtom tïpanakmai emna ja

i-të-Ø-tpïlï-Ø-tomo tï-panakma-he emna ja 3-go-SpcEvntNmlz-Dvl-Pss-Coll T-hear.O-He 1+3ExclPro Erg

'With the shooting, we heard those that had gone about us.' (Pëne 127-182)

b. Ëhepanë pëk wai pëkë wahe

Eh-epa-në pëkë wahe

Det-teach.O-GenEvntNmlz busy.with 1be

'I am (busy with) studying.'

Gildea (1998:202-203) shows that a progressive construction derived historically from nominalizations with $-\emptyset$ (for both transitive and intransitive verbs, as in examples (132-133)) and $-n\ddot{e}$ (for intransitive, as in example (131)) plus the postposition $p\ddot{e}k(\ddot{e})$ 'busy with' occurs in several languages in the Cariban family. In Wayâna, however, no definite morphosyntactic evidence shows that these constructions have in fact grammaticalized into a new verb form in the language (see a morphosyntactic description of this construction in section 8.3.1.5). In all such constructions the copula is optional.

- 131) Eleminë pëk (wai)
 elemi-në pëkë wahe
 sing-GenEvntNmlz busy.with
 'I am (occupied with) singing.'
- 132) tuwakom pëk
 t-uwa-Ø-Ø-komo pëkë
 3Refl-dance-SpcEvntNmlz-Pss-Coll
 '(They) are (busy with their) dancing.'
- tulii epiï pëk (kunehak)
 tulihi epï-Ø-lï pëkë kun-eha-kë
 fruit.sp eat.soft.food-SpcEvntNmlz-Pss busy.withPts 3DistPst-be -DistPst
 '(He) was (occupied with) eating tulii.'

In his fieldwork, Gildea found that "the Wayana speakers show a marked preference" for the construction with -në. When asked to answer to the question ëti pëk 'Occupied with what?', the speakers would invariably answer with Set I non-past (see below) or with $-n\ddot{e}$, and add that the equivalent construction with $-\mathcal{O}$ was not very used.

The data gathered here, and my observation of spontaneous speech, however, contradict Gildea's findings. 42 The examples shown below, coming from two distinct elicitation sessions with the same consultant (Alinawale Wayâna), present a different pattern. Nominalizations with -Ø were most frequently the first answer to the question ëti pëk? ((134 a-c) for intransitive stems, and for transitive stems (134 j-k), with occasional Set I non-past (134d) and some t-V-(h)e (134 l) answers. Examples with -në were all elicited, but were considered equally good (134 e-h). (Examples with with long vowels are inflected with- \emptyset).

134)	a.	tëëhetamikaakom pëk	'(They are at their) playing.'	(first answer)
	b.	tëtuluukom pëk	'(They are at their) talking.'	(first answer)
	c.	tuwaakom pëk	'(They are at their) dancing.'	(first answer)
	d.	luwe wetëjai	'I am playing flute.'	(first answer)
	e.	epohnëmnë pëk	'(He is) thinking.'	(elicited)
	f.	ëhetamikanë pëk tot	'(They are) playing.'	(elicited)
	g.	ëtuu në pëk tot	'(They are) talking.'	(elicited)
	ĥ.	uwanë pëk	'(They are) dancing.'	(elicited)
	i.	luwe et ë ë pëk wai	'I am playing flute.'	(elicited)
	į.	domino alimaa pëk	'(They are) playing dominos.'	(first answer)
	k.	televisao enee pëk	'(They are) watching TV.'	(first answer)
	1.	tëepohnëphe	'(He is) thinking.'	(first answer) (about a man who was just seating down thinking with a gazing look)

In my notes recording spontaneous speech, t-V-(h)e is frequently used with a 'progressive' meaning (135). Non-past is frequently used with a 'future' meaning

⁴² This may be due to dialectal differences, as Gildea's data come primarily from Speakers from Bona Village.

(similarly to progressive glosses in English). Unfortunately, no examples with -në coming from spontaneous speech were collected.

```
135)
       a. kape tiihe?
           kape t-ïlï-he
           cofeeT-make-He
           'Making coffee'?
           (Said to me as I was pouring coffee powder into the hot water)
       b. tîtëtîtëi
           tïtë-t-ïtë-he
           Red2-T-go-He
           '(They are) walking around.'
           (Said about a group of teachers as they were walking around the village)
       c. itimëjai
                                          Funai pona
                                          funai po-na
           w-ïtë-jmë-ja-he
           1SA-go-Resumpt-NPst-SapAff Funai at-to
           'I am going to Funai.'
136)
       a. kaikui ëwëjai
           kaikuhi ë-wë-ja-he
           jaguar 3A2O-kill.O-NPst-SapAff
           'The jaguar will eat you.'
           (Said to me jokingly by a woman as I was taking off to a farm.)
       b. anumalë witëimëjai
                                                   Jahelai pona
           anumalë w-ïtë-jmë-ja-he
                                                   jahelai po-na
           tomorrow 1SA-go-Resumpt-NPst-SapAff Jahelai at-to
           'Tomorrow I am going to the Jahelai (village).'
           (Told me by my consultant.)
```

Only one clear example with the progressive -në occurs in texts: (in the example below the speakers uses *ïwï*, the Apalai first person pronoun)

137) İwi, aa, Renato, ëtuunë pëk.
ïwi aa renato ëtulu-në pëkë
1 Pro um! Renato talk-GenEvnNmlz busy.with
'I, Renato, (am) speaking.'

4.2.2.1.3. -hem(i) 'Patient Modifier Nominalizer'. This suffix has a very limited distribution. It occurs only with factive verbs i(li) 'do; make' and kap(i) 'to craft'. The noun derived with -hem(i) is always preceded by a full noun indicating the substance which the created item is made of.

```
b. malija tëpu ïhem
c. kulumuli ïhem malija 'knife made from stone'
d. luwe amohawin ïhem
e. mauu kaphem
a. ëliwë kaphem
'knife made from stone'
'flute made with nails (of an armadillo)'
'crafted from cotton'
'crafted with clay'
```

The *-hem(i)* forms can occupy a nominal slot:

```
138b) Malija wew iihem iili inëlëë.

malija wewe ili-hemi ili-Ø inëlëë
knife wood make.O-PatModNmlz make.O-RecPst 3AnaphPro
'He made a knife made out of wood.'
```

The possessibility of forms with -hem(i) is not clear, since prefixed forms are not accepted. However, the noun preceding can be seen as the possessor of the derived stem, and a corroborating argument for this is the fact that the two nouns cannot be separated by second position particles as is the case in genitive phrases (*kulumuli ka iihem).

4.2.2.1.4. -tpon(u) 'Past Agent'. This suffix is restricted to transitive roots, with the resulting noun denoting a participant which is the 'agent' of an already past event.⁴⁴ The possessor is the notional object.

```
139) jepatpon
j-epa-tponu-Ø
1-teach.O-PstAgtNmlz-Pss
'my former teacher' (Walema 020)
```

140) wewe apëkatponu ja wewe apëka-tponu-Ø ja wood get.O-PstAgtNmlz-Pss Erg 'the one that got the wood' (Stair 015)

4.2.2.1.5. -top(o) 'Circumstantial.' This is a very productive and very frequent suffix. It derives nouns with meanings that can vary from entities to events. This is to say that a

⁴³ Second position particles can be easily placed between two nouns in noun-noun modification: *eluwa*_i *ka pëtukulun*_i *mene* 'Did you see the handsome_i man_i?) (*cf.* section 8.1.2).

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⁴⁴ In Jackson's (1972:70) analysis, this suffix comes from "-tpi" former and -ne agentive". I do not adopt his analysis here because there are no occurrences of a nominalizer on an already nominalized stem (-tpi(li)) only inflects nouns) and the past agent nominalizer ends in /nu/, not in /ne/ as would be the case if it took the agentive -ne.

nominalization with -top(o) may refer to a thing or object, to a place, to the purpose an event, or to an event itself.

In its more entity-like derivations, -top(o) may derive concrete items (as for instance, a *lock*, a *cutting instrument*, a *blanket*, a *place* (141 a-d)), or to more abstract ones (a *story*, a *job*, a *talk*, etc. (142 a-c)). Meira (1999:183-4), reports that in Tiriyó - topo 's "more entity-like uses can be described as purposive: an instrument, or a place for the purpose of carrying out the action described by the verb. In this respect, -top(o) can be seen as a means of generating a noun for a peripheral participant, one which is important to the event, but not central to it, unlike nuclear participants A, O and S." This is mostly true for Wayâna, but a -top(o) nominalization can easily occur as a nuclear participant (in example (143), it occurs as the O):

- 141) a. apuutop
 Ø-apulu-topo-Ø
 3-cover.O-CircumstNmlz-Pss
 'lock, lid'
 - b. ipkëlëtopomna, malijamna nma upak,
 i-pïkëlë-topo-Ø-mna malija-mna nma upake
 3-cut.O-CircmstNmlz-Pss-without knife-without Intens long.ago
 'There was no cutting instrument, there were no knives, a long time ago.' (jolokoa 388- 389)
 - c. jiniktop tiitek sisi hjak,
 j-iniki-topo-Ø tiili-te-ke hihi hja-ke
 1-sleep-CircmstNmlz-Pss make.O-SapColl-ProxImp sun
 'Put my blanket in the sun.' (Jolokoc 488)
 (i.e, a thing that I sleep with)
 - d. ĕhekuptëtopomna nma
 Ø-ëh-ekuptë-topo-Ø-mna nma
 3-Det-stop.O-CircmstNmlz-Pss-without Intens
 '(There was) really no place to stop.' (Alawaka 044)
- 142) a. Ma, hemalëë ekalëtop wekalëjai maa hemalëlë Ø-ekalë-topo-Ø wekalë-ja-he
 So now/today 3-tell.O-CircmstNmlz-Pss 1A3O-tell.O-NPst-SapAff
 'So, I will tell a story.' (Eagle 001)

⁴⁵ This has been called 'Place/instrument nominalizer' (Gildea 1998:119) and 'Circumstantial' (Meira 1999). The latter seems more encompassing to me.

- b. epo emaminumtoponpiï, epo Ø-emaminumï-topo-Ø-npïlï finish 3-work-CircmstNmlz-Pss-Dvl 'His fomer job (was now) finished.' (Jolokod 721)
- c. ëtuutop panakmai emna kuntëm.
 Ø-ëtulu-topo-Ø panakma-he emna kun-tëmï
 3-talk-CircmstNmlz-Pss hear.O-PurpMot 1+3ExclPro 3DistPst-go
 'In order to listen to the talk, we went.' (Mopelu2 022)
 (A political talk carried out by a Brazilian in the celebrations of the *Indian Week*)

The example below shows -top(o) with eventive meaning, part of what is essentially a complement clause:

Ewïptëimëtop wijai
ë-w-ïptë-jmë-topo-Ø w-ïlï -ja -he
2-SA-go.down-Resumpt-CircnstNmlz-Pss 'I will make you go down.' (Eagle 071)

Ewïptëimëtop wijai
w-ïlï -ja -he
1A3O-make.O-NPst-SapAff

-top(o) nominalizations can occur unmarked as adverbials (an unusual pattern, since in general only core participants occur unmarked). In this context, they refer to an event with a clear sense of *purpose*:

luwe tanuptëi, jolok amëipatop tëjahe.
luwe t-anuptë-he joloko amëjipa-topo-Ø të-ja-he
flute T-play.instr-He evil.spirit call.O-CircnstNmlz-Pss 3Refl-Dat-PColl
'They played the flute, (in order to) call the evil spirit to themselves.' (Jolokoa 040-41)

In their possessed forms, stems with -top(o) are inflected with personal prefixes forming an absolutive category, the notional S for intransitive verbs and the notional O for transitive verbs (all the examples above). Unpossessed forms exist with -top(o), but are only attested with two roots ka 'say; do' and ehi 'be':

- ipok lep, eitop man ipok lep, eh-epe-me ehi-topo mane ipoke lep RecprN-friend-Attrb be-CircnstNmlz 3be good Advrs 'Being one another's friend is good, but...' (Eagle 036)
- 146) katop
 ka-topo
 say-CircmstNmlz
 '(It is) said.' (Jolokoc 514)

4.2.2.2. Nominalization of adverbs and postpositions. Adverbs and postpositions also become nouns by means of nominalizing suffixes, with adverbs taking two nominalizers and postpositions one. The 'Participant' nominalizer, which shows several apparent suppletive allomorphs (see Table 11 below), is taken by both adverbs and postpositions. While some allomorphs of the 'Participant' nominalizer occur with both classes (in table in bold), others only occur with one or the other of them. Adverbials take in addition the privative $-p\ddot{\imath}n(\ddot{\imath})/-m\ddot{\imath}n(\ddot{\imath})$ (4.2.3).

Table 11 Nominalizers of Adverbs and Postpositions

	'Participa	'Privative'	
ADVERBS	-m(ï)~-Ø		-pïn(ï) ~
	-ato		-mïn(ï)
	-an(u)		
	-to∼-lo		
	-lon(u)	-n(u)	
	-on(u)	-no	
POSTPOSITIONS	-lï(lï)	-non(u)	
	-an(o)		
	-to		

The meaning of nominalizations with the 'Participant' suffix is usually that of a superlative (malija ipokan 'knife the good one, i.e. 'the best knife'), of what would be a relative clause in English (apëita ahponon 'get the one that is on the back), and, as both of these examples show, of definiteness. Thus, this nominalizer refers to an inherent property or to a permanent characteristic of a referent. Note that the meaning of nouns derived by the 'Participant' nominalizer is predictable given the meaning of the original postposition.

The factors conditioning the distribution of the different allomorphs of the 'Participant' nominalizer in each speech class are discussed in the next sections.

4.2.2.2.1. Nominalization of postpositions. The allomorphs of the 'Participant' nominalizer are are all conditioned lexically. Container-like postpositions (all ending in /ta/, /na/, /ja/, or /wa/ take -li(li) (147) (cf. section 6.2.1.1). Postpositions ending in /e/ take -an(o) (148a). 46 All other postpositions (with the exception of the 'away' postpostions discussed below) take either -n(u), -no, -to or -non(u) (148.b-d).

```
147)
                            'There is nothing/no one inside.'
        a. alilimna
                             'one inside the house'
        b. pakolo talii
        c. kapu naliii
                            'one in the sky'
        d. sisi hjalii
                            'one in the sun' cf. sisi hnak in Malama 009.
        e. tuna kwalii
                            'one in the water'
148)
       a. i-sanomna
                            'one who wants/desires it is missing'.
        b. ëpi pëkënumna 'one busy with medicine (i.e. 'nurse'; 'doctor') is missing' 48
                            'one from Macapa city' 49
        c. makapa pono
                            'one that is over something' 50
        d. ahponon
                            'one that does not have anything'
        e. i-mnato
```

Though it is clear from the examples above that nominalizers occur right after the postpositional root, there are some attested cases of nominalized spatial postpositions bearing some of the spatial suffixes (cf. section 6.1.2.1). Such examples, however, are of limited scope. No nominalized examples with the goal markers $-k(\ddot{e})$ 'into' and -na 'to' have been attested or accepted, but one example of the position marker -w(e) 'in' and one of the path marker -ilë 'through' have been found in the corpus, one from coming from a text (149a), and the other coming from elicited data (149 b). Such forms, however, are so

⁴⁶ Most morphemes ending in /e/ have this vowel deleted when taking suffixes starting with /a/ (see also the de-adverbial nominalizers -at(o) and -an(u), and the collective -an(o) in section 2.3.1.1.3): /i-he-ano/->isano. Other examples of postpositions ending with /e/ are eile 'angry at', pole 'towards', pune 'fitting', and potentially wake 'be aware of' for which no nominalized examples exist in the database. An exception to this pattern is ke 'instrumental' which cannot be nominalized.

⁴⁷ No nominalized forms of the following postpositions are attested: kwata 'in a port', ina 'adjacent; belonging', opikai 'under', uwap(o) 'ahead of', wake 'wary of'. No nominalized forms of walë 'Uncertainty', wante 'by one's will', umpoj(e) 'Cause', ke 'Instrument; Source' and ja 'Dative; Agent; Causee' have been accepted.

⁴⁸ Other examples are: akëlë '(Comitative) with', katïp(ï) 'alike', kuptëlë 'following', malë '(Inclusive) with', opinë 'under', pëk(ë) 'about', pinwë 'caring for', (u)walë 'knowing of', and wala 'around'.

⁴⁹ The only other attested example is *uno* 'afraid of'. The nasal allomorph of *po* 'on' is also nominalized by -no: lo mono 'the one on the ground'.

The only other attested example is uhpo 'on top'.

infrequent that their reliability is questionable. All container-like postpositions are all nominalized with $-l\ddot{\imath}(l\ddot{\imath})$ (as seen above), except in these two examples where they take -n(u):

149) a. i-lopta-ilë-n 'something that comes from within' b. a-wë-n 'one that is inside'

Only one example of the path marker -lo 'along' is attested (in both texts and elicitation), and this occurs with the non-spatial meaning of *uhpo* 'on top; better than me':

150) a. j-uhpo-lo-n 'one better than me'

There is, nevertheless, one solid case. For a group of postpositions (the 'away' postpositions (cf. 6.2.1.3)), the nominalizer occurs after the spatial -j(e) 'away'. The nominalizers that occur with this group of postpositions are -n(u) or -an(u):

```
151) a. /Ø-epo-je-anu/ > epojan 'one that is above it'
b. /i-mïkappo-je-nu/ > imkahpojen 'one that is behind it'
c. /Ø-aktuppo-je-nu/ > aktuhpojen 'one from up river, from the north of it'
d. /Ø-ameta-je-nu/ > ametajen 'one from down river, from the south of it'
```

Thus, -j(e) 'away' is the only spatial morpheme to occur systematically in nominalized forms. As for postpositions bearing the position marker $-\emptyset$ 'on', it is not possible to show whether they are nominalizable or not, for obvious reasons.

Nominalized postpositions result in inherently possessed nouns that take either a third person prefix $(i-/e-/\mathcal{O}-\text{ or the reflexive }t(i)-(153))$ or a full noun as the possessor.

```
152)
                                                 b. ipëkënumna
       a. ëpi
                    pëkënumna
                    pëkë-nu-Ø-mna
                                                     i-pëkë-nu-Ø-mna
           medicine busy.with-PtNmlz-Pss-without
                                                    3-busy.with-PtNmlz-Pss-without
           '(The) one busy with medicine is missing ' '(The) one busy with it is missing.'
153) a. ilamnaliï
                                                 b. t-ënaliï
           i-lamna-lïlï-Ø
                                                     t-ena-lïlï-Ø
                                                     3Refl-in.middle.of.supported-PtNmlz-Pss
           3-in.center.of-PtNmlz-Pss
           '(the) one among something/someone'
                                                     '(the) one in his own middle; in his own lap'
```

```
154) a. itu htaliï 'one in the jungle'
b. istalikom 'one among them'
c. iwaliptaliï 'one that is always behind it'
d. ewalan 'something around it'
```

Forms bearing SAP prefixes were also accepted, but the few rejected examples call for further investigation:

```
    juhpolon
    j-uppo-lo-nu-Ø
    l-on.top.of-along-PtNmlz-Pss
    'one better (than) me' (Walema 92)
```

ë-pune-ano-∅
2-fitting-PtNmlz-Pss
'one that fits you'

157) jeilan j-eile-anuo-∅ 1-angry.at-PtNmlz-Pss 'one who is angry with me'

talihna 'in the open' is an exception in that it takes -li(li) 'PtNmlz' but no object (cf. section 6.1.1.1)

4.2.2.2.2. Nominalization of Adverbs. Adverbs are nominalized by means of the participant suffix with its several allomorphs $(-an(u), -on(u), -non(u), -n(u), -ato, -no, -to \sim -lo, -lon(u),$ and $-m(\tilde{\imath})/-\emptyset$) and by means of the privative suffix $-p\tilde{\imath}n(\tilde{\imath})/-m\tilde{\imath}n(\tilde{\imath})$ (cf. section 4.2.3). Of all the allomorphs of the 'Participant' nominalizer, -an(u) is the most frequent, occurring with both derived (by -me/-pe 'Attributive', with discontinuous $i-phak(\tilde{e})/i-mhak(\tilde{e})$ 'Modifier Adverbializer') (158) and almost all non-derived adverbs ending in /e/ (159) (see exception in footnote 53 below). Unlike nouns derived from verbs and postpositions, nouns derived from adverbs do not take personal prefixes.

```
158)
            ikaphakë nma
                              'really fat'
            ikaphakan
                              'fat one'
            elamhakënu nma 'really fat one'
        c.
        d.
            pakolome
                              'house-like'
            pakoloman
                              'one that is like a house, (i.e., a cave)'
            pakolomanumna 'there is not one like a house'
159)
                                                          'lier'
       a. ahpe
                            'untrue'
                                               ahpan
        b. kupime
                            'long'
                                              kupiman
                                                          'long one'
        d. kole
                            'many'
                                              kolan
                                                          'a lot of something'
                                                          'good one'
        e. ipoke nma
                            'very good'
                                              ipokan
```

-n(u) occurs with non-derived adverbs (160) and adverbs derived with the deverbal adverbializer -të (161) (cf. 7.2.1.2.1); -ato (for adverbs ending in /e/), -to, -no, -non(u) and -on(u) all occur with non-derived adverbs (162).

```
160) a. pëtukuu 'beautiful'
b. pëtukulun 'beautiful one' 51
c. pëtukulunu nma 'very beautiful one'
```

161) tamusimna uutënumna tamuhimna ulu-të-nu-mna old.man-without talk.to-GenModAvlz-PtNmlz-without 'There is no old man, no story teller' (Jolokob 395)

```
b. kokonato 'One from yesterday' 52
162)
       a. kokone 'yesterday'
        c. ëkëmnë 'behind'
                                   d. ëkëmnëto 'One behind' 53
                                                 'tall, high one' 54
                   'tall; high'
                                   f. kawëno
        e. kawë
        g. tuwalë
                                                 'One that knows' 55
                   'knowingly'
                                   h. tuwalon
                                                 'One from where?' 56
        i. të
                   'Where?'
                                   j. tënon
```

A few adverbials can take either of the two nominalizers with no apparent difference in meaning. In (163 b) and (163 d), -to alternates with -lo and -on(u) with -an(u) (this being the only example in the database in which -lo occurs). In (163 f-g), the choice of -ato over -an(u) triggers a slight difference in meaning:

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⁵¹ Other examples are *molo* 'there (medial)', *jakwe* 'sweet; salty', *wantë(lë)* 'later; afterwards', *malë* 'also; too', etc.

⁵² Other adverbs taking -ato are ihpe/ihme 'Existent/having'

⁵³ Other adverbs taking -to are: hemalë 'now; today' and pëkëna 'sole; alone.'

⁵⁴ The only other example is malalë 'same'.

⁵⁵ This is the only attested example.

⁵⁶ This is the only attested example.

163)	 a. hemalë b. ka hemalëlo ~ ka hamalëto c. talë d. talonu hnë ~ talanu hnë e. ihme f. ihmato g. ihman 	'today' 'the fish of 'here' 'one from l 'existent; h 'the owner 'one who h	here als aving' ; the lea		
	The four non-proximal adve	erbs (cf. sec	tions 7	7.1.2.1 ar	nd 7.1.2.2) take -lon(u):
164)	 a. hej 'around there somewher c. mëj 'around somewhere way e. sija 'motion in this direction g. mïja 'motion in that direction 	over there'	f. sija	elon lon	'one somewhere around there' 'one somewhere way over there' 'one moving this way' 'one moving that way also'
	Adverbs derived from noun	s with the d	iscont	inous mo	orpheme t-k(e) 'Having'
(and it	ts allomorphs t-le and t-je), ar	nd adverbs	derive	d from v	erbs with <i>t</i> -V-(he)
'Partic	ciple' take - <i>m(i)</i> ((165 a-c) an	d (166 a-b)	resne	ectively)	which has the allomornh -0
	•	,	-	• • •	-
when	the resulting noun is inflected	I for the col	lective	e (167 a-	c) and (168 a-b)."
165)	 a. tïkatalikemïmna tï-katali-ke-mï-mna havingAvlz-basket- HavingA' 'There is no one with a basket 			tëpelem t-ëpelï-le havingA 'fruit' 58	e-mï Avlz-fruit-havingAvlz-PtNmlz
	c. tïwatkiïjem tï-watkiïi-je-mï havingAvlz-tail-havingAvlz-F '(an animal) with a tail'	PtNmlz			
166)	a. tulakanumhem t-ulakanumï-he-mï Prtc-hunt/fish-Prtc-PtNmlz 'hunter'		b.	tëhem t-ë-he-mï Prtc-eat.n 'food'	i neat-Prtc-PtNmlz
167)	a. tīkatalikamo tī-katali-ke-Ø-amo havingAvlz-basket-havingAv 'ones with a basket'	lz-PtNmlz-Co		tëpelamo t-ëpelï-le- havingAv 'ones wi	-Ø-amo vlz-fruit-havingAvlz-PtNmlz-Coll
	c. tïwatkiïjamo tï-watkiïj-je-Ø-amo	nay t o ll			

havingAvlz-tail-havingAvlz-PtNmlz-Coll

'(animals) with tail'

The properties of the de-verbal adverbializer t-V-he are discussed fully in section 7.2.1.2.3.

**The properties of the de-verbal adverbializer t-V-he are discussed fully in section 7.2.1.2.3.

**The properties of the de-verbal adverbializer t-V-he are discussed fully in section 7.2.1.2.3. the meaning of the stem resulting from nominalization is 'fruit', but see the collective form in (167.b below).

```
168) a. tulakanumhamo b. tëhamo
t-ulakanumï-he-Ø-amo t-ë-he-Ø-amo
Prtc-hunt/fish-Prtc-PtNmlz-Coll
'hunters' (Pëne 100) 'all (the different types of) food'
(Walema2 009)
```

Some synchronically non-derived adverbs seem to have once been built with the various ambifixes (t-ke, t-le, and even *t-me (which does not exist the language today)) (169 a-j), and with -me 'Attributive' (169 k-n). In these cases, the original nominal root is not attested or no longer occurs as a free form (see section 4.4.2 below on nominal formatives). Such adverbs are nominalized similarly to their derived equivalents: -m(i) occurs with all except those ending in /e/, which, following the general pattern of the language, take -an(u).

```
169)
        a. talilime
                          'black'
                                            b. taliliman
                                                           'black one'
        c. tapulunme
                          'dark; cloudy'
                                            d. tapulunman'dark one'
        e. tijule
                          'greenish/ bluish' f. tijulem
                                                           'blue/green one'
        g. takpile
                          'reddish'
                                            h. takpilem
                                                           'red one'
        i. tikoloke
                          'whitish'
                                            j. tikolokem 'white one'
        k. maikame nma 'really bitter'
                                            l. maikaman 'bitter one'
        m. kupime
                          'long'
                                            n. kupiman
                                                           'long one'
```

4.2.3. The suffix -pin(i)/-min(i) 'Privative'. The privative suffix is an interesting morpheme. It derives nominal stems from adverbs, but also occurs on nominal and verbal stems. Of its two allomorphs, -min(i) is attested only with nominal stems ((174 a, c-e) and (175-176), below), while -pin(i) occurs with other forms. ⁵⁹ Examples in (170) show non-derived adverbs inflected with this nominalizer:

```
170)
        a. ipok
                                            b. ipokepînî
                                                                'one without goodness!'
                      'good'
        c. ëile
                                            d. ëilepïn
                                                                'one without anger'
                      'angry'
                                                                'one without bitterness'
                      'bitter'
                                            f. maikamepin
        e. maikam
                      'well'
        g. uwame
                                            h. uwamepin
                                                                'one constantly sick'
        i. ahpe
                      'untrue'
                                            j. ahpepïn
                                                                'a true one'
```

⁵⁹ The 'Privative' suffix is odd phonologically because it is a #CV suffix that blocks syllable reduction, a job carried out almost exclusively by CCV morphemes (section 2.3.1).

Adverbials derived from nouns with -me/-pe 'Attributive' and from verbs with $-t\ddot{e}$ 'Generic Modifier' also take $-p\ddot{v}n(\ddot{v})$. In both cases, the nominal base is prefixless: ⁶⁰

171) a. peptamepïn 'not biggish'
b. pïipepïn 'shameless'
c. ohanëmepïn 'needless'

d. sitpïlïmepïn 'without ugly/old things'

172) a. panakmatëpin b. ënetëpin panakma-të-pini ëne-të-pini

listen.to.O-GenModAvlz-Priv see.O-GenModAvlz-Priv 'one that does not listen' 'one that does not see'

In the cases where the privative suffix occurs with nouns, for possessible stems, the nominal stem presents a prefix with the same allomorphic pattern as the third person possessive prefix, i-, \mathcal{O} - (with additional front grade for nouns with ablaut), a-and e- (see section 4.1.1.1 on the allomorphy of possessive prefixes). This prefix cannot be replaced by SAP prefixes.

Another interesting aspect of nouns bearing the privative suffix is that two of the overt allormorphs of the possessive suffix, -n(u) and -t(i), which obligatory occur with possessessed nouns, do not occur. The allomorph, -(li), however, occurs (174d-e). This suffix is indicated in the examples (173 b, d, e) by long vowels.

173) a. i-pampila-n
b. i-ka-t
c. e-wasii
d. a-wëlïsii
e. Ø-euu
'his/her paper'
'his/her/its fat'
'his/her/its lower leg'
'his sister'
'his/her eye'

174)
a. i-pampila-mïn
b. i-ka-pïn
c. a-wëlïsi-lï-mïn
d. e-wasi-lï-mïn
'one without paper'
'one not fat one'
'one without a sister'
'one without lower leg'

e. Ø-eu-lu-min 'one without lowe'

Thus, it seems that in a similar fashion to some adverbializing ambifixes which have been derived historically from forms bearing third person prefixes *i*- or *t*- (see

⁶⁰ Though prefixed forms do occur with -me/-pe, there are no attested cases of such forms with -pin(i).

section 7.3), *t-N-ke* 'Having', *i-V-pophak* 'Satisfactory', among others, the third person on possessible nouns may be analized as the first part and *-min(i)* as the second part of a new ambifix performing the job of meaning changing morphology.

There are no attested cases of -pin(i)/-min(i) with adverbs derived by means of the discontinous morphemes t-k(e), t-le, t-je 'Having' or t-he 'Participle'. An explanation for this may be that the meaning of these forms is incompatible semantically with that of the privative. The meaning of the different ambifixes is either 'to have' a thing (in the case of those derived from nouns: tipatuke 'having a pan') or a property (in the case of those derived from verbs: tuputse 'having the property of being full').

However, the nominalized forms of the discontinuous adverbializers, referring now to an entity, can take -min(i).

175) 'one without that which can be eaten' a. t-ë-he-mï-mïn b. t-ëkalë-he-mï-mïn 'one without what was given' c. tï-milik-he-mï-mïn 'one whithout what was writen' d. tï-jasilam-he-mï-mïn 'one without a dry one' e. t-akpilam-he-mï-mïn 'one without a red one' 176) a. tï-pataa-ke-mï-mïn 'one without a leader' b. tï-mï-le-mï-mïn 'one without one that bleeds' c. tï-pï-je-mï-mïn 'one without one who has a wife'

We witness a similar scenario with verbal stems. For intransitive verbs staring with a consonant, we can clearly see a third person-like prefix (177c). Transitive stems take the third person $\ddot{e}n$ - (178), which occurs only in negated verbal forms (*cf.* forms with the negative suffix -la in section 7.2.1.3).

a. Ø-ïtë-pïn
b. Ø-eliku-pïn
c. i-kaimo-pïnï-npë
a. ën-ipohnëpï-pïn
b. ën-ulu-pïn
one not able to walk'
one that cannot be killed'
one without game.'
one that does not think it'
one that does not warn one'

In the case of verbs, the privative morpheme (ambifix?) has the function of deriving a nominal form.

Given the fact that nouns with the privative suffix cannot be possessed (the third person prefix-like segments cannot be replaced by *SAP* prefixes) and refer semantically to an attribute of a participant, it falls together with the class of the nominal modifiers (see section 4.1.1.3.1).

4.2.4. The prefix $\ddot{e}h(e)$ - 'Reciprocal; Reflexive'. This prefix occurs with all major speech classes. It is very frequent and productive with verbs and postpositions, less so with adverbs, and very infrequent and non-productive with nouns. It seems to occur only with nouns whose meaning is compatible with it. Examples occurring on nouns indicate reciprocity between two entities (i.e, that two entities have the same role vis-à-vis one another). It presents three phonologically conditioned allomorphs: $\ddot{e}h$ - preceding consonants and $\ddot{e}t$ - and $\ddot{e}he$ - before vowels.

179)

a. ĕh-epe-me
b. ĕhepït
c. ĕh-etato
d. ĕhe-jaton
e. ĕt-akon

'as each other's friend' (Eagle 034)
'each other's wives' (Eagle 008)
'side by side'
'each other's associate'
'each other's sibling'

In conclusion to this section, Figure 3 presents the relative order of all nominal affixes:

[PrsPref-Root(-Nmlz)-Pss-Dvl-Coll] Recpr-

Order of nominal affixes
Figure 3

4.3. Pronouns. Wayâna presents four classes of pronouns: speech act participant pronouns, anaphoric pronouns, demonstrative pronouns, and interrogative pronouns.

With the exception of -kom(o) 'collective', no morphology is found with this word class. Syntactically, pronouns present a distribution that is similar but asymmetric to that of lexical nouns. Pronouns referring to speech act participants and anaphoric pronouns cannot occur as the possessor of genitive constructions (with one exception discussed below), though personal pronouns may co-occur with a possessor for emphatic purposes.

Besides ordinary pronouns, other elements function pronominally in the language. These are tot(o), a collective particle, and ja 'Dative', a postposition (4.3.2.1).

4.3.1. Speech act participant pronouns. The speech act pronouns present first person, second person and dual inclusive $(1^{st}+2^{nd})$ and exclusive $(1^{st}+3^{rd})$ forms. The collective form for first person is derived historically on the dual inclusive pronoun, rather than on the first person pronoun. However, synchronically it refers to a collective group consisting minimally of $1^{st} + 2^{nd} + 3^{rd}$. The SAP pronouns are shown in Table 12.

Table 12
Speech act pronouns

	Non-collective	Collective
1 st	ïu	kunmëlamkom(o)
2 nd	ëmë(lë)	ëmëlamkom(o)

	Dual inclusive
1 st +2 nd	kunmë
	Exclusive
1 st +3 rd	emna

⁶¹ Kunmëlamkom 'we all' is clearly derived, at least historically, from a form with the dual pronoun kunmë: *kunmëlë-amo-komo. Emëlamkom 'you all' seems derived from *ëmëlë-amo-komo. Both forms present an idiosyncratic co-occurrence of two collective morphemes -am(o) and -kom(o) (cf. section 4.1.2 for a discussion of these forms)

```
180) rumna manu wai; 181) moloinë, ëmëë ken, kaikë; molojinë ëmëlë ken kaji-kë lPro-without Irrealis 1be then 2Pro Aditive say -ProxImp 'I wouldn't be here.' (Ëkëi 026) 'Then, you also say (it).' (Iguana 038)
```

The pronominal forms *kunmë* and *emna* include two persons of the paradigm. *kunmë* includes first and second person (thus, including the hearer) and *emna* includes first and third person (thus, excluding the hearer). *Kunmë* refers to only one other participant. *Emna*, on the other hand, may refer to one or to several third person participants.

```
182) tuhmoi
                       lëken emna
                                               mëkjalë
                                                                 ja
     t-upmo-he
                       lëken emna
                                         ja
                                               mëkjalë
                                                                 ja
     T-kill.O/hit.O-He only 1+3ExclPro Erg DemAnmMedColl Erg
     ïpëinomo
                    ja
     ï-pëj-Ø-nomo
                    ja
      1-child-Pss-Coll Erg
      'We, they, my children, killed it only (by hitting it).' (Alawaka 037)
```

- 183) malonme emna tumëkëmëi Elamakani malë malonme emna t-umëkï-ëmë-he elamakani malë then 1+3ExclPro T-come-Resumpt-He Elamakani Inclus.with 'Then, we came back, me with Elamakani.' (Fishing 007)
- 184) kunmë kuhepui kunmë kuh -epuhi -Ø 1+2Pro 1+2SO-get.fat-RecPst 'The two of us (you and I) got fat.'

Both, *emna* and *kunmë* can occur as the possessors in genitive constructions, in complementary distribution with personal prefixes (examples with *kunmë* as the possessor were all elicited):

- a. emna pakolon.
 emna pakolo-nu
 1+3ExclPro house-Pss
 our house
 - b. *emna ipakolon
 - c. kunmë umhet.
 kunmë umhe-tï
 1+2Pro hair-Pss
 'our hair'.

d. * kunmë kumhet

Morphosyntactically, *emna* behaves similarly to lexical nouns, triggering coreferential third person prefixes on Set I verbs (compare it in (187) with *kunmë* in (184). Unlike any other pronoun, *emna*'s co-occurrence with verbs is obligatory; otherwise third person is interpreted (188)). Like nouns, *emna* is in complementary distribution with *3A3O* pronominal prefixes in the object slot (186), a possibility that is not clear for *kunmë* given the inconsistent evaluations on the acceptance of such cases by native speakers.

- 186) Emna alëimëne tot.
 emna alë-jmë-ne toto
 1+3ExclPro take.O-Resumpt-DistPst 3Coll
 'They took us.' (Mopelu2 028)
- 187) mala emna numëkëmë lep ipok lëken mala emna n -umëkï-ëmë-Ø lep ipoke lëken so 1+3ExclPro 3SA-come-Resumpt-RecPst Advrs good only 'But, we arrived just well.' (Jolokod 598)
- 188) numëkëmë
 n-umëkï-ëmë-Ø
 3SA-come-Resumpt-RecPst
 '(He) arrived.' (*We arrived.)
- **4.3.2. Third person pronouns.** These are anaphoric pronouns and demonstrative pronouns. Demonstrative and interrogative pronouns can occupy the syntactic slot of the possessor; anaphoric pronouns cannot.
- **4.3.2.1.** *inëlë(lë)* and the pronoun-like elements tot(o) and eja. These elements occur in texts referring to the most important, most salient, best-defined, and best-known third person participant. Though coming from different sources (tot(o)) behaves morphosyntactically as a particle and eja as a postpositional phrase (see section 6.2.4)), both forms function as pronouns. In clauses with a Set I verb, both tot(o) and inële(le)

occur, their occurrence not being determined by their syntactic role, though *inëlë(lë)* does not seem to occur in the O slot. In clauses with a t-V-(h)e verb, these forms occur in specific syntactic positions. This is shown in Table 13.

Table 13

<u>Distribution of third person anaphoric 'pronouns' in texts</u>

	singular	collective
ABSOLUTIVE	inëlë(lë)	inamolo/tot(o)
<u>ERGATIVE</u>	eja	ejahe

In texts, all of the forms in Table 13 occur referring almost exclusively to human participants. However, occurrences of at least $in\ddot{e}l\ddot{e}(l\ddot{e})$ and eja referring to inanimate participants have also been attested (though no occurrences of inanimate $in\ddot{e}l\ddot{e}(l\ddot{e})$'s are found in texts; one occurrence of the inanimate eja is attested in a text). Most cases in the database are with the pronoun $in\ddot{e}l\ddot{e}(l\ddot{e})$. The example in (198) comes from an elicitation session with two consultants (the question asked in Portuguese is translated here into English), and the example in (190) comes from a conversation:

```
189) (linguist)
                             - What is the word for 'shelf'?
      (consultant A)
                             - 'shelf'?
      (linguist)
                             - Yes, 'shelf'.
      (consultant A)
                             – ëë, ahmit...Ïnëlëë?
                                                                 'Um, ahmit...Is that it?'
      (consultant B)
                             – Ïhï, inëlëë.
                                                                 'Yes, that is it'
190) - \sin 
                       ka
                                pa
                                       ësandajan?
                       ka
                                pa
                                       ë-sandaja-nu
         DemInanProx Quest Quest 2-sandals-Pss
         'Are these your sandals?'
      - inëlëë
         inëlëlë
         3Pro.Anph
```

As stated above, in texts, the only inanimate anaphoric pronoun used is *mëlë*, primarily a demonstrative pronoun (see below).

'It's it/them.'

⁶² This pronoun resembles Portuguese a gente 'us' which comes historically from a third person form ('the

It is interesting that *tot(o)* occurs more frequently to mark the collective absolutive than inamolo, which is the morphological collective equivalent of inëlë(lë). The low frequency of *inamolo* (and the high frequency of *tot(o)*) indicates that the former may be disappearing.

4.3.2.2. Demonstrative pronouns. All forms of demonstrative pronouns are distinguished by three main semantic parameters, deixis, animacy and collectivity. Table 14 below shows that the demonstrative pronouns form a system with three degrees of deixis (proximal, medial and distal; cf. section 7.1.2.1 for a description of the same three degrees of deixis for adverbs), two degrees of animacy (animate and inanimate), and two degrees of collectivity (collective and non-collective).⁶³ In the collective forms of pronouns, it is easy to identify the shape of some collective suffixes (-kom(o) for inanimate pronouns, and -am(o) or -jam(o) for animate pronouns). Note that some forms seem to present a reflex of, perhaps, an old morpheme *më.

Table 14 **Demonstrative Pronouns**

Animacy	Aniı	mate	Inanimate		
Deixis	singular	collective	singular	collective	
Proximal	më(s)i, mëhe(lë)	mëhe-am(o),	sin(ï)~mësin;	sin-kom(o)	
		mëha(lë)	helë	helë-kom(o)	
Medial	mëklë(lë)	mëkja(lë)	mëlë	mëlë-kom(o)	
Distal	mëk(ï)	mëkjam(o)	mïn(ï)	mïn(ï)-kom(o)	

Futher research is needed to clarify potential semantic distinctions between the different proximal forms of both the animate and the inanimate pronouns. It is possible,

people') and still triggers third person agreement on verbs (a gente fala 'we speak').

63 Visibility has been reported as a distinctive feature for pronouns at least for Tiriyó (Meira 1999:156) and Panare (Gildea 1989). Jackson (1972:65) indicates that some pronouns are used for 'distant or unseen' referents. Since no indication of 'visibility' as a distinctive feature exists for all demonstrative pronouns, 'visibility' is best analyzed here as consequence of the 'distal' deixis (referents may be so distant that may not be visible)

nevertheless, to detect a few nuances; *helë* is more like a presentative, as in *helë kan* womi pampilan 'this is the word of God', while *sin* emphasizes the location 'this one here' (as opposed to another). In addition, *helë* may be used to refer to an abstract entity (a story, a happening), while *sin(i)* seems only to refer to concrete objects spatially located. As for the animate forms, no distinctions have been yet detected.

Some referents seem to be construable as either animate or inanimate as indicated by the choice of the demonstrative pronouns. This is the case with stars, for example:⁶⁴

- 191) a. mëklëë puupuu 'That (is) the Turtle constellation' b. mëlë kaikui 'That (is) the Jaguar constellation'
- **4.3.2.3. Interrogative pronouns.** Only two interrogative pronouns are attested in Wayâna:

Table 15 Interrogative Pronouns

	animated	inanimate
non-collective	ënïk(ï)	ëtï
collective	ënikjam(o)	ëtikom(o)

Both the animate and the inanimate pronouns can be used to elicit the identity of a referent ('who'/'what') or to choose among a limited set ('which one')?

- 192) ëniki htak tiitëi hemele
 eniki tta-kë ti-w-itë-he hemele
 who among-into T-SA-go-He now
 'To which others did they go now?'
- 193) ëti alëja pa ëti alë-ja pa what take.O-NPst Quest 'Which one will (he) take?'

⁶⁴ A similar case is found in Tiriyó (Meira 1999:155).

Other pronoun-like morphemes are all nominalized adverbs or combination of adverbs with particles (*tënon(u)* 'which one?, *ta phele* 'how many', *tala aptau* 'when?' (see section 7.1.2).

- **4.4. Special cases.** This section presents some irregular nouns and some unusual cases that require a closer look. These are some roots with idiosyncratic allomorphs, nominal formatives, ambivalent roots, compound-like nouns, and sound symbolic words.
- **4.4.1. Idiosyncratic roots.** Some roots present some particular phonological alternations in their last vowels:

194) a. ï-mumkuu 'my son'
b. ï-mumku-lu psik 'my little son'
c. j-akon mumkë 'my sister's son'

195) a. wapot 'fire'
b. wapoto psik 'small fire'
c. ï-waptë-lï psik 'my small fire'

196) a. ëlinat 'plate'

b. ëlinatë-mna 'without a plate'
c. j-elinatuu 'my plate'
d. j-elinatu-lu-mna 'without my plate'

197) a. ëlimak
b. ëlimakë psik
c. j-elimakii 'baking plate'
d. j-elimaki-li psik
'baking plate'
'my baking plate'
'my small baking plate'

4.4.2. Nominal formatives. Some nominal roots only occur accompanied by nominal morphology or particles or another noun, but never in isolation. In some cases, they are easily parseable and have a very specific meaning; in other cases, they are not. Though it is not possible to access the history of each form, for the purposes of facilitating further research, a list of such forms is given below.

a) Forms occurring only with other nouns (198-203), or other morphemes (204-205), but never on their own (shown in bold):

```
198)
                                              b. kasili kononto 'juice of kasili potato '
                      'potato (sp.)'
        a. kasili
199)
        a. wapot
                      'fire'
                                              b. wapot ahkon 'firewood'
200)
                      'what?'
                                                                'who?'
        a. ëtï
                                              b. ënïk
        c. ëtï pena
                      'something'
                                              d. ënïk pena
                                                                'someone'
201)
        a. ëpë
                      'arm'
                                              b. ëpë tumu
                                                                'shoulder'
202)
        a. uwak
                      'waist'
                                              b. uwak silili
                                                                'intestines'
203)
                      'his hand'
                                                                'fingernails'
        a. amo
                                              b. omo hawin
204)
        a. kawemna 'without high, tall ones' b. kawemhak
                                                                'tall; high'
205)
        a. jumhak
                      'burning'
                                              b. jumna
                                                                'without burning'
```

b) Forms occurring with what seems to once have been the discontinuous morphemes: i- $phak(\ddot{e})/i$ - $mhak(\ddot{e})$, t-ke, *t-m(e) (?):

```
a. asiphak 'hot'; b. asimhak 'fast; c. ïkïphak 'hard'; d. ëmëmhak 'greedy'; e. anumhak 'strong'; f. akalephak 'far'; g. elamhak 'afraid'.
```

- a. talilime 'black'; b. tïjule 'green/blue'; c. takpile 'red'; d. tïkoloke 'white'; e. tameheke 'careful'; f. tïpëke 'smelly'; g. tïnme 'quiet/still'; h. tapulunme 'dark'.
- d) Nouns ending in what seems to be the devaluative suffix. There seems to exist a continuum of integration of the devaluative going from nouns for which there is a free form and where the devaluative is clearly added (*pakolo-tpë* 'old, abandoned house'), to forms in which the remnants of the devaluative can still be parsed due to morphemic alternations but with no difference in meaning between the allomorphs, such as

```
208) a. a-wotpii 'his aunt' b. to-wo-ke la 'without having an aunt' 209) a. uputpë 'head' b. tupkai 'to behead'
```

210) a. pitpë 'skin' b. tïpikai 'to skin'

and forms for which the 'devaluative' cannot be synchronically parsed, such as

- a. tutpë 'vase'; b. pïtpë 'tapioca'; c. pëkënatpë 'one'; d. ikutpë 'lake'; e. halihalilapitpë 'bird.sp'; f. junutpë 'biggish'; g. kuliputpë 'turtle.sp'; h. makalaputpë 'bird.sp'; i. moholotpë 'potato.sp,monkey.sp'; j. watasitpë 'thin'; k. ukupitpë 'caterpillar.sp'; l. kaikusinpë 'warriors'; m. munpë 'rat'; n. akwalïtpë 'ghost'.
- c) Forms that have several allomorphs, each apparently having more than one morpheme, but with no difference in meaning:

```
212) a. pëitopit; b. peito 'children'
c. ipëinom 'my children'
d. (*pëi)
```

4.4.3. Compound-like nouns. Some genitive phrases resemble compounds in that they may refer to an entity which is different from the strict sum of its parts. However, in all cases, the meanings of such forms are still somewhat apparent from their parts. The few existing examples are shown below: (see the cases of the relational *j, which also comes from possession (4.1.1.1.1):

```
213) a. ituhale 'leaf' (itu 'jungle' + ale 'leaf' = 'jungle' leaf');
b. ituwakii 'Indian' (itu 'jungle' + akii 'breed' = 'jungle's breed')
c. maipuliawëm 'wasp (sp.)' (maipuli 'tapir' + awëm 'penis' = 'tapir's penis'
d. maipuliwet 'wasp (sp.)' (maipuli 'tapir' + wet 'feces' = 'tapir's feces')
```

In some cases, the composing parts have become obscure due to syllable reduction:

```
214) a. apletīï 'its dorsal fin' (from apëë 'his arm'+ letī 'tail')
215) b. imaletīï 'its lower fin' (from ma '?' + letī 'tail')
216) c. juhmīt 'my bandana' (the cover of my head?) (from upu 'head' + mītī 'cover')
```

4.4.4. Sound symbolic words. These roots are difficult to classify because they present very limited syntactic distribution, generally occurring with no additional morphology either in isolation or preceding the verbs ka 'say' or $\ddot{e}t\ddot{\imath}(l\ddot{\imath})$ 'become'. Semantically, they present a rich range of lexical meanings that go from onomatopoeic imitation to arbitrary reference to non-auditory events. Some examples are presented in Figure 4. (Examples have been arranged somewhat intuitively for illustrative purposes).

	Onomatopoei		Arbitrary >			
tintin atsu houhouhou iii kuhku	'metal banging' 'sneeze' 'bark' 'monkey cry' 'chant of the kuhku bird'	tuk helep som tuhtu hee	'pull' 'turn head' 'stand up' 'walk' 'noise of something moving in the bushes'	tëk emukle hemik alok hiwïlïn	'think' 'stop working' 'disappear' 'pierce' 'kill'	
kutonkkutonk lonklonklon pisokpisok pilihpulip suksuk toktok toponk	'drink water' 'play flute' 'to nurse' 'to throb' 'to suck' 'pulsate; shake' 'drop in water'	henuk sak hamham hikok itu kalakakak kaweh koken kïlïm	'jump' 'cut' 'stomach-ache' 'choke' 'spit' 'snap' 'paddle' 'jaguar's roar' 'heart beat' 'grit teeth'	kama kolo awën hawele kui kïlim kïlïk kilititik	'to end' 'sit down' 'to decide' 'to dawn' 'to scream' 'be inert' 'to move' 'to tie' 'to pierce'	

Sound Symbolic words Figure 4

Some grammatical properties indicate that sound symbolic words may be classifiable as nouns, though they do not take any nominal inflectional morphology and cannot occur in the slots in which core participants are found. Like nouns, however, they can occur with the de-nominal verbalizers -ka and -ma (cf. section 5.4.1.2), with the adverbializer -me, and there are even examples with postpositions.⁶⁵

- 217) malonme tokpilopkaimëi
 malonme t-okpilop-ka-jmë-he
 then T-untie.snd-PrivVrblz-Resumpt-He
 'Then, (he) untied (it).' (Jolokoa 216)
- 218) emna kunepolepkaimë
 emna kun-e-polep-ka-jmë
 1+3ExclPro 3DistPst-Det-arrive.snd-PrivVrblz-Resumpt
 'We arrived.' (Pëne 117)
- a. kolome man
 b. tuhtume wïtëjai
 c. walawalame la eikë
 d. kulume neha malija

 'He is seated.'

 'I will go running.'

 'Do not salute anybody.'

 'knife was in a hole' (kulu 'in a hole')

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⁶⁵ This is not true for all sound symbolic words. Many constructed examples were rejected by speakers.

```
220) pitam tïkai
pitam tï-ka-he
drip T-say-He
'It dripped.'
```

221) wepïma pakolo pitam nau.
w-epï-ma-Ø pakolo pitam na-wë
1A3O-tree-GiveVrblz-RecPst house drip in.boundless.loc-into
'I planted on by the side of the house' (i.e., where it drips from the rain).

Sound symbolic words do not take oblique markers when occurring with ka 'say; do'. That could be seen as an indication that they are not nouns (which must take oblique markers if not occurring as core participants), but adverbial-like elements or even particles. However, this possibility is discarded here due to the fact that adverbials take derivational morphology (sound symbolic words do not) and that particles cannot occur in isolation (while sound symbolic words frequently do so). Besides, in looking at nouns occurring as the semantic 'object' of ka, one notices that they occur unmarked:

222) lome kalipono mënke coberta
lome kalipono mën -ka -ja coberta
but non.Wayâna 3SACertnty-say-NPst blanket
'But the non-Wayâna (Brazilians) say coberta.' (Jolokoa 009)

Furthermore, some nouns encoding animal names have a reduplicated form and a particular phonological pattern that suggest an onomatopoeic origin (*cf.* example (236) in section 2.6).⁶⁶

Thus, though not prototypical members, sound symbolic words are considered as belonging to the noun class. For the few attested cases, all morphology taken by a sound symbolic form is nominal.

-

⁶⁶ This is pattern has been reported for other languages. In Miwok, for instance, animals are named after sound symbolic words which are descriptive of the sound the animals make (Wash 1999). In Wayâna, besides animal names, the noun [∫u∫u]~ [huhu] 'nurse, milk, breast' also seems to be onomatopoeic in origin.

5. VERBS.

Verbs are easily distinguished from members of other speech classes. They take unique personal prefixes for intransitive and transtive Verbs, TAM morphology, valence increasing, valence decreasing morphology, and they present negated forms. Some of these features are seen in these examples:

- 1) Wokopojai w-oko-po-ja-he 1A3O-cut.O-Caus-NPst-SapAff 'I will make (him/her) cut it.'
- 2) *Ëwinik*. ëw-iniki-Ø 2S₀-sleep-RecPst 'You slept.'

Figure 1 shows the order of the affixes:

Person	Them.	Det	ROOT	Verbal-	Transitiv-	Caus.	Tense	Aspect	SAP
prefx.	prefx.			izers	izers			_	Aff.

Figure 1
Order of Affixes on verbs

The root may be a monomorphemic verb or a noun plus a verbalizer. 'Them' stands for a thematic prefix, 'Det.' stands for a detransitivizing prefix, and 'SAP Aff.' is a morpheme marking that the subject is a speech-act participant in an affirmative sentence. With so much grammatical information within the verbal word, verbs readily occur alone as full sentences in the language.

Semantically, verbs express events, processes, states, *etc.* One interesting aspect of Wayâna grammar is that some forms presenting such properties are not verbs. This is the case for sound symbolic words, grammatically nouns, that can express concepts that one would usually express in the verbal category: *tëk* 'think,' *tuhtu* 'walk,' *kïlititik* 'tie

up,' hemik 'disappear,' etc. (cf. 4.4.4). Similarly, postpositions may carry meanings usually associated with verbs, such as 'know,' 'fear,' 'desire,' 'be angry at,' etc. (cf. 6.2.3).

- **5.1. Verbal allomorphy.** Most of the verb classes proposed by Jackson (1972:49) for Wayâna are accounted for by the process of syllable reduction (*cf.* described in detail in section 2.3.1). In general, verb stems present long and short allomorphs, depending on the nature of their last segment and whether or not they are followed by particular morphemes:
- a) Verb stems ending with the high vowels /i/ and /u/ reduce when followed by CV suffixes or by - \emptyset 'Recent past' (Examples bear w- '1A3O,' m- '2A3O,' and j- '1S $_{0}$ ').

```
3) a. /ïnïkï/ 'sleep' → jïnïkjai 'I am going to sleep'
b. /enepï/ 'bring O' → wenepjai 'I am going to bring it'
c. /elepï/ 'make O afraid' → jelep 'He/she/it just made me afraid.'
```

- 4) a. /ëtuku/ 'have a meal' → wëtukjai 'I am going to have a meal'
 b. /ukuku/ 'try O' → mukukjai 'You are going to try it'
 c. /ëku/ 'eat bread' → wëkjai 'I am going to eat bread'
- b) Verb stems ending with /li/ or /lu/ reduce leaving compensatory lengthening on the preceding vowel:

```
5) a. /ilī/ 'make O' → wīijajai 'I am making it.'
b. /ulu/ 'talk to' → (w)uujai 'I am talking to O'
c. /ikilī/ 'take O from' → wikīijai 'I am taking O from'
```

6) Some two-syllable stems ending with /ī/ and /u/ do not reduce (/w/ deletes before /u/, *cf.* section 2.2.3):

```
→ welïjai
a) elï
        'drink O'
                                            'I am drinking it'
                             → welï
                                            'I drank it'
b) upï
        'bathe O'
                             → (w)upijai 'I will bathe him/her'
                             → (w)upï
                                             'I bathed him/her'
                             → wïkïjai
                                            'I will grate it.'
c) ïkï
       'grate O'
                             → wïkï
                                            'I grated it'
```

The stem $\ddot{e}ku$ 'eat bread' reduces before CV suffixes, but not in the recent past (compare (4c) with (7) below):

- 7) wëku 'I just ate bread'
- c) Stems having /h/ as their last consonant undergo /h/ deletion before CV suffixes and -Ø 'Recent past,' but not with /jV/ suffixes (cf. section 2.3.1.3.2 for a complete discussion):

Verb stems ending with the other vowels, /i/, /e/, /e/, /e/, /e/, /o/, and /a/, do not reduce, but the suffixes may reduce (*cf.* section 2.3.1.1.1.1 for the reducing suffixes).

- **5.1.1. Ablaut.** Some verb stems alternate their first vowel, /e/~/e/, /a/~/o/, or /a/~/e/, depending on the morphological context. The first vowel of each pair is labeled here as front grade and the second as back grade. The front grade vowel occurs in the majority of contexts, and the back grade vowel occurs only in the following contexts (cf. section 2.3.8 for a complete discussion):
 - a) In stems inflected by /t/- and /k/- prefixes:

- b) In stems inflected with the adverbializing morphemes -të and -tse (cf.
- 7.2.1.2.1). (There are no attested cases of stems with $\frac{\dot{e}}{\sim}/a$ alternation and -tse):

```
10) a. enete 'able to see.'
b. enetse 'specialist in seeing.'
11) epeite 'able to grab.'
12) a. onopte 'able to paint.'
b. onotse 'specialist in painting.'
```

Only transitive and intransitive $S_{\rm O}$ stems undergo this process. No examples of ablaut with $S_{\rm A}$ intransitive verbs are attested.

5.1.2. Minor patterns. The are some patterns affecting only some specific verb stems. Verb stems ending in /a/ present an idiosyncratic allomorph with -ja, the non-past suffix: Va+ja \rightarrow [e] (Examples with oko 'cut' are offered for comparison; cf. also Derbyshire 1985 for a parallel pattern in Hixkariana):

```
13)
        a. wïka
                       'I spoke'
                       'I am speaking.'
        b. wïkei
        c. (*wïkajai)
14)
        wipanakma
                       'I heard it.'
        wipanakmei
                       'I am hearing it.'
        (*wipanakmajai)
15)
        a. woko
                       'I cut it.'
        b. wokojai
                       'I am cutting it.'
```

Some verbal stems present more than one phonemic allomorph. Examples include the verbal stem $\ddot{e}/ewakam(\ddot{i})\sim wakam(\ddot{i})$, with the first allomorph occurring depending on the morphological context ($\ddot{i}wakam$ 'I sat down,' $\ddot{e}wakamk\ddot{e}$ 'Sit down!,' but newakam 'He sat down,' $ewakam\ddot{i}la$ 'not to sit down,' $t\ddot{e}wakamhe$ 'sit,' with /e/ being historically perhaps the third person genitive prefix (cf. 4.1.1.1 for the genitive prefixes and 7.2.1.3 for negative adverbialized forms retaining the third person prefix e-) and the verbal stem $lasilam(\ddot{i})\sim jasilam(\ddot{i})$ 'S dry' where /1/ and /j/ occur in free variation.

The S_A intransitive verbs ka(i) 'say; do,' $(u)m\ddot{e}k(i)$ 'come', and $(i)t\ddot{e}k(i)$ 'go' present a more complex pattern with regard to their potential first vowel, which occurs depending on the morphological context $(cf. \text{ for S}_A)$. In the case of personal prefixes, a first vowel occurs with w- '1st,' m- '2nd,' and n- '3rd,' but not with $m\ddot{e}n$ - '3rd certainty,' kun- '3rd Distant Past,' and with the 1+2nd prefixes kut- and kup- (examples are inflected with $-\mathcal{O}$ 'Recent past' or -ja 'Non-past' (a+ja \rightarrow e, as in $ka\sim ke$ in the examples below) or with the allomorph of the 1+2nd prefix kut- $\rightarrow kun$ /_nasal (cf. 2.3.2.2 for nasal assimilation); $/w/\rightarrow \mathcal{O}$ //u/, as in $um\ddot{e}k$ below) 1:

```
m- '2<sup>nd</sup>'
                                               n- '3<sup>rd</sup>'
                                                                               kun- '3<sup>rd</sup>DP'
                                                                                                 1+2<sup>nd</sup>
                                                              mën- '3<sup>rd</sup>C'
16)
         a. umëk
                          b. mumëk
                                            c. numëk
                                                          d. mënmëk
                                                                           e. kunmëk
                                                          d. mëntëja
         a. wïtëm
                          b. mïtëm
                                            c. nïtëm
                                                                           e. kuptëm
                                                                                             f. kuntëm
                          b. mïka
                                            c. nïka
                                                          d. mënke
                                                                           e. kutke
                                                                                             f. kunka
         a. wika
```

In other environments, the three verb stems present distinct patterns: negated verb forms (17), t-V-(h)e forms (18), Imperative forms (19), and nominalizations (with the circumstantial nominalizer -top(o) in the examples in (21) below, but the same pattern is attested for cases with $-\emptyset$ 'Specific event nominalizer' and cases with the postpositionalizing suffix -tihwe 'Posteriority' (6.3). For the purpose of motion suffix, data are provided only for ka(i) (20). Vowel lengthening occurs for ka(i) and (i)te(mi) in the t-V-(h)e forms and for the prefixes in nominalizations, the third person i- in the examples below. (/meki/ \rightarrow [meh] is a result of syllable reduction and consonant dissimilation: /kk/ \rightarrow [hk] (2.3.2.3))

17) a. umëkila b. ïtëla c. kala 18) a. tumëkhe b. tiitëi c. ti**ïka**i 19) a. mëhkë b. ïtëk c. kaikë 20) kahe 21) a. imëktop b. ii**të**top c. iikatop

¹ Wayâna presents two sets of intransitive verbs called the SO verbs and the SA verbs. These classes are discussed in the next section.

-

Teasing apart the forms of the roots and the forms of the prefixes is not a simple task. In the forms of $(u)m\ddot{e}k(i)$ 'come,' it is clear that for all forms with a prefix where the stem starts with a /u/, the prefixes have a consonantal shape (w-,m-,n-,t-,etc.) since prefixes never occur anywhere else with /u/ as a second vowel. Also, in the prefixless forms of $(u)m\ddot{e}k(i)$, as in the imperative and in the negative forms, /u/ occurs as part of the root. For $(i)t\ddot{e}(mi)$ 'go' and ka(i) 'say; do,' the question is more complex. Prefixes with /i/ as a second vowel exist for roots starting with a consonant (this being the case for the t-V-(h)e forms, $t\ddot{i}$ -pankma-t 'heard'; cf also 4.1.1.1, 7.2.1.1.2.1). Thus, the important question here is whether these roots start with a vowel or a consonant. Given the scenario above, this is not a clear matter, but since the prefixless forms, the imperative and negative forms, show a distinction between $(i)t\ddot{e}(mi)$ and ka(i), the first starting with /i/ and the second with a consonant, we consider that $(i)t\ddot{e}(mi)$ fits the general pattern and takes the same set of prefixes as $(u)m\ddot{e}k(i)$, but ka(i) takes the idiosyncratic prefixes $w\ddot{i}$ -, $m\ddot{i}$ -, and $n\ddot{i}$ -.

A possibility to be investigated is whether historically ka(i) started with /i/, which was deleted except after these prefixes. It is interesting that this stem takes the $1+2^{nd}$ person prefix kut-, which occurs elsewhere only with stems starting with the high vowels /i/ or /u/ or with /a/ (see section 5.3.1.1).

The vowel lengthening in the t-V-(h)e forms and in nominalizations may be a historical residue of $\frac{w}{cf}$ section 5.1.4 below).

5.1.3. The thematic prefixes i- and t(i)-. Verbs stems present two recurrent morphemes that are devoid of meaning, the thematic prefixes i-, for all verbs starting with

consonants, and t(i)-, for only a few transitive verb forms. Each of these prefixes is restricted to some specific morphosyntactic contexts.

We start by presenting transitive verbal forms that do not present the thematic prefixes: those are forms with the suffix $-t\ddot{e}$ 'Generic modifying adverbializer' and forms in phrases with a pre-verbal noun, e.g. 3A3O S1 verb forms with a pre-verbal O, purpose of motion forms with a nominal O, and verbal nominalization with a nominal possessor, exemplified here with $-\mathcal{O}$ 'Specific event nominalizer.' The verb *panakma* 'hear O; listen to O' represents the most general class. The stems je 'cook O,' kap(i) 'craft O,' and iki 'grate O' all present distinct allomorphic patterns, discussed below.

22)	b. c.	panakmatë ïkïtë jetë kaptë	'able to hear' 'able to grate' 'able to cook' 'able to weave'
23)	b. c.	kulasi panakma ulu ïkï tëhem je pïlasi kap	'He/she/it heard the rooster' 'She grated manioc' 'She cooked food' 'He wove a basket'
24)	b. c.	wïtëm elemitop panakmai wïtëm ulu ïkï he wïtëm tëhem je i wïtëm pïlasi kap he	'I went to hear the singing' 'I went to grate manioc' 'I went to cook food' 'I went to weave a basket'
25)	b. c.	lalio panakma lï htau ulu ïkï lï htau tëhem je lï htau pïlasi kapï lï htau	'in the listening of the radio' 'in the grating of the manioc' 'in the cooking of the food' 'in the weaving of the basket'
26)	b. c.	tïpanakmai tïkihe tïjei tïkaphe	'heard' 'grated' 'cooked' 'woven'

² This also applies to the suffix -tse 'Specific modifying adverbializer' (cf. 7.2.1.2.1. for -të and -tse), to the nominalizers -top(o), -tpon(u), -ne 'Agent nominalizer' but not to n- 'Object nominalizer' (see below and cf. 4.2.2.1 for deverbal nominalizers), to the postpositionalizer -tihwë, to the t-V-(h)e forms, and to the detransitivized forms, perhaps for semantic reasons, it is not attested for iki 'grate O,' je 'cook O' and kap(i) 'weave O'.

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³ Like iki 'grate O' are i(li) 'make O' and iki(li) 'take O from'. The verbs kap(i) 'craft O' and je 'cook O' are the only attested members of their class.

27) epanakma

For stems starting in consonants, like *panakma* 'hear O; listen to O' and je 'cook O,' an extra morpheme, i-, occurs when the stems are inflected with direct prefixes w'1A30,' m- '2A3O,' and (ku)h- '1+2A30,' the third person prefixes n-, $m\bar{e}n$ -, and kun-, with third person negative prefix $\bar{e}n$ -, or the object nominalizer n-. This is not the case for $ik\bar{i}$ 'grate O' or any root starting with a vowel. The verb $kap(\bar{i})$ 'weave O' is an interesting case. It seems to start with a consonant, as it patterns with consonants in the examples above and as it presents the thematic i- with the third person negative prefix $\bar{e}n$ -(30). However, assuming that it starts with a consonant, we must say that $kap(\bar{i})$ takes the idiosyncratic prefixes $w\bar{i}$ -, $m\bar{i}$ -, and $n\bar{i}$ - (28p, q, and s), which do not occur with any other transitive stem in the language. We assume this to be a historical accident, as $kap(\bar{i})$ seems to result from ka 'do' plus the verbalizer $-p\bar{i}$ (cf section 5.4.1.2), and as such it presents some of the same idiosyncrasies found with ka 'say; do' regarding the personal prefixes.

'hear oneself'

```
n- '3<sup>rd</sup>, m\ddot{e}n- '3<sup>rd</sup> C.'
           w- '1A30' m- '2A3O'
                                            (ku)h-/kut-
                                            '1+2A30'
28)
        a. w-i-panakma b. m-i-panakma c. s-i-panakma d. n-i-panakma e. mën-i-panakma.
        f. w-i-je
                        g. m-i-je
                                                                         j. mën-i-je
                                         h. s-i-je.
                                                         i. n-i-je
        k. w-ïkï
                        l. m-ïkï
                                         m. kut-ïkï
                                                         n. n-ïkï
                                                                         o. mën-ïkï
                                        r. kut-kap
        p. wï-kap
                        q. mï-kap
                                                         s. nï-kap
                                                                         t. mën-kap
29)
        a. ën-i-panakma-la 'not hearing O'
       b. ën-i-je-la
                             'not cooking O'
        c. ën-ïkï-la
                             'not grating O'
        d. ën-i-kapï-la
                             'not weaving O'
30)
                            'what you listen to'
        a. ë-n-i-panakmaa
        b. ë-n-i-jee
                             'what you cook'
        c. ë-n-ïkï
                             'what you grate'
        d. ?ë-n-i-kap
                            (what you weave)
```

⁴ Presumably kap(i) 'weave O' also presents the thematic vowel with the object nominalizer, as we speculate in example (30d), but such an example is not attested.

Imperative forms reveal another thematic prefix. With or without a pre-verbal O, the verbs je, iki and kap(i) occur with an extra prefix, t(i)-, which is not in paradigmatic or contrastive distribution with any other prefix (compare, however, the imperative examples here with those in section 5.3.5.2 with the purpose of motion morpheme, -(h)e, where t(i)- is a third person prefix existing only for verbs of this class in alternation with a preverbal O. The verb *panakma* occurs as usual with the thematic prefix i-.

31) a. i-panakmak 'able to hear' 'Listen to your mother!' b. **ëje i-**panakmak c. t-ïkïkë 'able to grate' d. ulu t-ïkïkë 'Grate manioc!' e. tï-jek 'able to cook' f. akuli tï-jek 'Cook agouti!' g. tï-kapkë 'able to weave' h. pamït tï-kapkë 'Weave a pamit basket!'

Other stems presenting the thematic t(i)- are $(u)w\ddot{e}$ 'pierce; kill,' $\ddot{i}(l\ddot{i})$ 'make,' $(\ddot{i})k\ddot{i}(l\ddot{i})$ 'take from,' $\ddot{e}k(u)$ 'eat bread; have sex,' and \ddot{e} 'eat meat.'

The occurrences of thematic elements in intransitive verbs are clear. Only ioccurs for intransitive stems starting with consonants, and only with third person
prefixes. Some of the prefixes presented above occur only with transitive stems, e.g., the
third person negative $\ddot{e}n$ - and the O nominalizer n-. Intransitive stems starting with
vowels and S_A stems do not present a thematic prefix.

32) a. n-i-lëmëp 'He/she/it died'
b. mën-i-lëmëp-ja 'He/she/it is going to die'
c. kun-i-lëmëp 'He/she/it died a long time ago'

No thematic element occurs with the following forms: t-V-(h)e forms, imperative forms (since S_O verbs take 2^{nd} person prefixes), and nominalizations (and forms with postpositionalizing suffix *-tihwë*) where third person prefixes alternate with a nominal possessor (a parallel pattern to that seen with the transitive stems discussed above):

a. tï-lëmëp-he
b. i-lasilam-top
c. upo lasilam-top
d. ë-sikta-k

'He/she/it died'
to dry it'
to dry clothing'

Summarizing the occurrences of the thematic prefixes: with the exclusion of the idiosyncratic kap(i) 'weave O,' all verbal stems starting with a consonant take the thematic i- with direct or third person prefixes, i.e., whenever a third person is involved (except for the cases of pre-verbal O's). This is also the case with the third person negative prefix en- and the object nominalizer n-, both implying a third person participant. The thematic prefix t(i)-, on the other hand, is less productive, occurring only with a few transitive stems in the imperative forms. The possibility of this prefix being historically related to the third person reflexive prefix readily comes to mind.

5.1.4. The S_A prefix w-. This thematic prefix occurs almost exclusively with intransitive S_A stems (synchronically derived or not), in two contexts, in nominalizations (-top(o) in ex. 34 g and - \emptyset in ex. 35) and in t-V-(h)e forms, as in the examples below:

34) m-ëmëm 'You entered' 35) w-ëtïlï 'I became' të-w-ëmëm-he 'entered' të-w-ëtïi-he 'become' "-w-ëmëm-top 'to my entering' "-w-ëtïlï-lï htau 'in my becoming'

Exceptions to this pattern exist. Three S_A stems do not present w-: $(u)m\ddot{e}k(\ddot{i})$ 'come,' $(\ddot{i})t\ddot{e}(m\ddot{i})$ 'go,' and ka 'say; do' (cf. section 5.1.2 for a discussion of the allomorphic patterns of these stems). Two S_O stems (cf. section 5.2 for S_O verbs) occur with w-, $\ddot{i}pt\ddot{e}$ 'go down' and ekakta 'come out; be born'. (examples are presented with $-\mathcal{O}$ 'Recent past,' -ja 'Non-past,' and $-k(\ddot{e})$ 'Proximal imperative'):

36) j-ïptëjai 'I will go down' ï-w-ïptëë 'My going down.'

ëw-ïptëjai 'You will go down'

n-ïptëja 'He will go down'

ëw-ïptë-k 'Get down!'

tï-w-ïptëi 'Gone down.'

37) ekakta 'I came out' **ëw**-akakta-k 'Come out!' **ëw**-ekakta 'You came out' të-**w**-ekakta-i 'Come out' n-ekakta 'He/she/it came out' 'i-**w**-ekakta-top 'to my coming out'

One verb occurring with only third person prefixes, etapam(i) 'sing,' which can only take an S referring to a bird, takes w- in its t-V-(h)e form but, due to the lack of personal prefixes encoding speech act participants (henceforth SAP), cannot be classified as either S_A or S_O . Unfortunately, no nominalized forms are attested for this stem.

38) n-etapam 'It sang' të-w-etapamï-he 'sang'

Since w- occurs almost exclusively and with the great majority of S_A verbs, we label it as ' S_A ,' a thematic prefix characteristic of this verb class.

- **5.2. Morphosyntactic verb classes.** The following morphosyntactic tests distinguish the two main verb classes of transitive and intransitive verbs and a few ambiguous stems:
- Transitive verb stems. The transitive verbs present two nuclear participants that are marked by prefixes indicating both the A and the O, which can be collectivized if they are SAP participants (see the specifics in section 5.3.1.1 and section 5.3.1.2). They take the specific nominalizers -ne 'Agent nominalizer,' n- 'Object nominalizer,' and -tpon(u) 'Past agent nominalizer.' The A of the t-V-(h)e verbs is marked by the morpheme ja 'Ergative.' Examples with verb enep(i) 'bring O' are presented below:
- 39) a. Menep. b. Meneptëu?
 m-enepï-Ø m-enepï-Ø-tëw
 2A3O-bring.O-RecPst 2A3O-bring.O-RecPst-SapColl
 'You brought it.' 'You all brought it?'
 - c. *Ëwenemne*. d. *Ënenepiï*.

 ëw-enepi-**ne** ë-**n**-enepi-li

 2-bring.O-AgtNmlz 2-ObjNmlz-bring.O-Pss

 'The one who brought you' 'The thing that you brought'

- e. Enepïtpon.
 O-enepï-tponu-Ø
 3-bring.O-PstAgtNmlz-Pss
 'The one who formerly brought it'

 f. Ulu tënephe Kilili ja.
 ulu t-ënepï-he kilili ja
 manioc T-bring.O-he Kilili Erg
 'Kilili brought manioc.'
- ii) Intransitive verb stems. The intransitive verbs present only one nuclear participant, marked on the verb by pronominal prefixes. The verb stems are sub-divided into two other classes, each taking a particular set of pronominal prefixes indicating the S: intransitive S_A verbs (roughly, those in which the personal prefixes resemble those marking the A on transitive verbs) and intransitive S_O verbs (those in which the personal prefixes resemble the marking of the O on transitive verbs (*cf.* Table 1, section 5.3.1.1). For both sets, the personal prefixes can be collectivized if encoding a SAP (40 and 41a). Besides taking different sets of personal prefixes, S_A and S_O verbs take different thematic elements: *w* and *i*-, respectively (cf section 5.1.4 and section 5.1.3). Finally, S_O verbs undergo the following morphological processes that do not apply to S_A verbs: transitivizing morphology (*cf.* section 5.4.2.2) and 2^{nd} person prefixes on imperative forms (examples 41b) and (41c), respectively).
- 40) a. mëmëmtëu.
 m-ëmëmï-Ø-tëw
 2S_A-enter-RecPst-SapColl
 'You all entered.'
- 41) a. *Ëwelemitëu*. **ëw**-ëlemi-Ø-**tëw** 2S_O-sing-RecPst-SapColl 'You all sang.'
 - b. Jelemika. j-elemi-ka-Ø 3A1O-sing-Transvzr-RecPst 'He prayed over me'
 - c. *Ewinihkë*! **ëw**-iniki-kë

 2S₀-sleep-ProxImp

 'Sleep!'

Monomorphemic S_O verbs are by far more numerous than monomorphemic S_A verbs, as most members of the S_A verb class result from the synchronic process of detransitivization (ene 'see O,' ëh-ene 'see oneself' (cf.)). All the attested monomorphemic S_A verbs may turn out to be derived historically from lost transitive verbs. For nearly all cases, the stem-initial segments look suspiciously similar to the allomorphs of the detransitivizing prefix (e-, ët-, ëh- (cf. section 5.4.2.1): esi/eha/ehe 'be' (cf.), emek(u) 'come back,' epe 'flee,' ëhum 'warm oneself,' ëtaj(u) 'level down,' ëtuk(u) 'have a meal,' ëtasika 'curse,' and ëtëmëm(i)~ëmëm(i) 'enter.' For two S_A stems, the source co-exists, but the detransitivized form has enough change of meaning to have an entry of its own: ëti(li) 'become' and ëtuhmo 'fall,' from i(li) 'make O' and uhmo 'beat O; kill O.' Three S_A verbs are the best candidates for the oldest forms of this class, distinguishing themselves from the other members for not taking the S_A marked w- (cf. 5.1.4): (u) mëk(i) 'come,' (i) të(mi) 'go,' and ka(i) 'say; do'.

- Two verb stems are intransitive by some criteria and transitive by others. The verb ka(i) 'say/do' is the only intransitive verb to take the causative -po and to have unmarked nominals occurring as the semantic O (examples (42)-(43)). The verb $\ddot{e}het\ddot{i}$ 'to dream' can occur with a transitivizer only if it loses the first syllable / $\ddot{e}h$ /, but $\ddot{e}t\ddot{i}$ cannot occur itself as a transitive stem (examples (44)-(45)).
- Wikapo eja. wï-ka-po-Ø e-ja 1S_A-say-RecPst 3-Causee 'I made him speak.'
- 43) Lome kalipono mënke 'kupeta.' lome kalipono mën-ka-ja kupeta but non.Wayana 3S_ACertnty-say-NPst blanket 'But the non-wayana (Brazilians) say kupeta.' (Jolokoa 009)

- 44) Wëhetï w-**ëh**-etï-Ø 1 Sa-dream-RecPst 'I dreamed'
- 45) Wetïnëp w-etï-nëp-Ø 1A3O-dream-Transvzr-RecPst 'I dreamed it.'
- **5.3. Inflection.** In this section, we describe morphemes that are productive, regular, and do not change a verbal root into another speech class. Given the fact that many verbal systems exist in Wayâna, grammatical distinctions such as person, TAM, number, etc., are better described as properties within each specific system. These systems are Set I (5.3.1), Imperative/Hortative (5.3.2), the negative imperative construction (5.3.3) t-V-(h)e (5.3.4), gerundive forms (5.3.5) and the past habitual (5.3.6). Because the copula takes a number of irregular inflections, the copular paradigm is described in a section of its own (5.3.7).

Main verbs are characterized by two distinct sets of inflectional morphology.

These have come to be known in the Cariban literature as Set I and t-V-se (Gildea 1998).

The factors underlying the choice of one set over another are not well understood (see comments, however, in section 5.3.4). The grammatical properties of each set are discussed below.

- **5.3.1.** Set I verbs. As defined in Gildea (1998), and echoed in Meira (1999), the main characteristics of Set I are:
 - a) Personal prefixes: A/O and split S (cf. section 5.3.1.1).
 - b) Inflectional suffixes indicating some combination of TAM and number (cf. section 5.3.1.2)
 - c) A speech act marking suffix. (cf. section 5.3.1.3)

d) An O slot inside the VP: the formation of a constituent when Agent is 3rd person and 3rd person object is pre-verbal. (*cf.* section 8.1.1)

The Set I verb forms are prevalent in conversations, and, in texts, it occurs more frequently in personal narratives.

5.3.1.1. Personal prefixes: Subject and Object focus prefixes, and Split S. The Wayâna system of person marking on the verb closely resembles those of various Cariban languages (Tiriyo, Carib of Surinam, Aparai, Hixkaryana, Kaxuyana, among others (*cf.* Gildea 1998: for an overview of the family as a whole)) which distinguishes four persons: 1st person, 2nd person, 1+2nd (dual) person, and 3rd person (an additional first person exclusive exists, but it is marked in the same way as the third person). The occurrence of the different prefixes is sensitive to the morphosyntactic properties of the verbal stem. Roughly, portmanteau prefixes marking the persons of both the *A* and the *O* occur with transitive stems, and prefixes marking the person of the *S* occur with intransitive stems.

For instransitive stems, two sets of personal prefixes occur. One set, labelled S_O , takes pronominal prefixes resembling those on transitive verbs when an SAP participant is acted upon by a third person and another, labeled S_A , takes pronominal prefixes resembling those on transitive verbs marking when an SAP participant acts on a third person. This configuration readily brings to mind Split S systems (Dixon 1979, 1994), but the semantic basis is lacking (*cf.* Meira (1999:245) for a discussion of what he labels the 'epiphenomenal Split S').

For transitive stems, the particular form of the prefixes depends on both the person and on the syntactic role of the participant: two different sets of prefixes are used

for SAP participants depending on whether they act on or are acted upon by a third person (respectively *direct* and *inverse* in Gildea's (1988:16) terminology), two different suffixes occur for first and second person when they act on each other (Gildea's *local*), and one prefix occurs when a third person acts on a third person (Gildea's *3A3O*). Table 1 presents these sets: ⁵

INTRANSITIVE S S_0 $1S_0$ $1S_A$ ï-/jw- $2S_A$ **3S** ë-/ëw- $2S_0$ mn-/mën-/kunh-, k-, kuh-, kut-, h-, k-, ku-, kuh- $1+2S_A$ $1 + 2S_0$ kupkut-**TRANSITIVE** Inverse Direct 1A3O 3A10 ï-/jw-2A3O ë-/ëw-3A2O m-3A3O n-/mën-/kun-~ pre-V O 1+2A3O (ku)h-/kut-, ku-, kku-, k-3A1+2O Local 1A2O kuw-/ku-/k-2A10 k-/ku-

Table 1
Personal Prefixes on Verbs

The different allomorphs of each prefix are phonologically conditioned. The first and second person forms \ddot{i} - and \ddot{e} - occur before stems starting a consonant, and \dot{j} - and $\ddot{e}w$ - occur before stems starting with a vowel. The allomorphs of prefixes involving 1st and 2nd persons all have, with the exception of the direct h-, a /k/, in them:

a) With
$$1+2S_O$$
 \rightarrow $ku-$ /_C: kut -atalum 'we trembled' $kut-$ /_/u/, / \ddot{i} !: kut -uika 'we defecated,' kut - \ddot{i} ive went down' $k-$ /_V, _/ \ddot{i} !: k - \ddot{e} lemi 'we sang,' \ddot{k} mi \ddot{k} 'we slept'

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⁵ One SA root seems to idiosyncratically take $w\ddot{i}$ -, $m\ddot{i}$ -, and $n\ddot{i}$ - (cf. 5.1.2). The historically derived $kap(\ddot{i})$ 'to craft' also takes the direct version of these prefixes (cf. 5.1.3).

```
b) With 1+2S_A \rightarrow kup - with të 'go'
                                                      kup-tëm 'we went'
                              kut- with (u)mëk(i) 'come,' ka(i) 'say; do,' and a'be':
                                                      kun-mëkja 'we will come' (t+m>nm)
                                                      kut-ke 'we will speak'
                                                      kut-ai 'we are'
                                                      helama 'we came back'
                                                      këtili 'we became'
                       c) Local: 1A2O
                                                     kuw-ene 'I saw you'
                                                     ku-panakma 'I heard you'
                                                      k-ili 'I placed you,'
                                                      k-uwëja 'I will kill you'
d) Local: 2A1O
                              k- /_V, /u/, /i/ këne 'you saw me'
                       \rightarrow
                                                      k-uwëja 'You will kill me'
                                                      k-ïlï 'you placed me'
                              ku- / C
                                                      ku-panakma 'You heard me'
                            (ku)s-/__C
e) Direct: 1+2A30 →
                                                     si-panakma 'You and I heard 3rd,
                                                     kus-ipika 'We skinned it'
                              h- /_V hene 'You and I saw 3^{rd}, kut- /_/u/, /ii/ kut-uhmo 'You and I bea
                                                     kut-uhmo 'You and I beat 3rd,
                                                      kut-ïli*You and I made it'
f) Inverse: 3A1+20 \rightarrow ku- /_C ku-panakma '3<sup>rd</sup> heard you and me' k- /_V, /u/, /i/ k-ëne '3<sup>rd</sup> saw you and me'
                                                      k-uhmo '3rd beat you and me'
                                                      k-ili'3<sup>rd</sup> placed you and me'
```

The third person prefixes occur as follow: n- occurs in all tenses, except in the distant past, where only kun- occurs. The third person $m\ddot{e}n$ - occurs only in the non-past forms and forms with habitual past $-(j)(\ddot{e})m\ddot{e}hneja$ (cf. section 5.3.1.2.4), where it contrasts with n- to present different degrees of certainty (see below).

Full paradigms are presented below with the transitive stems panakma 'hear; listen to' and ene 'see O,' and with the intransitive stems $\ddot{e}tuk(u)$ 'eat' and elemi 'sing.' The third person prefix on transitive stems is in complementary distribution with a preverbal O (48) (all examples presented here are in the recent past):

```
46)
1A3O
           a. w-ipanakma
                                       i. w-ene
2A3O
           b. m-ipanakma
                                       j. m-ene
1+2A3O
           c. s-ipanakma
                                       k. h-ene
1A2O
           d. ku-panakma
                                       l. kuw-ene
           e. ku-panakma
2A10
                                       m. k-ëne
           f. ï-panakma
3A10
                                       n. j-ene
           g. ë-panakma
3A2O
                                       o. ëw-ene
3A1+2O
           h. ku-panakma
                                       p. k-ëne
47)
1S_A
           a. w-ëtulu
                                1S_0 e.
                                              i-elemi
                                2S_0 f.
                                               ëw-elemi
2S_A
           b. m-ëtulu
1+2S_A
           c. k-ëtulu
                                1+2S<sub>0</sub> g.
                                               k-ëlemi
48)
3A3O
           a. n-ipanakma
                                       .e n-ene
           b. eluwa panakma
                                       f. eluwa ene
3S
           c. n-ëtulu
           d. n-elemi
```

Table 1 makes it obvious that the morphemes marking *SAP* prefixes on the intransitive verbs are the 'same' ones occurring with transitive verbs when an SAP and a third person participant are involved (i.e., the morphemes within squares with solid lines). This configuration has been subject to various interpretations in many languages of the Cariban family (an Active/Stative system (Gildea 1994, Tavares 1994), an inverse (Gildea 1998), portmanteau prefixes (Hoff 1995), among others), depending on what squares of Table 1 one chooses to focus upon. Taking the system as a whole, we see that it presents a complex configuration that looks more like a mixed system than one that would fit under any of these labels. The only clear distinction between the two classes of prefixes for both transitive and intransitive stems is that involving a first or a second person, and in the case of transitive verbs in contexts involving a third person. Other persons, such as third persons and 1+2 persons, do not present such a binary opposition.

Meira (1999:285) proposes an analysis that recognizes person marking prefixes on transitive verbs as referring to both A and O participants, since for both *direct* and

inverse alignments a semantic reference to a third person is obligatory. This is compatible with the fact that intransitive stems take the same set of either O or A oriented prefixes: in intransitive verbs, prefixes mark only the *SAP* participant involved in the event; with transitive verbs, they emphasize those participants while still implying a third person (this is consonant with Jackson's analysis of these prefixes which he calls *Subject focus* and *Object focus* prefixes (1972:50). Thus, the dominance of SAP's is recognized, which makes this analysis compatible with the direct/inverse analysis. Meira then proposes a hierarchy for person marking prefixes on Tiriyó verbs where first and second persons outrank third:

1=2 > 3

While this analysis holds for Wayâna, a further elaboration may be recognized in the system since the first person marker *kuw*- '1A2O' is a unique morpheme (though /k/ seems to be pervasive form whenever both 1st and 2nd person are involved in the event), while all the allomorphs of the '2A1O' are homophonous with those of the inverse. Thus, the following hierarchy is proposed for Wayâna: first person outranks second and both outrank third.

1>2>3

A difference in the certainty about the event is found in the occurrences of the third person prefix *mën*- versus *n*-. For instance, in one interaction we had with a Wayâna speaker, she said the following:

49) Kopë mënumkja. kopë mën-umëkï-ja rain 3Certnty-come-NPst 'Rain will come.' when looking at the sky in a dark, cloudy day when light rain was already falling. The next day, the same speaker said

50) Opalan numëkja opalanu n-umëkï-ja airplane 3S_A-come-NPst '(The) airplane will come.'

after we commented that we were expecting an airplane to come into the village that day. Thus, is seems that $m\ddot{e}n$ - indicates a higher degree of certainty than n-.

5.3.1.2. Tense-Aspect-Modality-Number suffixes. Set I verb forms bear morphemes, almost all suffixes, marking TAM and number distinctions, a common feature of this system in Cariban languages (Derbyshire (1999)). In Wayâna, though these morphemes present some heterogeneous semantics, they form a single category in that they all share a co-occurrence with a particular set of personal prefixes and with a collective form based on the collective suffix $-t\ddot{e}$. Forms with the permissive/admonitive -tan(u) do not take collective suffixes. Collective forms with the permissive $-(h)i/-\mathcal{O}$ do not occur in our database. Table 2 presents these morphems.

Table 2
The Tense-Aspect-Modality-Number suffixes

	Non-collective	Collective
'Non-Past'	-ja	ja-të(h)e ja-tëu
'HabPst'	-(j)(ë)mëhneja	-(j)(ë)mëhneja- të(h)e -(j)(ë)mëhneja- tëu
'RecPst'	-Ø	-Ø-tëu
'DistPst'	-ne	-të-ne
'Permissive'	-(h)i/-Ø	
'Permissive/admonitive'	-tan(u)	

The collective suffix is restricted to Set I verbs and it collectivizes only SAP participants (i.e., 2^{nd} person and $1+2^{nd}$ person) encoded by personal prefixes (but see

examples below for second person imperative). As usual, the first person singular cannot be collectivized (thus, in *local* pairings only the 2nd person is collectivized (*cf.* examples 94-96 below). The different allomorphs of the collective suffix and the order in which they occur in the verbal word are dependent on their co-occurrence with specific morphemes. Table 2 shows that the allomorph *-të* occurs before certain tense and mood suffixes while the other allomorphs occur after:

The word final allomorphs of the collective suffix seem to result historically from the preservation of the reflexes of some tense/evidential/certainty morphology following the collective: $-t\ddot{e}(h)e$, $-t\ddot{e}w$, $-t\ddot{e}n(u)$, $-t\ddot{e}k(\ddot{e})$. The allomorphs co-occurring with the tense suffixes are a clear reflex of the collective forms reconstructed by Gildea (1998:98) for Proto-Carib (the collective suffix is shown in boldface) ⁶:

Proto-Carib		Modern Wayâna
*to-ne	'Distant Past'	- të -ne
*to-wï	'Recent Past'	-tëw
*ja-to-ce	'Nonpast'	-ja -të(h)e
*ja- to -wï	'Nonpast Uncertain'	-ja- tëw

It is thus not surprising that $-t\ddot{e}u$, the reflex of the collective non-past uncertain, is now restricted to questions and to third persons although the dichotomy certain/uncertain is no longer operating fully in the Wayâna system.

Set I verbs present a two-way distinction between past and non-past tenses: the suffix -ne (and its allomorphs) marks the remote past, -O marks the recent past, and -ja marks the non-past tense. All tense suffixes imply to different degrees some aspectual distinctions such as perfectivity and imperfectivity, which are not independently marked

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⁶ In Table 2 above the collective -*tëw* is considered as going after the -Ø recent past in consonance with the general pattern of allomorphs other than -*të* occurring after the tense suffix. Historically that does not seem to be the case.

on the verb: the non-past suffix presents, among other meanings, the semantics of an imperfective aspect (habitual and continuous), but the past suffixes imply only perfective meaning. The imperfective meaning is provided for the past (also for the non-past where it is in competition with the progressive readings of -ja) by an independent progressive construction, the nominalization plus $p\ddot{e}k(\ddot{e})$ construction (cf. section 8.3.1.5). The habitual aspect is marked by two habitual suffixes but only for the distant past (cf. section 5.3.1.2.4).

The next section discusses the properties of the tense affixes.

5.3.1.2.1. *-ja* 'Non-past.' The non-past refers to situations holding from the moment of the speech act onwards. It commonly refers to future events (near future (54 and 55) and distant future events (56), but also marks aspectual distinctions such as the imperfective aspect (continuous (51), non-continuous (52), and habitual(53)). It also refers to permanent situations held to be true in the world (57 and 58). (The reduced form of the non-past (examples (55), (56), and (57)) is discussed in section 5.1.2 above.)

- 51) Ulu wekejai.
 ulu w-ekeju-ja-he
 bread 1A3O-make.bread.NPst-SapAff
 'I am making bread.'
- 52) Ipoo menejai?
 ipolï m-ene-ja-he
 river.being 2A3Ø-see.O-NPst-SapAff
 "Do you see the river being?" (Kaikui2 074)
- 53) Ituwakii Pakolon tak hepi witejai.
 ituwakii pakolo-nu ta-ke hepi w-ite-ja-he
 indian house-Pss in.permanent.loc-into habitual 1S_A-go-NPst-SapAff
 'I always go to the House of the Indians.'

⁷ As the perfective/imperfective distinction is not morphologically instantiated in Wayâna, we see here with the non-past -*ja* that a proposition will be understood as perfective or imperfective depending on the context: example tf5 can be translated as 'I will make bread' or as 'I make breads.'

- Kaikui ëwëja.
 kaikuhi ëw-ë-ja
 jaguar 3A2O-eat.meat-NPst
 'A jaguar is going to eat you!'
 (This was said to us, as we were leaving the village on our way to the jungle.)
- 55) *Ïwenatei* pitë.

 i-wenata-ja-he pitë

 1So-vomit-NPst-SapAff in.a.minute

 'I am about to vomit.'
- Akon wei po, wëhepei Estados Unidos po.
 akono weji po-Ø w-ëh-epa-ja-he estados unidos po-Ø
 another year on.supported-on
 'Next year, I will study in the United States.'
- 57) Lome kalipono mënke 'kupeta.' lome kalipono mën-ka-ja kupeta but non.Wayana 3Certnty-say-NPst kupeta "But (the) non-Wayâna (Brazilians) say 'kupeta.'"
- 58) Ahpela kunumusitom ekatau aptau, appe-la kunumuhi-tomo ekata-wë wapta-wë untrue-Neg old.woman-Coll in.area.nearby-in when-in

Mënekalëja lep.
mën-ekalë-**ja** lep
3Certnty-tell.O-NPst Advrs
"True, when one is nearby the old women, they certainly tell it, in vain."

The non-past presents the most complex distribution of the allomorphs of the collective suffix. For verbs other than the copula, $-t\ddot{e}(h)e$ occurs in affirmatives with both S_O and S_A verbs (examples 59 and 60) and with transitive verbs bearing *direct* or *local* prefixes (examples 61-63), while $-t\ddot{e}u$ occurs in affirmatives with *inverse* prefixes (64) and in interrogatives (66). (The same scenario presumably holds also for forms with the habitual past $-(j)(\ddot{e})m\ddot{e}hneja$, though we only find in the database collective forms in affirmative sentences (67).)

- 59) *Ëwelikjatëi*. ëw-eliku-ja-**tëhe** 1S₀-get.killed-NPst-SapColl "You'll get killed."
- 60) Tok mïketëi. tok mï-ka-ja-tëhe beat.up.snd 2S_A-say-NPst-SapColl 'You are all beating up'
- 61) Kutukukëmëjatëi manu.
 kut-ukuku-ëmë-ja-**tëhe** manu
 1+2A3O-try.O-Resumpt-NPst-SapColl Irrealis
 "We would try it again."
- 62) Kuwenejatëi. kuw-ene-ja-**tëhe** 1A2O-see.O-NPst-SapColl 'I see you all.'
- 63) Kënejatëi. k-ëne-ja-**tëhe** 2A1O-see.O-NPst-SapColl 'You all see me.'
- 64) *Euhmojatëu* nahek.

 ëw-upmo-ja-**tëw** nahek

 3A2O-kill.O-NPst-SapColl just?

 "(He) is just going to kill you all."
- 65) Kan kënejatëu. kanu k-ëne-ja-**tëw** God 3A1+2O-see.O-NPst-SapColl 'God sees all of us.'
- 66) Eti mijatëu?

 eti m-ili-ja-tëw

 what 2A3Ø-make.O-NPst-SapColl

 "What do you all do?"
- 67) Tutukë henepëmëhnejatëi.
 tutukë h-enepï-ëmëtneja-**tëhe**brazil.nut 1+2A3O-bring.O-HabPst-SapColl
 'A long time ago, we all used to bring Brazil nuts back.'

In sum, the allomorphs of the collective suffix are partially conditioned by the syntactic role of the SAP participants in the non-past tense forms, with *-tëhe* only occurring with *direct* and *local* forms and *-tëw* in the *inverse* forms. The other factor conditioning the allomorphs is whether the proposition is affirmative or interrogative,

with *-tëhe* occurring with the former and *-tëw* with the latter. No semantic motivation suggests itself as an explanation for this configuration.

5.3.1.2.2. -Ø 'Recent Past'. The recent past marks events that took place in the past twenty-four hours (*cf.* Jackson 1972:53). Thus, it may refer to events that have just happened, events that happened hours ago, and events that happened in the previous day.⁸

- 68) Nilëmëp.
 n -i-lëmëpï-Ø
 3S-Them-die-RecPst
 'He just died (a few minutes ago).'
- 69) Hemalëlë nma weha inikila.
 hemalëlë nma w-eha-Ø iniki-la
 today Intens 1S_A-be-RecPst sleep-Neg
 "Just today, I did not sleep."
- 70) Eluwa pepta kaikui uwë kokone.
 eluwa pepta kaikuhi uwë-Ø kokone
 man big jaguar kill.O-RecPs yesterday
 'A man killed a big jaguar yesterday.'
- 71) Jemsii nijep kokone, j-emsilï-Ø n-i-jepï-Ø kokone 1-daughter-Pss 3S_O-Them-have.fever-RecPst yesterday

lome hemalë uwame nëtili.
lome hemalë uwame n-ëtili-Ø
but today healthy 3S_A-become-RecPst
'My daughter had fever yesterday, but today she is healthy.'

In the recent past, the allomorph of the collective suffix is always –*tëu*:

72) Kuwënetëu. kuw-ene-Ø-**tëw** 1A2O-see.O-RecPst-SapColl 'I saw all of you.'

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⁸ Meira (1999:299) reports that for Tiriyó the cognate form for the recent past marks a combination of tense and aspect, the 'present-perfective' with a perfect meaning, referring to a situation that 'just finished'. Though the semantics of a perfect (i.e., 'the continuing present relevance of a past situation'' (Comrie 1976:52)) could apply to -Ø recent past forms in Wayâna, specially for events that 'just happened' and thus with some lasting effects still holding in the present, this has not been found to be a necessary implication, as clearly seen in example 71.

- 73) Eluwa kënetëu.
 eluwa k-ëne-Ø-**tëw**man 3A1+2O-see.O-RecPst-SapColl
 'The man saw all of us.'
- 74) Ëmëlamkom ka kulasi menetëu?

 ëmëlamkomo ka kulahi m-ene-Ø-tëw

 2CollPro Quest chicken 2A3O-see.O-RecPst-SapColl

 'Did you see the chicken?'

5.3.1.2.3. The Remote Past markers: -ne/kun-. The remote past affixes occur as follows: for verbs other than the copula 'be,' the suffix -ne occurs whenever the verb is inflected by an SAP participant (75 and 67) or when the object preceds the verb when a third person A acts on a third person O (77). The portmanteau prefix kun-, marking both third person and remote past, occurs elsewhere (78 and 79). As is normally the case, the first person exclusive is marked in the same way as third persons (80, 81, and 82).

- 75) Menene ïpi?
 m-ene-ne ïpï
 2A3O-see.O-DistPst mountain
 'Did you see the mountain?'
- 76) Min toholohem wenene.
 mini toholohe-mi wenene.
 DemInanDist hollow-PtNmlz 1A3O-see.O-DistPst
 'I saw that distant cave.'
- 77) Jolok enene Anakali. joloko ene-ne anakali evil.spirit see.O-DistPst Anakali 'Anakali saw a Jolok.'
- 78) Malonme kunmëkëmë tot.
 malonme kun-umëkï-ëmë toto
 then 3S_ADistPst-come-Resumpt 3Coll
 "Then, they came back."
- 79) Malonme kunene.
 malonme kun-ene
 then 3A3ODistPst-see.O
 "Then, he saw it (the baskets with the pears)"

- 80) Moloinë emna ikanawakom enene.
 molojinë emna i-kanawa-Ø-komo ene-ne
 then 1+3ExclPro 3-canoe-Pss-Coll see.O-DistPst
 'Then, we saw their canoe.'
- 81) Emna kunmëkëmë, emna kun-umëkï-ëmë 1+3ExclPro 1+3S_ADistPst-come-NonCompl 'We came.'
- 82) Moloinë emna kuneneimë ehemakom.

 molojinë emna kun-ene-jmë Ø-ehema-Ø-komo
 then 1+3ExclPro 1+3A3ODistPst-see-Resumpt 3-trail-Pss-Coll
 'Then, we found their trail.'

In the distant past, the allomorph of the collective suffix is always -të. One exceptional example in which a first person exclusive is collectivized with -tëu in the distant past, was found in the database (86). In all other attested examples, the collective occurrences of the first person exclusive are not formally marked, with the collective reading coming from the context, as in example (87).

83) Kwenetëne.

kuw-ene-të-ne 1A2O-see.O-SapColl-DistPst 'I saw all of you a long time ago.'

84) Kënetëne.

k-ëne-**të**-ne 2A1O-see.O-SapColl-DistPst 'You all saw me a long time ago.'

85) Menetëne?

m-ene-të-ne 2A3O-see.O-RecPst-SapColl 'Did you see all of them a long time ago?'

- 86) Moloinë emna kunepotëu tühule psik.
 molojinë emna kun-epoli-tëw tühule phiki
 then 1+3ExclPro 1+3A3ODistPst-find.O-SapColl a.while? little
 "Then we all found it... very far"
- 87) Macapa pona semana do indio po.

 macapa po-na semana do indio po-Ø

 Macapa on.supported-Goal week of Indian on.supported-on

emna kunëhalë. emna kun-ëh-alë 1+3ExclPro 3S_ADistPst-Det-take.O

Dezme wajana kunëhalë tot mija.

dez-me wajana kun-ëh-alë toto mija
ten-Attrb people 3S_ADistPst-Det-take.O 3Coll thither

"to Macapa on the Week of Indians, we went. About 10 people went that way."

- **5.3.1.2.4.** The Habitual past -(j)(ë)mëhneja. This suffix takes the same Set I personal prefixes that occur with non-past forms (examples 88-92). It does not co-occur with other TAM affixes, including *kun*-, the third person for distant past forms. Like the non-past, habitual past forms bear -(h)e the SAP suffix for affirmatives (with the same properties) and the same allomorph for the SAP collective suffix for affirmatives (89). In addition, the 3A3O prefixes are in complementary distribution with a pre-verbal object (93).
- 88) Mëlë psik lëken ipanakmaimëhnejai.
 mëlë phikï lëken w-i-panakma-jmëtneja-he
 DemInanMed little only 1A3O-Them-hear.O-HabPst-SapAff
 "Only this little I used to hear"
- 89) Upak aptau, kaikui pitpë halëimëhnejatëi katelu ja upak apta-wë kaikuhi pitpë-Ø h-alë-jmëtneja-tëhe katelu ja long.ago when/if-in jaguar sking-Pss 1+2A3O-take.O-HabPst-SapColl jaguar.skin.hunter Dat 'A long time ago, we all used to take jaguar skin to the jaguar skin hunters.'
- 90) Muleme ïwaptau ïjepëmëhnejai. mule-me ï-wapta-wë ï-jepï-**ëmëtneja**-he child-Attrb 1-when/if-in 1S₀-have.fever-HabPst-SapAff 'When I was a child, I used to have fever.'

- 91) Upak kulumuli ke mënehemëhneja malijatom
 upake kulumuli ke mën-ehe-mëtneja malija-tomo
 long.ago bamboo Instr 3certnty-be-HabPst knife-Coll
 "Long time ago the knives (i.e., the knife-like instruments) used to be with bamboo
- 92) Emna nipohnëpëmëhnejai helëkom.
 emna n-i-potnëpï-**ëmëtneja**-he helë-komo
 1+3ExclPro 1+3A3O-Them-think.O-HabPst-SapAff PrsntvPro-Coll
 "These things used to be our constant thinking."
- 93) Akuli je ïlëmëhneja malijame. akuli je-Ø ïlï-**ëmëtneja** malija-me agouti tooth-Pss make.O-HabPst knife-Attrb 'They used to make agouti's teeth into knives.'

An idiosyncratic form of the copula 'be,' ehe, occurs with this suffix:

94) *Uwamela wehemëhneja.*uwame-la w-ehe-mëtneja
healthy-Neg 1S_A-be-HabPst
'I used to be healthy.'

5.3.1.2.5. The permissive suffix $-(h)il-\emptyset$. Forms bearing this suffix express a request to the listener to allow what is being requested to happen. They frequently, but not obligatorily, co-occur with the particle *awap* 'wait!'. The suffix presents two allomorphs that are conditioned by the person of the clause's subject. Stems bearing third person subjects take a $-\emptyset$ suffix, with the same allomorphy of $-\emptyset$ recent past (*cf.* section 5.3.1.2.2 above),

- 95) Awap nitëm!
 awap n-itëmi-Ø
 awap 3S_A-go-Permissive
 'Let him go.'
- 96) Awap nëtulu!

 awap n-ët-ulu-Ø

 awap 3S_A-Det-talk.to.O-Permissive

 'Let him talk.'

'No. Let it grow.'

98) Awap professorme nesi! awap professor-me n-ehi-Ø

```
3S<sub>A</sub>-be-Permissive
        wait
                teacher-Attrb
        'Wait, let him be a teacher.'
99)
        Awap
                nepï!
        awap
                n-epï-Ø
                3A3O-eat.soft.food-Permissive
        wait
        'Wait, let him eat it.'
100)
        Awap juwë!
        awap j-uwë-Ø
        wait 3A1O -pierce.O-Permissive
        'Wait, let him give me an injection!'
101)
        Awap ëwë!
        awap
               ë-uwë-Ø
               3A2O -pierce.O-Permissive
        wait
        'Wait, let him give you an injection!'
stems with first person subject take -(h)i with the same allomorphy as the proximal
hortatory (cf. 5.3.2.2 above). (Example 106b shows the full allomorph of the permissive
suffix.)
102)
        Awap ïwakamïi!
        awap ï-wakamï-hi
        wait 1S<sub>0</sub>-sit.down-Permissive
        'Let me sit down!'
103)
        Awap wëtului
                                             kija!
        awap w-ët-ulu-hi
                                             kija
               1S<sub>A</sub>-Det-talk.to.O-Permissive Persuasive
        wait
        'Wait, let me talk, will you?'
104)
        Awap professorme wesii!
        awap professor-me w-ehi-hi
               teacher-Attrb 1S<sub>A</sub>-be-Permissive
        wait
        'Wait, let me be a teacher!'
105)
        Wenei!
        w-ene-hi
        1A3O-see.O-Permissive
        'Let me see it!'
106)
        a. Awap
                    kuwenei!
           awap
                    kuw-ene-hi
           wait
                    1A2O-see.O-Permissive
```

'Let me see you!'

b. Wepïsi hnë. w-e-pï-hi tnë $1S_A$ -Det-bathe.O-Permissive also 'Let me also take a bath.

The example (104) above shows that the permissive occurs with the allomorph e(h)i of the copula 'be' which is not the same as the copular allomorph for the recent past (eha, section 5.3.1.2.2). The other occurrences of e(h)i are with the habitual past -(h)e, with the purpose of motion suffix -(h)e, and in nominalizations (cf. section 5.3.7 for the forms of the copula 'be').

Permissive forms do not occur with a second person subject which is probably due to the semantics of these forms, since they encode a request to induce the listener to allow something to happen against his will.

There are no collective forms with the permissive suffix in our database.

5.3.1.2.6 The permissive/admonitive -tan(u). Jackson (1972:53) states that 'the future tense is indicated by -tan' and that it occurs only with transitive stems and the third person prefix mën-. Our data confirm that mën- is the only third person prefix to co-occur with -tan(u), although in complementary distribution with a pre-verbal object. However, we have found it to occur also with intransitive verbs. Furthermore, it was not possible to replicate Jackson's examples with a future meaning (perhaps a dialectal difference?). In all examples we collected, -tan(u) showed the semantics of either permission or admonition, rather than marking future tense. Forms taking the third person prefix mën- had the meaning of either a command to the listener to allow someone else to carry out a task or a statement that a third person is allowed to do so (examples

107-110). Forms with a pre-verbal object may have an admonitive meaning (examples 111-113).

- 107) Mënëtïtan!
 mën-ëtïlï-tanu
 3Certnty-work-ImpPerm
 'Let him work!'
- 108) Ise aptau mënapëitan.
 i-se wapta-wë mën-apëhi-tanu
 3-Des when/if-in 3Certnty-take.O-ImpPerm
 'If wanting, he/she can take it.'
- 109) Akon wei po mënëhepatan Estados Unidos po.
 akono weji po-Ø mën-ëh-epa-tanu estados unidos po-Ø
 another year on.supported-on 3Certnty-Det-teach.O-ImpPerm United States on.supported-on
 'In the next year he is allowed to study in the United States.'
- 110) Enalëla mëneitan.
 ën-alë-Ø-la mën-ehi-tanu
 3Neg-take.O-Neg 3Certnty-be-ImpPerm
 'He cannot take it (it is not his').'
- 111) İkilii enetan.

 i'-kili'li'-Ø ene-tanu
 1-thing-Pss see.O-ImpPerm

 '(You'd) better verify my things.'
- ka pïkëlëtan!
 ka pïkëlë-tanu
 fish cut.O-ImpPerm
 'She'd better cut fish!'
- 113) Ëwamoo okotan.

 ëw-amo-lï oko-tanu
 2-hand-Pss cut.O-ImpPerm
 'Watch out, lest you cut your finger.'

Forms with the permissive/admonitive do not occur with a collective suffix, since the collective suffix only modifies *SAP* participants.

5.3.1.3. The suffix -(h)e 'SAP affirmative.' This suffix occurs in affirmative clauses with the suffixes -ja 'Non past' (and also non-past forms of the copula 'be') and the

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⁹ There are no examples of -tan(u) in texts. In a narrative where a speaker talks about his plans for the

suffix -(j)(e) mëhneja 'Habitual past,' and only with verbs bearing non-collective SAP participants (114 to 119), including $1+3^{rd}$ person exclusive (120 and 121), in the syntactic role of A, S or O (except when A is third person (125 and 126)). (Example 117 shows the full allomorph of -(h)e)

- 114) Helë wekalëjai.
 helë w-ekalë-ja-he
 PrsntvPro 1A3O-tell.O-NPst-SapAff
 "This I will tell."
- 115) Wipanakmaimëhnejai. w-i-panakma-jmëtneja-he 1A3O-Them-listen.to.O-HabPst-SapAff 'I used to listen to it.'
- 116) Peptame ïpakolon aptau wekalëjai manu.
 pepta-me ï-pakolo-nu wapta-wë w-ekalë-ja-he manu
 big-Attrb 1-house-Pss if/when-in 1A3O-give.O-NPst-SapAff Irrealis
 'If my house were big, I would give it.'
- 117) Këlelepjahe nma. k-ëlepï-Red5-ja-**he** nma 1A2O-make.O.afraid-Red5-NPst-SapAff Intens "You are really scaring me."
- 118) Talanme uwamela wëtiijai.

 talanme uwame-la w-ëtili-ja-he
 maybe healthy-Neg 1S_A-become-NPst-SapAff
 'Maybe I will get sick.'
- 119) Masike tëmamine kutai.
 mahike tëmamine kut-a-he
 With.that have.work 1+2S_A-be-SapAff
 "With that, we have work (to do)."
- 120) Emna ninëmëjai.
 emna n-i-nëmë-ja-he
 1+3ExclPro 1+3A3O-leave.O-NPst-SapAff
 'We will leave it.'
- 121) Emna nipohnëpëmëhnejai helëkom.
 emna n-i-potnëpï-ëmëtneja-he helë-komo
 1+3ExclPro 3A3Ø-Them-think.O-HabPst-SapAff "We used to think about these things."

Third person S/A participants do not co-occur with -(h)e:

future, only non-past forms (with -ja 'Non past') or t-V-(h)e forms occurred.

- 122) Mëklëë hnë mënumëkja.

 mëklëlë tnë **mën**-umëkï-ja

 DemAnmMed also 3S_ACertnty-come-NPst

 'That one will aso come.'
- 123) Josinete ëtilë sitpili ewaaja hepi.
 josinete ëtilë hitpili ewalu-ja hepi
 Josinete belongings dirty burn.O-NPst Habitual
 'Josinete always burns her garbage.'
- 124) Upak kulumuli ke mënehemëhneja malijatom.

 upake kulumuli ke mën-ehe-mëtneja malija-tomo
 long.ago bamboo InstrPts 3S_Acertnty-be-HabPst knife-Coll

 "Long time ago the knives (i.e., the knife-like instruments) used to be with bamboo."
- 125) Kaikui nai këja.

 kajikuhi naj k-ë-ja
 jaguar Intens 3A1+2O-eat.meat-NPst
 "The jaguar will eat us."
- 126) Uwa, kaikui nai ëwëja.
 uwa kajikuhi naj ëw-ë-ja
 Neg jaguar Intens 3A2O-eat.meat-NPst
 "No, the jaguar will certainly eat you"

The suffix -(h)e is incompatible with questions. In fact, its absence on verbs with SAP A/S participants always produces a question (as in example 127).

- 127) Maa, jepe, tala kuta? maa j-epe-Ø tala kut-a So 1-friend-Pss how 1+2S_A-be "So, my friend, how will we be?"
- 128) Talaa pa kasili wiija?
 tala pa kahili w-ïlï-ja
 how Quest manioc.beer 1A3O-make.O-NPst
 'How do I make kasili (beer)?'
- 129) Nila, anumalë ka mitëimëja?

 nila anumalë ka m-itë-jmë-ja

 Nila tomorrow Quest 2S_A-go-Resumpt-NPst

 'Nila, are you going back tomorrow?'
- 130) *Mitëja?*m-ïtë-ja
 2S_A-go-NPst
 'Are you going?'

The fact that -(h)e occurs only with SAP participants and in affirmative clauses suggests that it expresses some certainty value. However, -(h)e may co-occur with the

particle *manu* 'Irrealis' (example 116 above) and with adverbs expressing uncertainty such as *talanme* 'maybe' (118). Moreover, it does not contrast paradigmatically with any other morpheme in the language (as is the case for the cognate forms for -(h)e in other Cariban languages, such as Carib of Surinam, where the cognate form of -(h)e is part of a clear evidential system (Hoff:1986), or Tiriyó, where -(h)e marks certainty (Meira 1999:310)). It is more difficult to clearly establish the role of -(h)e in Wayâna, since it does not mark evidentiality per-se, (i.e., it does not indicate the source of information or information about the degree of certainty a speaker has about the proposition, though it may have done so historically. It is works now more like a redundant marker of *SAP* subjects in affirmative non-past and habitual past clauses.

5.3.2. The Imperative and hortative Inflections. The imperative and hortatory forms (the labels are borrowed from Jackson 1972) are each characterized by the occurrences of three distinct suffixes: the proximal suffixes (indicating an order or invitation to the listener to perform close to where the speaker and hearer are), the allative suffixes (an order or invitation to the listener to perform after moving to where the speaker is) and the ablative suffixes (an order or invitation to the listener to perform away from where both the speaker and hearer are—see Jackson, 1972:55-56). Table 3 shows these suffixes:

Table 3
The Imperative and Hortatory suffixes.

	Proximal		Allative		Ablative	
	Non-Coll	Coll	Non-Coll	Coll	Non-Coll	Coll
Imp	-k(ë)	-të-k(ë)	-kët(ë)	-të-kët(ë)	ta	-ta-tëk(ë)
Hort	-(h)i	-të- (h)i	-net(ë)	-të-net(ë)	ta	-ta-tën(u)

As for the occurrences of the collective with imperative forms, as shown in Table 3, the allomorph *-të* occurs whenever it precedes the proximal imperative, the imperative

allative, the proximal hortatory, or the hortatory allative, and the allomorphs $-t\ddot{e}k(\ddot{e})$ and $-t\ddot{e}n(u)$ occur after the imperative ablative and the hortatory ablative, respectively. As with forms bearing tense suffixes, only SAP participants are collectivized, even in the absence of personal prefixes, as in the case of the second person imperatives.

The imperative and hortatory forms bear different arrangements of personal prefixes: while the first may take 2nd person prefixes, the latter must occur with 1+2nd prefixes. No other personal distinctions are marked on these forms. The long and short allomorphs of the imperative and hortatory suffixes are dictated by the principles of syllable reduction (*cf.* section 2.3.1). Table 4 shows the personal prefixes that occur with the imperative and hortatory forms.

Table 4
Personal prefixes on imperative and hortatory forms

Imperative			
Transitive	Intransitive		
k-/ku- '2A1O'	ë(w)- '2S ₀ '		
Hortatory			
Transitive	Intransitive		
(ku)h-/kut-, ku-, k- '1+2A3O'	h-, k-, kuh-, kut- '1+2S _A ' h-, k-, ku-, kuh-, kut- '1+2S _O '		

Besides the imperative suffixes, an independent imperative negative construction is attested.

5.3.2.1. The imperative suffixes: -k(\ddot{e}) 'proximal imperative,' -k \ddot{e} t(\ddot{e}) 'imperative allative,' and -ta 'imperative ablative.' The imperative forms take 2^{nd} person prefixes as follows: transitive verbs may take only the local prefix k- '2A1O,' and intransitive S_O verbs take the 2^{nd} person prefix. Other situations, 2A3O and $2S_A$ for instance, show no

prefix marking. Thematic prefixes occur for the relevant cases (cf. section 5.1.3).

Examples of all three suffixes with transitive, S_0 , and S_A verbs are given below:

Proximal imperative:

131) Anopkë! anopï-kë paint.O-ProxImp 'Paint he/she/it!' 2S₀-sing-ProxImp

133) Konopkë! k-onopï-kë 2A1O-paint.O-ProxImp 'Paint me!' in Emëmkë!

emëmi-kë

enter-ProxImp

Enter'

Imperative allative:

- 135) Anopkët!
 anopï-këtë
 paint.O-ImpAllat
 'Come and paint he/she/it!'
- Ewelemikët!

 ëw-elemi-këtë

 2S₀-sing-ImpAllat

 'Come and sing!'

137) Konopkët! k-onopï-këtë 2A1O-paint.O-ImpAllat 'Come and paint me!' ituhkët!

ëtuku-këtë

have.a.meal-ImpAllat

'Come and have a meal'

Imperative ablative:

139) Ipanakmata!
i-panakma-ta
Them-hear.O-ImpAblat
'Listen to he/she/it.'

- Ewata!

 ëw-uwa-ta
 2-dance-ImpAblat
 'Go dance!'
- 141) Kupanakmata! ku-panakma-ta 2A1O-hear.O-ImpAblat 'Go (there) and listen to me!'
- 142) *Etukta!*ëtuku-ta

 have.a.meal-ImpAblat
 'Go have a meal.'

143) Alëtëk! alë-**të**-kë take.O-SapColl-ProxImp 'You all take it!'

- 144) Etuktëkët!

 ëtuku-të-këtë
 have.a.meal-ImpAllat
 'Come you all and eat!'
- 145) Kaitatëk eja. kaj-ta-**tëkë** e-ja say-ImpAblat-SapColl 2-Allative 'You all go and say (it) to him/her.'

5.3.2.2. The hortatory suffixes: -h(i) proximal hortatory, -net(ë) hortatory allative, and -ta(-n(u)) hortatory ablative. All hortatory suffixes occur with verbs inflected with 1+2nd personal prefixes, as in the following examples (no examples of the hortatory allative suffix are found in texts):

Proximal hortatory

146) Henesi hkuu! h-ene-hi kkulu

1+2A3O-see.O-ProxHort Intens

'Let's go see he/she/it!'

147) Kïnïkïi! k-ïnïkï-hi

1+2S₀-sleep-ProxHort

'Let's sleep.'

148) Ëhepeme

ëh-epe-me

h-ehi-të-hi

RecprN-friend-Attrb 1+2S_A-be-SapColl-ProxHort

heitëi!

'Let us all be friends.'

Hortatory allative:

149) Hepinet!

h-epï-netë

1+2A3O-eat.soft.food-HortAllat

'Let's come and eat it!'

150) Kutuwatënetë psik. kut-uwa-të-netë phikï

> 1+2S₀-dance-SapColl-HortAllat 'Let us all came and dance a little.'

Hortatory ablative:

151) Hapëita!

h-apëhi-ta!

1+2A3O-get.O-HortAblat

'Let's go get it!'

152) Kutuwatatën!

kut-uwa-ta-tënu

1+2So-dance-HortAblat-SapColl 'Let us all go there and dance!'

153) Hapëitatën!

h-apëhi-ta-tënu

1+2A3O-get.O-HortAblat-SapColl

'Let us all go and get it!'

154) Këtukta!

k-ëtuku-ta

1+2S_A-have.a.meal-HortAblat

'Let's go there and have a meal.

155) Kutuwatënet!

kut-uwa-të-netï

1+2So-dance-SapColl-HortAllat

'Let us all come dance.'

156) Henetëi!

h-ene-të-hi

1+2A3O-see.O-SapColl-ProxHort

'Let us all see (it)'

157) Henetatën!

h-ene-ta-tënu

1+2A3O-see.O-HortAblat-SapColl

'Let's all go see it'

In the non-collective forms, the hortatory ablative is homophonous with the imperative ablative (both occur as -ta), but the personal prefixes $1+2^{nd}$ for the hortatory and 2^{nd} person prefixes for the imperative disambiguate between the two forms. In the collective, the two forms are further distinguished by the allomorph of the collective morpheme: $-t\ddot{e}k(\ddot{e})$ for the imperative and $-t\ddot{e}n(u)$ for the hortatory.

The source of the collective forms with the ablative imperative and hortatory forms seems to be the future *-ta in combination with some other morphology. Gildea's list of Set I TAM affixes for the modern Cariban languages (1989:102) shows languages with future forms. Some are shown below:

	Future	Future+Coll
Carib	-ta ke	-ta-:to- ŋ
Carijona	-ta-e	-ta- kë- i
Tiriyó	-ta	-ta-h ki
Wayâna	-ta n	-të-ta n

Figure 2

Cariban future suffixes

This points to a historical development where the future *-ta is extended to other semantic domains while retaining the morphology that followed it historically. Thus, the ablative forms -ta- $t\ddot{e}n(u)$ for the imperative and -ta- $t\ddot{e}k(\ddot{e})$ for the hortatory seem to be historically derived from *-ta- $t\ddot{e}$ -nu and *-ta- $t\ddot{e}$ - $k\ddot{e}$ (with the last elements as cognates of the forms in bold in Figure 2 and the now imperative permissive/admonitive from the future *-ta-nu.

5.3.3. The negative imperative construction: 1+2-V-Ø+nai. In this construction, the verb occurs with the same set of prefixes as the hortatory form, 1+2A3O (direct) form for transitive verbs and 1+2S_O and 1+2S_A for intransitive verbs, together with the second position particle *nai* 'Intensifying'. This particle follows the verb unless the O is preverbal, in which case it follows the O (*cf.* Jackson, 1972:56). Though the imperative negative designates a command, it has also an admonitive flavor. The negative imperative construction is homophonous with verbal forms taking 1+2nd prefixes in the recent past, whose translations are given later between parenthesis in the examples below:

```
158) Imumuu nai halimanehpo!

i'-mumulu-Ø naj h-alima-neppo
1-men's.son-Pss Intens 1+2A3O-throw.O-Caus

'Watch out, do not let my son fall!''

('We just let my son fall.')
```

- 159) Kutuika nai!
 kut-ujka naj
 1+2S₀-defecate Intens
 ''Watch out, lest you defecate.''
 (We just defecated)
- 160) Kunmëk nai!
 kut-umëkï naj
 1+2S_A-come Intens
 ''Don't you come!''
 (We just came.)

The admonitive semantics differentiate between the imperative negative and negated verbs plus 'be' in the imperative (*ënenela eikë* 'do not look!') which is a simple direct negative command. There are no attested cases of negative imperative forms.

- **5.3.4.** t-V-(h)e verbs. The main formal characteristics of t-V-(h)e verbal set are:
 - a) The discontinuous morpheme t--(h)e.

- b) Ergative case-marking: the A is marked by the ergative marking ja, and the S and the O are unmarked.
- c) Free word order.
- d) Lack of conjugation: T-V-(h)e forms do not bear personal prefixes, tense, evidential, or number affixes. They take only derivational aspectual suffixes (*cf.* section 5.4.4)
- e) Number is expressed by pronouns or by the particle *tot(o)* '3rd person collective.'

The examples below show some of these properties:

- [0 ja] 161) Malonme ïwokan pasina ерии tëpkëlëi ja. epulu-Ø të-pïkëlë-he pahina malonme ï-woka-nu ja 1-fishhook-Pss pole-Pss T-break.O-He fish.sp. Erg "Then, a pasina (fish) broke the pole of my fishhook."
- [O] [A-ja]
 162) Malonme pasina ija tëpëlëtse huwaa.
 malonme pahina i-ja t-ëpëlëti-he huwalë
 then fish.kind 1-Erg T-get.fish-He as.such
 "Then, I got I pasina, as such."
- [S]

 Kopë telen tumëkhe
 kopë telenu t-umëkï-he
 rain huge T-come-He
 'A huge rain came.'

[S]
164) Tikai iu.
ti-ka-he iwu
T-say-He 1Pro
'I said.'

The examples show that though T-V-(h)e forms do not bear tense suffixes, they are used in reference to events located in the past (with perfective meaning as in the examples above and progressive meaning as in the one below),

165) Tëk tikai inëlëë.
tëk ti-ka-he inëlëlë
think.snd T-do-He 3AnphPro
'She was thinking.'

in the present (with habitual and progressive meaning, examples 166 and 167), and in the future (example 169 and 170):

- 166) Tëlelephe hepï ïu kaikusi ja. t-ëlepï-le-he hepï ïwu kajikuhi ja T-make.O.afraid-Red5-He habitual 1Pro jaguar Erg 'The jaguar always makes me scared.'
- 167) Kape tiïhe.
 kape t-ïïlï-he
 coffee T-make.O-He
 '(You) are making coffee.'

(Said to me by one of my consultants when he arrived as I was adding coffee powder to the hot water, as the reply to my statement: 'I am making coffee, Sapotoli'.')

'It's heart is still beating.'
(Said about a dying animal.)

- 169) Moloinë aptau tëepijëmëi.
 molojinë wapta-wë të-ë-e-pï-jëmë-he
 Then thus-in T-S_A-Det-bathe.O-Resumpt-He
 "Then, thus, (I) will bathe again"
- 170) Tuna pëk tiïtëi, huwaa tuna pëkë ti-w-itë-he huwalë water about T-S_A-go-He as.such "(I) will go get water, as such."

Since the semantic value of the t-V-(h)e verb shows such great overlap with the semantics of the various Set I inflections, any description of the Wayana language should discuss what might condition the distribution of t-V-(h)e forms in texts and spontaneous speech as compared to the distribution of Set I verbs. The factor conditioning the occurrences of the two verbal sets, Set I and t-V-(h)e, is not a formal one. To this point, we have not been able to find any morphosyntactic test that will consistently yield one form instead of the other. It seems instead that the choice of using one of the two sets is

confined to the realm of pragmatics and to what type of rhetorical nuances each set implies. This is indicated by the distribution of the two sets in texts.

In historical narratives we see a complementary distribution between Set I and t-V-(h)e forms, with t-V-(h)e occurring in almost a 100% of the cases in narrative clauses and with Set I occurring only in reported speech clauses (example 171), or when the narrator is making an aside addressed to the audience. In personal narratives, the distribution of the two sets is more complex. We see basically the same organization as in the historical narrative in some texts (Snake, Monkey, etc)., in others the occurrence of both sets in narrative clauses (Alawaka, Mopelu1, Future, *etc.*, as in example 172), and in still others only Set I (Mopelu2, *etc.*) or t-V-(h)e occurred (Malamala, *etc.*). In sum, the only clear distinction in the distribution of the two sets in texts is a discursive one with only Set I occurring in reported speech and only t-V-(h)e occurring in narrative clauses in historical narratives. ¹⁰

```
171) Ëti pa mepija?

ëti pa m-epi-ja

what Quest 2A30-eat.soft.food-NPst

"What do you eat?"
```

Tikai ololi ja, kaikui. tï-ka-he ololi ja kajikuhi T-say-He iguana Dat jaguar "Said Jaguar to Iguana."

172) kunëhalë lëë Malonme emna talë inë mïja jnë lëlë malonme kun-ëh-alë talë mïja emna then 1+3ExclPro **3DistPst**-Det-take.O NspcProxLoc Source thither Emph

Ëtukulanmatiïtëiemnaëtuku-lanmatï-w-ïtë-heemnahave.a.meal-NegIntensT-SA-go-He1+3ExclPro

"Then, from here we went thither. We went without having a meal..."

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¹⁰ For a more thorough discussion on the occurrences of the two sets, including examples of daily speech, see section discourse.doc.

Wayâna figures as an unattested type for Dixon's (1994) typology of split ergative systems, which states that grammatical features such as TAM, the semantic properties of the NP's, the status of the verb as main or subordinated, and the semantics of the verb are the triggering features of split ergative systems. In Tiriyó (Meira 1999:333), for instance, the cognate t-V-(h)e form is restricted to the remote past, thus conditioned by tense, fitting Dixon's typology. This is not true in the Wayâna case, where both systems occur independent of tense, with all persons and in main clauses, and with all verb stems. Since grammatical devices cannot tell the two systems apart, what triggers the split must be some pragmatic discursive attributes each set presents. The nature of these properties, however, is not well understood.

- **5.3.5. Gerundive forms.** The gerundive forms are two subordinated verbal forms that do not belong morphologically to any of the major speech classes existing in the language. Their co-occurrence with a main verb resembles those of adverbials, but they can take O prefixes and the collective suffix -he, which adverbials do not take. In addition, they refer to events in which the S and A arguments are obligatorily marked on the main verb (a nominative pattern). The same gerundive collective suffix, -he, occurs with the purpose of motion forms (5.3.5.2) and negated verb forms (5.3.5.1, cf. also 6.1.2.2 for the collectivizer -he on postpositions).
- **5.3.5.1.** Negated verb forms. Negated verb forms are historical developments of former de-verbal adverbializations (cf. section 7.2.1.3 for a discussion on the cases of de-verbal adverbialization with the negative suffix -la). They occur as adverbs in co-occurrences with a main verb (most commonly the copula 'be'). Intransitive stems take no personal prefixes, the prefix $i-l\emptyset$ can be analyzed as part of the historical adverbializing ambifix

i-V-*la* ((173) and (175)), and transitive stems take prefixes referring to the underlying O ((177) and (178)). The main verb thus encodes the underlying A or S.

- 173) Meku ilëmëpïla hnë nai. meku i-lëmëpï-la tnë naj monkey i?-die-Neg still Intens 'The monkey hasn't died yet.'
- 174) Kala inëlëë. ka-la inëlëlë say-Neg 3AnaphPro 'She did not speak.'
- 175) Elemila kutatëi.
 Ø-elemi-la kut-a-tëhe
 Ø?-sing-Neg 1+2-be-SapColl
 'We are not going to sing.'
- 176) Etukula nma tiïtëi emna

 ëtuku-la nma tiï-w-îtë-he emna
 have.a.meal-Neg Intens T-S_A-go-He 1+3ExclPro
 "We went without having a meal,"

'Have you still not seen these yet?'

178) Më, jelepïla nma.

më j-elepï-la nma

So 1-make.O.afraid-Neg Intens
"So, it does not scare me at all."

Following the general pattern, -he collectivizes prefixed participants other than first person singular.

- 179) Pufalo ënenelahe wai.
 pufalo ën-ene-la-he wahe
 bull 3Neg-see.O-Neg-Coll 1be
 'I do not see the bulls.'
- 180) Konoplahe kunehak Telesa. k-onopï-la-he kun-eha-kë telesa 1+2-paint.O-Neg-Coll 3S_ADistPst-be-DistPst Thereza 'Thereza did not paint all of us.'
- **5.3.5.2.** -(h)e 'Purpose of Motion.' This suffix occurs most commonly with the verbs of motion, usually $(i)t\dot{e}(mi)$ 'go and $(u)m\ddot{e}k(i)$ 'come,' to indicate the purpose or source of

motion. It occurs with both transitive and intransitive verbal stems, the former taking O prefixes for 1^{st} person, 2^{nd} person, $1+2^{nd}$ person, and 3^{rd} person (quickly exemplified in (186)), which are collectivized by -he, excepting as usual the first person. A small group of transitive verbs take an idiosyncratic third person prefix t(i)- in complementary distribution with a preverbal O (186e-h) (cf. section 5.1.3). Intransitive verbs starting with consonants present the thematic prefix i- (181) (cf. section 5.1.3 above) (The nominative pattern of the purpose of motion form is discussed in syntax).

- 181) Witėjai isiktai.
 W-itė-ja-he i-hiku-ta-he
 1S_A-go-Npst-SapAff Them-urine-PssNIntrVrblz-PurpMot
 'I am going (there) to urinate.'
- 182) Ëtï kai umëk?

 ëtï ka-he w-umëkï-Ø

 what do-PurpMot 1S_A-come-RecPst

 'In order to do what did I come here?'
- 183) Wekilima paluu enephe.
 w-e-kilima-Ø palulu enepi-he
 1S_A-Det-Leave.O-RecPst banana bring.O-MotPurp
 'I left in order to get bananas.'
- 184) Kama kahe inë tinëmëimëi.
 kama ka-he jnë ti-nëmë-jmë-he
 end.snd do-MotPurp from T-leave-Resumpt-He
 'From having finished (with their activity), they left'
- 185) Hemalëë inikhe jawainei.
 hemalëlë inikhe j-awajna-ja-he
 today sleep-PurpMot 1S₀-go.from.night.to.day-NPst-SapAff
 'Today I will sleep well.'
 (Lit.: today I will go from night to day to sleep (will sleep all night long).)
- 186) a. *ipanakmai* 'In order to listen to me.'
 b. *ëpanakmai* 'In order to listen to you.'
 c. *kupanakmai* 'In order to listen to us.'
 d. *ipanakamai* 'In order to listen to him/her/it.'
 - e. Ulu ëk-he witëjai 'I am going to eat bread' f. t-ëk-he witëjai 'I am going to eat (bread)'
 - g. malamala kap-he wïtëjai 'I am going to craft malamala seeds'
 - h. tï-kap-he wïtëjai 'I am going to craft it'

- 187) Emna tütëi eneimëhehe.
 emna t-ïtë-he Ø-ene-jmë-he-he
 1+3ExclPro T-go-He 3-see.O-Resumpt-PurpMot-Coll
 'We went in order to see them.'
- Paulu mënumëkja kupananmahehe.
 Paulu mën-umëkï-ja ku-panakma-he-he
 Paulu 3S_Acertnty-come-NPst 1+2-hear.O- PurpMot-Coll
 'Paul will come to hear us all.'
- **5.3.6.** The habitual past -(h)e. Verb stems bearing this suffix occur as main verbs in their front grade (Cf. 5.1.1). In all attested examples, the habitual past forms occur without personal prefixes. ¹¹ The habitual past -(h)e marks habitual past events apparently in the same way as the habitual past -(j)(e)mehneja (above); to this point no semantic distinctions have been found between the two suffixes (cf. section 5.3.1.2.4 for the morphosyntactic properties of forms with this suffix).
- 189) Maa lep nai tan eihe kole maa lep naj tanë ehi-he kole So Advrs Intens SpcProxLoc be-HabPst many "There used to be lots of potatoes right here."
- 190) Upak kaikui pitpë alëi iu katelu ja.
 upake kaikuhi pitpë-Ø alë-he iwu katelu ja
 long.ago jaguar skin-Pss take.O 1Pro jaguar.skin.hunter Allative
 'Long ago, I used to take jaguar skin to the jaguar skin hunters.'
- 191) Upak wajana umëkhe itu polo lëken talëna. aptau umëkï-he upake apta-wë wajana itu po-lo lëken talë-na long.ago when/if-in Wayana come-HabPst jungle on-along only NspcProxLoc-to 'A long time ago the Wayana used to come here only through the jungle.'
- 192) Kai kuni. ka-he kuni say-HabPst grandmother '(Grandma used to say.'

¹¹ Meira (1999:329) describes the cognate habitual past for Tiriyó as taking O prefixes. Unfortunately, the relevant data does not occur in the our database.

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The habitual past occurs with the copular allomorph e(h)i (also occurring with nominalizations, -(h)e 'purpose of motion,' and the permissive $-(h)i/-\mathcal{O}$) (see section 5.3.7):

193) *Eile eihe ïu.*ëjle ehi-**he** ïwu

angry be-HabPst 1Pro
'I used to be angry.'

5.3.7. The copula 'be'. The copula 'be' undergoes the same morphological processes as other verbal stem. In table 5, we show the Set I forms of the copula 'be' for the non-past, the recent past, and the remote past.

Table 5 S1 Forms of the copula 'be'

	Non-past	Recent Past	Remote Past
1	w-a-he (affirm) wa (questions)	w-eha-Ø	w-eha-ken(e)
2	manahe (affirmative) man (questions)	m-eha-Ø	m-eha-ken(e)
3	man(e) (man(u)?)	n-eha-Ø	kun-eha-k(ë)
1+2	kut-a-(h)e (affirmative) kut-a (questions)	h-eha-Ø (in frida also kuheha	h-eha-ken(e)
CII	kut-a-të(h)e~kut-a-tëw (affirmatives) kut-a-tëw (questions)	h-eha-tëw(ë)-Ø	h-eha-të-ken(e)
2CII	man-a-tëhe man-a-tëwë (questions)	m-eha-tëw(ë)-Ø	m-eha-të-ken(e)

In Table 5, we see that the distant past suffix -ken(e) occurs with SAP prefixes, and $kun-k(\ddot{e})$ occurs with third person forms and the first person exclusive emna. Examples follow.

- 194) *Itëimëla wehaken.*itë-jmë-la w-eha-kene
 go-Resumpt-Neg 1S_A-be-DistPst

 "I did not go again."
- 195) Tipije mehaken. tï-pï-je meha-kene havingAvlz-wife-havingAvlz 2S_A-be-DistPst 'You had a wife.'
- 196) Alimi kunehak molo.

 alimi kun-eha-kë molo

 monkey.sp 3DistPst-be-DistPst SpcMedLoc

 'An alimi monkey was there.'
- 197) Emna mëje emna kunehak.

 emna mëje emna kun-eha-kë
 1+3ExclPro NspcDistLoc 1+3ExclPro 3DistPst-be-DistPst
 'Far away there we stayed.'

As for the collective suffix, with the non-past forms of the copula 'be' present the most complexity: $-t\ddot{e}(h)e$ and $-t\ddot{e}u$ occur in free variation in affirmatives with $1+2^{nd}$ forms (198 and 199), and only $-t\ddot{e}u$ occurs in questions (200); for 2^{nd} person forms- $t\ddot{e}(h)e$ occurs in affirmatives (201) and $-t\ddot{e}u$ in questions (202). The Collective suffix is always $-t\ddot{e}u$ for the Recent Past and $-t\ddot{e}$ for the distant past.

- 198) Talë kutatëi helë pakolo tau.
 talë kut-a-tëhe helë pakolo ta-wë
 NspcProxLoc 1+2S_A-be-SapColl PrsntvPro house in.permanent.loc-in
 'Here we are in this house.'
- 199) Ma totike psik kutatëu.
 maa t-oti-ke phiki kut-a-tëw
 So havingAvlz-meat-havingAvlz small 1+2S_A-be-SapColl
 'So, we have a little bit of food.' (alawaka 038)
- 200) Tohme ëhehtau kutatëu? topme ëhe-tta-wë kut-a-tëw why Recpr-among-in 1+2S_A-be-SapColl 'Why are we all mixed?'
- 201) *Ïna ipok anumhak manatëi.*ina ipoke anu-mhakë mana-**tëhe**yeah good strong-ModAdvlz 2be-SapColl

 'Yeah, good, you are strong.'

202) Tala manatëu?
tala mana-tëw
how 2be-SapColl
"How have you managed (to do these things)?"

The other attested forms are e(s)i with the habitual past suffix -(h)e (section 5.3.1.2.4), with the permissive/admonitive suffix -tan(u) (section 5.3.1.2.6), with the permissive suffix $-(h)i/-\mathcal{O}$ (section 5.3.1.2.5), with the imperative suffixes (section 5.3.2.1), and with t-V-(h)e forms (section 5.3.4). The allomorph ehe occurs with the Habitual past -(j)(e)mehneja (section 5.3.1.2.4).

Examples of the t-V-(h)e form of the copula *tëweihe* were accepted in elicitation but never occurred in texts. For all examples, zero copula or one of the S1 forms in from Table 5 are used (203). Cases indicating a change of state or entering a state occurred with the copula *ëtï(lī)* 'become' (204):

- 203) Alimi kunehak molo.
 alimi kun-eha-kë molo
 monkey.sp 3DistPst-be-DistPst SpcMedLoc
 '(An) alimi was there.' (Alawaka 016)
- 204) *Ïu elamhak tëëtiïhe*.

 ïwu elamhakë t-ëtïlï-he
 1Pro fearful T-become-He
 'I became scared.'

The allomorph of the copula occurring with the purpose of motion is e(h)i.

- **5.4. Derivational Morphemes.** More than the morphemes discussed under the label 'inflection,' the morphemes described here prototypically fit the derivational category, i.e., they create new forms that inflectional morphology may attach to. These are, beginning from the most nuclear root/stem, the verbalizers (deriving a stem equivalent to

a verb root, *cf.* 5.4.1), the valence changing morphemes (the detransitivizer, *cf.* 5.4.2.1, and the various transitivizers, *cf.* 5.4.2.2), the causative (5.4.3), and the derivational aspectual suffixes (5.4.4).

5.4.1. Verbalizers. With a few exceptions (discussed below) all verbalization is a denominal process. It creates either transitive or intransitive S_O verbal stems, i.e., stems that fully participate in the morphological processes affecting these classes. No verbalizing suffix occurs with all nouns, as unpossessable nouns (4.1.1.3.1) are left out of verbalization. Most verbalizers have a strong tendency of occurring only with possessible nouns. Others, less productive, occur with only more limited sets of noun stems. Nouns derived from other speech classes, including some cases of nominalized adverbs and nominalized postpositions, are rare but do occur. There are, however, no attested cases of verbalizers with de-verbal noun forms. The suffixes presented in Table 6 below show that the great majority of verbalizers create transitive stems ('/' indicates lexically conditioning and '~' free variation).

Table 6 Verbalizing suffixes

	Transitive Verbalizers	Intransitive Verbalizers
All possessible	-ka 'PrivVrblz'	-ta 'PssNIntrVrblz'
nouns	-pa / -ma 'GiveVrblz'	
	-ptë / -mtë 'ProvideVrblz'	
Sound symbolic	<i>-ka / -ma</i> 'SndVrblz'	-lum(i) 'SndIntrVrblz'
words		
Body-parts	-kma \sim -takma \sim -tama \sim	
	-pakma 'HitVrblz'	
	<i>-tukma</i> ∼ -hapakma	
	'PressVrblz'	
A few nouns only	-p(i) 'PpNVrblz'	-pam(i) 'AttrVrblz'
	<i>-lë</i> 'TransVrblz'	-napam(ï) 'AttrVrblz'
	<i>-pë</i> 'TransVrblz'	-m(i) 'AttrVrblz'
:	-nama 'TransVrblz'	
	-nëp(ï) 'TransVrblz'	

Verbalization is closely related to possession. All possessible noun stems occur in their possessed allomorph in verbalized derivations, and the O must be a referent belonging to the class of potential possessors of the noun stem. This is made clear by the cases of specifically possessed nouns such as *ëwa* 'rope' and *kanet(i)* 'hammock string'(*cf.* 4.1.1.3.3.2) whose verbalized forms must have as the O a member of the class of their potential possessors. Exceptions to this pattern exist and are treated in the relevant sections.

As for the allomorphs of the possessible verbalized noun, they occur according to a rule as follows:

- a) Only the possessed allomorph of possessible nouns is verbalized (*cf.*4.1.1.3 for a discussion on the possessibility of all nouns and their allomorphs).
- b) Though the noun stems occur in their possessed allomorph, the overt allomorphs of the genitive suffixes are usually lost: -n(u) is lost in all contexts, -(li)

occurs in only one example with one verbalizer (see below), and -t(i) sometimes occurs and sometimes does not. The form for the noun 'hand' presents and extra final /t/ in all cases.

- c) Nouns starting with /w/ are verbalized together with their idiosyncratic third person possessive prefix a- but apparently only in the direct and 3A3O cases. The allomorphs of such nouns occur without prefixes in the other arrangements (inverse and maybe local). Though the existing data is not conclusive, some examples such as the one offered here indicate that this conclusion is correct. Two nouns, wohanë 'suffering' and (w)ok(i) 'beverage,' verbalized by the transitive -ma/-pa 'Give verbalizer,' exemplify this: ë-wohanë-ma '3A made you suffer,' i-wohanë-ma '3A made me suffer,' n-a-wohanë-ma '3A made 3O suffer,' n-a-wok-pa '3A gave 3O beverage,' m-a-wok-pa '2A gave 3O beverage.' An obvious conclusion from this is that the nouns were verbalized in their full possessed forms, and the SAP prefixes were reanalized as the pronominal verbal prefixes (as the forms in bold highlight).
 - d) Nouns referring to body-parts ending with *tpe* lose the ending.
- **5.4.1.1. Intransitive verbalizers.** All intransitive verbalizers create new verbal stems taking S_O morphology (*cf.* parsed examples below). The meaning of the five attested forms -ta, -pam(i), -napam(i), -lum(i), and -m(i) is that of the S possessing the item encoded by the nominal root, the S entering the state that is characteristic of the nominal root, or as stated by Jackson for -ta (1972:71), for S to 'perform the activity that is usual for X,' 'X' being the nominal root.

The verbalizer -ta 'possessed noun intransitive verbalizer' is the only productive intransitive verbalizer, but its occurrences are limited to the possessed allomorphs of

possessible nouns which occur without the allomorphs -n(u) and -(li) of the genitive suffix; some stems retain and some lose the allomorph -t(i) (in boldface in the second column). Only one noun ending in what seems to be a fusion with the devaluative $-tp\ddot{e}$ and its allomorphs (cf. section 4.2.1.1) occurred with -ta in the database (examples 207g and h are inherently possessed, and example 207f shows $/tt/\rightarrow$ [ht], a consonant dissimilation rule.

```
206) Isiktei.

i-hiku-ta-ja-he
1So-urine-PssNIntrVrblz-NPst-SapAff
'I am going to urinate.'
```

207)	b. c. d.	pakolo wapot pïlëu pïjai pïlasi	'house' 'fire' 'arrow' 'shaman' 'basket'	ipakolon ijaptëë iile iijasii iilasin	'his house' 'his fire' 'his arrow' 'his shaman' 'his basket'	niwaptëta niileta niijaita niilasita	'He/she has a house' 'He/she has fire' 'He has arrow' 'He/she got a shaman' 'He/she has basket'
	f. g.	ëpi	'medicine'	epit ipï t	'his medicine' 'his wife'	nepi hta nipï ta	'He/she has medicine' 'He has a wife'
	h.			ikat	'his fat'	nika ta	'He/she got fat'
	i.	kanpë	'smoked meat'	ika npii	'his smoked meat'	nika npïta	'He/she has smoked meat'
	j.	luwe	'flute'	iluwen	'his flute'	niluwe ta	'He played a flute'
	h.	siku	'urine'	isikuu	'his urine'	nisik ta	'He/she/it urinated'

The S must be the nominal equivalent of the possessor of the nominal stem, as exemplified below:

```
208) Wapot nelisiwëta.
wapoto n-elihiwë-ta-Ø
fire 3S<sub>O</sub>-smoke-PssIntrVrblz-RecPst
'There was smoke from the fire.'
(Lit.: the fire smoked)
```

209) Wewe neluwëtpëta.

weew n-eluwëtpë-ta-Ø

wood 3S_O-ashes-PssIntrVrblz-RecPst

The wood went into ashes.'

Exceptionally, a few non-possessible nouns, including a nominalized adverbial form (with -anu (4.2.2.2.2)), one adverbial stem (*maika is historically a noun that fused

with -me, the attributive adverbalizer), and one postpositional phrase (he is a desiderative postposition (6.2.3)) occur with -ta:

```
210)
        a. waluhma 'young woman'
                                                            'become a young woman'
                                              waluhmata
        b. jolok
                      'evil spirit'
                                              jolokta
                                                            'incorporate an evil spirit'
       c. maikame 'bitter'
                                              maikata
                                                            'get bitter'
211)
       jamephak
                      'happy'
                                              jamephakta
                                                            'get happy'
212)
                      'with stomach pain' →
       ahmek
                                              ahmekanta
                                                            'become nauseated'
213)
                                              tunaheta 'desireful of water'
       tuna he
                      'wanting water'
```

The verbalizer *-pam(i)* 'Attributive verbalizer' is attested with only a few nouns, all unpossessible nouns. One case with a semi-frozen de-nominal adverbial stem is also attested (216b). ¹² (*Cf.* 4.1.1.3.1 for other descriptive nouns such as *sitpili* 'ugly' and *pepta* 'big'.)

'I became ugly.'

```
215)
                     'big'
                                           peptapam(ï)
                                                           'become big'
        a. pepta
        b. waluhma 'young woman'
                                           waluhmapam(ï)
                                                           'become a young woman'
        c. imiata
                     'young man'
                                           imiatapam(ï)
                                                           'become a young man'
                     'angry'
        d. asika
                                           asikapam(ï)
                                                           'become angry'
216)
        a. muno-me 'pregnant'
        b. timnoke 'full bellied'
                                    \rightarrow
                                           m(u)nokpam(i) 'become full bellied'
```

The three other intransitive verbalizers, -napam(i), -lum(i), and -m(i), also labeled as 'Attributive verbalizers,' occur with only one noun each (cf. section 4.4.4 for a discussion of tatata 'tremble' and other sound symbolic words as nominal roots). The verbalizer -lum(i) is the only attested case of an intransitive verbalizer occurring with a sound symbolic word (all other cases take the transitive verbalizers -ma and -ka, section 5.4.1.2 below):

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¹² Jackson (1972:71) reports that forms ending with $-phak(\ddot{e})$ or $-mhak(\ddot{e})$ change their endings for the verbalizer $-pam(\ddot{i})$. The example $\ddot{i}k\ddot{i}phak$ 'lazy' vs. $\ddot{i}k\ddot{i}pam$ 'to become lazy; to become tired' was the only such form accepted by our speakers. Due to the phonologically unpredictable allomorphy of the two forms

- 217) a. tatata 'tremble'
 - b. *Etatalum*.
 ë-tatata-lumï-Ø
 2S_O-tremble-AttrbVrblz-RecPst
 'You trembled'
- 218) a. ela(h)i 'fear'
 - b. *Ëwelainapam*.
 ëw-elahi-napamï-Ø
 2S₀-fear-AttrbVrblz-RecPst
 'You got scared.'
- 219) a. ïmaminum 'my work'
 - b. *Imaminumjai*.

 "i-maminu-**m**"-ja-he

 1S₀-work-AttrbVrblz-NPst-SapAff

 'I am working.'

5.4.1.2. Transitive verbalizers. These processes create verb stems that undergo all the morphological possibilities characteristic of transitive verbs. As described above with regard to intransitive verbalizers, for possessible stems the O corresponds semantically to the possessor.

The privative verbalizer -ka indicates that the O is dispossessed of the item indicated by the noun stem (the verbalized examples are shown in the $-\emptyset$ 'Recent Past' forms in the examples below). Of the allomorphs of the genitive suffix, -n(u) and -(li) (cf. syllable reduction (in example 220d) never happens in the presence of -(li)) do not occur in the verbalized forms, and -t(i) is preserved with some nouns but not with others (220e-h). Body parts with /tpi/ lose their endings (only nouns with a distinct unpossessed allomorph are presented in the first column):

^{(/}iki/ vs. /ki/) and the additional meaning of the form with /pëmi/, we chose to consider /ikipami/ as synchronically non-derived verbal stem (cf. additional discussion in 7.1.1.3.3.).

220)	a.	malamala	'seed'	ïmalamala n	'my seed'	nimalamalaka	'3A de-seeds O'
	b.	ïmë	'farm'	ïtupi	'my farm'	nitupika	'3A de-farms O'
	c.	pïlëu	'arrow'	ïïle	'my arrow'	niile ka	'3A de-arrows O'
	d.	ëlinat	'baking plate'	jelinat uu	'my b. plate'	nelinat ka	'3A de-b. plates O
	e.			ïhpot	'my body hair'	nihpo ka	'3A shaves O'
	f.			ïkat	'my fat'	nika tka	'3A de-fats O'
	g.			jot	'my meat'	no tka	'3A de-meats O'
	h.			jumhet	'my hair'	numhe tka	'3A de-hairs O'
	i.	omo	'hand'	jamoo	'my hand'	amo tka	'3A de-hands O'
	j.	putpë		jupu tpïï	'my head'	nup ka	'3A de-heads O'
	k.	pitpë		ïpi tpïï	'his skin scale'	nipi ka	'3A skins O'

Only nouns belonging to the class of potential possessors of the noun root can occur as the O:

221) . Ka malet . Ka maletka.

ka maletï-Ø
fish lower.side.fin-Pss
'A fish's lower side fin.'

Ka maletka.

ka maletï-ka-Ø
fish lower.side.fin-PrivVrblz
'He/she/it took the lower side fin from the fish.'

*mule maletka
(He/she/it took the (fish's) lower side fin from the child)

. Etat ewaa . Etat ewaka.

Ø-etatï-Ø ewa-lï Ø-etatï-Ø ewa-ka-Ø

3-hammock-Pss rope-Pss
'Hammock's rope' 3-hammock-Pss rope-PrivVrblz-RecPst
'He/she took the rope from the hammock.'

. *wëlïi ewaka (He/she/it took a rope from the woman)

Some exeptions to the pattern described above exist, however. Some possessible nouns were not accepted with the verbalizer -ka: epe 'friend,' pakolo 'house,' and pata 'village.' This is due perhaps to the fact that to take a friend, a house, or a village from someone is an unusual occurrence. Another exception is the occurrences of a few unpossessed nouns with -ka, e.g., jolok 'evil spirit,' in nijolohka '3A took an evil spirit from O,' is acceptable if spoken by a Christian, according to a native speaker.

The verbalizer -pa/-ma, with two lexically conditioned allomorphs, is the best candidate for the semantic opposite of the privative -ka. It normally means to 'give N to O,' or to 'provide O with N.' Many examples, however, present some unexpected

semantics (see below). The allomorphy of nouns follows the general pattern (the first column presents examples of nouns with a distinct unpossessed allomorph).

```
222)
                    'manioc bread'
                                                                               'give manioc bread to O'
        a. ulu
                                   juu
                                               'my manioc bread' uupa
                                    ïmalijan
                                               'my knife'
                                                                               'give a knife to O'
        b.
                                                                   malijapa
                                    jepiïn
                                               'my stair'
                                                                   epiïpa
                                                                               'give/provide a stair to O'
        c.
                                                                   opa
        d.
                                    iot
                                               'my meat'
                                                                               'give meat to O'
        e. kanpë 'smoked meat'
                                    ïkanpïï
                                               'my smoked meat' nikanpïpa
                                                                               'give smoked meat to O'
        f.
                                    jupo
                                               'my clothing'
                                                                   nupoma
                                                                               'give clothing to O'
                                               'my farm'
                                                                               'give farm to O'
                    'farm'
                                    ïtupi
                                                                   nitupima
        g.
           ïmë
                                               'its plant'
                                                                   epïma
                                                                               'plant O'
        h.
                                    epï
```

As with the privative -*ka*, for the majority of examples the O belongs to the class of potential possessors for the verbalized noun. For inherently possessed nouns, the O is the semantic possessor of the noun stem:

- 223) . Wapot ahkoma.
 wapoto akkonu-ma-Ø
 fire fire.wood-GiveVrblz-RecPst
 'He/she placed wood in the fire'
 - * Wëlïi ahkonma
 (He/she gave the woman some firewood)
- 224) . Pilëu wipotpa.
 pilëw w-i-poti-pa-Ø
 arrow 1A3O-Them-tip-GiveVrblz-RecPst
 'I put a tip on the arrow.'
 - *Eluwa wipotpa
 (I gave the man a tip (of an arrow))

There are, however, many cases where forms bearing -ma do not relate to possession, i.e., they do not mean that the referent encoded on the nominal stem is given to O as a possession, but rather indicate that it directly affects O. In such cases, the O is not necessarily related semantically to a possessor of the noun stem. The noun euku, for instance, has two homophonous forms, one that can only be possessed by a (pro)noun referring to a male animal, when referring to 'sperm,' and another that can only be possessed by a (pro)noun referring to a plant, when referring to 'sap.' In the example

(225) below, the O is *lo* 'soil, ground' which cannot be the possessor of either form. Examples in (226) also show O's that are more patients than recipients/possessors.

```
225) Kopë lo eukuma.
kopë lo ewuku-ma-Ø
rain soil sap-GiveVrblz-RecPst
'The rain soaked the soil.'
```

```
226)
                                          'his/her/its box, container'
                                                                     nenïma
                                                                                  'to box O'
                                epetpiï
                                          'his/hers payment'
                                                                      nepetpïma 'pay back; punish O'
        c. napi 'potato (sp.)' ïnapii
                                          'my potato (sp.)'
                                                                      napima
                                                                                  'add potato to a
                                                                                  beverage.'
                                          'his/her water'
                                                                                  'Add water to make O
        d. tuna 'water'
                                itunaa
                                                                      tunama
                                                                                  thinner.'
```

A few non-possessible nouns and some nominalized adverbial forms (with -on(u)-and an(u) occur with -ma: (though $\ddot{e}hewake$ is an adverb and ewake cannot occur as a free form, ewakma is included in (227) since it is clearly the case that -ma inflects this form here):

227)	a.	ëmï	'nothing'	amï ma	'finish all O'
	b.	ëhewake	'happily'	ewak ma	'make O happy'
	c.	wohanë	'sufferring'	(a)waohanë ma	'make O suffer'
	d.	tuwalë	'knowingly'	tuwalonu ma	'make O know'
	e.	ahmek	'bothersome'	ahmekan ma	'bother O'

One unique case of -ma with a complex stem occurred in the database:

228) Jamonmëma. j-amot-më-ma-Ø 1S_A-hand-bad.smell-GiveVrblz-RecPst 'I held something smelly'

In Jackson (1972:71) we find that -ma can occur with nominalized postpositions. In his words, -ma derives verbs meaning to 'act in the relation denoted by X,' where X is a nominalized postposition.' Though we confirmed the accuracy of Jackson's data, we gathered no more additional examples, and none occurred in the texts. Thus, his examples are repeated here: të-po-no-ma-i 'put onto,' t-ëkëlë-n-ma-i 'accompany,' t-ohpo-yan-ma-i 'go above, put above.'

The difference between -pa/-ma and the verbalizer -mtë/-ptë is not a clear one. The examples suggest that the O of forms with -mtë/-ptë is more directly affected by the referent encoded by the noun stem, but -pa/-ma also presents such cases (cf. examples 285 and 286 above). In the translations, -mtë/-ptë means to 'bring N to existence in order to benefit O or to affect O' or to 'provide O with N,' this second sense being semantically close to that of -ma/-pa. The difference between the two verbalizer seems thus to be that most examples of -pa/-ma suggests a transference of possession while examples with -mtë/-ptë do not (thus, pata-mtë 'provide O with a farm' is an acceptable form, since one may benefit from a farm whether or not it is one's own, but *pata-pa/*pata-ma are not acceptable forms since nobody gives anybody their farm).

Following the general pattern, the possessed nouns occur in their possessed allomorphs. As for the allomorphs of the genitive suffix, -(li) is preserved in certain stems but lost in others (*cf. nipatamtë* in 289 and ex. 290), while -t(i) does not occur in the only relevant example attested (*eheptë* in 289). No examples of nouns ending with- $tp\ddot{e}$ occurring with this verbalizer are attested.

229)	a.	ëpïi	'stair'	jepïi n	'my stair'	epïi mtë	'Make O a stair'
,	b.	kamisa	'clothing'	ïkamisa n	'my clothing'	kamisatpë	'Dress O'
	c.	imë	'farm'	ïtupi	'my farm'	tupimtë	'provide O with farm'
	d.	pïlëu	'arow'	ïīle	'my arrow'	aleptë	'make O an arrow'
	e.	pata	'place'	ïpataa	'my place'	nipatamtë	'Place O'
	f.			enï	'its container'	enï mtë	'Make O a container'
	g.			jamole	'my shadow; image; spirit'	amoleptë	'dream O'
	h.			jehet	'my name'	ehe ptë	'Name O'

Unfortunately, there are not enough examples of specifically possessed nouns to indicate for certain whether the O must be equivalent to the possessor or not. In the example below, a specifically possessed noun co-occurs with an O that is semantically its

possessor. It is not known, however, whether or not a person (which cannot be the possessor of *ëwa* 'rope') can occur as the O here:

230) Upo ewalimtë.
upo ewa-li'-mtë-Ø
clothing rope-Pss-ProvideVrblz-RecPst
'He/she made a rope/string to tie/sow the clothing'

Some non-possessible descriptive nouns are also found with -mtë/-ptë:

231) a. jetu- 'hurt' jetu**mtë** 'hurt O'
b. akena 'alignment' akena**ptë** 'align O; direct O; organize O'
c. pī(s)i 'shame' pïsi**ptë** 'shame O'

The other transitive verbalizers are attested with only a very few nouns. The verbalizer -p(i) is attested in three nominalized postpositions: /uno-no-pi/ \rightarrow unonop(i) 'A fears O,' /he-ano-pi/ \rightarrow hanop(i) 'love O' and /ejle-ano-pi/ \rightarrow eilanop(i) 'make O angry.' The following verbalizers are each attested with only one noun stem: $-n\ddot{e}p(i)$ with epi 'his/hers/its medicine,' in epinëp(i) 'medicate/cure O'; $-p\ddot{e}$ with alu 'idiot, stupid,' in alupë 'make O crazy'; -nama with ela(h)i 'his/hers/its fear,' in elainama 'scare O'; $-l\ddot{e}$ with siku 'urine,' in siku-lë 'urinates on O' (cf. uika-lë 'make O defecate'). For convenience, the last four verbalizers are labeled as 'Transitive Verbalizers.'

5.4.1.2.1. Verbalization of sound symbolic words. Sound symbolic words (*cf.* section 4.4.4), grammatically nouns, take either of the two lexically conditioned allomorphs of the sound symbolic verbalizer: -*ka* /-*ma*. The verbalized forms are transitive stems. The forms in table 7 show that the meaning of the verbalized forms is almost always predictable from the meaning of the sound symbolic word, and the verbalizers seem to only allow the sound symbolic word to function as a verb but do not add significantly to the semantics of the stem.

Table 7
Sound symbolic word plus verbalizer

Sound symblic word		-ka
hemik 'disappear'	hemih ka	'Steal O; make O disappear'
tokpilop 'untie'	tokpilopka	'untie O'
sak 'cut'	sahka	'cut O'
pikat 'burning sensation from heat'	pikat ka	'cause a burning sensation on O'
wanpilop 'get a scare, surprised'	wanpilopka	'scare O; surprise O'
walawala 'talk; wisper'	walawalaka	'complain to O'
sololo 'drip'	soloka	'pour O'
polep 'go through'	polepka	'go through O'
		-ma
tuk 'pull'	puk ma	'pull O'
topokn 'drop in water'	topoknma	'dip O on the water'
tokn 'shoot'	tokn ma	'arrow O' (*shoot O)
kui 'scream'	kuima	'make O scream' (*scream at O)
tek 'cutucar'	tekma	'cutucar O'
tok 'hit; beat up'	tokma	'hit/beat up O'
sokolom 'paddle'	sokolo ma	'stirring liquid'
tokotok 'shake wings'	tokotokma	'make O shake wings'
lok 'pierce'	alokma	'pierce O'
kulu 'place in a hole'	kulu ma	'place O in a hole'
pulip 'peel penis'	pulih ma	'peel O's penis'
kïlïm 'move restlessly'	kïlï ma	'move restlessly, hitting O'
polep 'arrive; visit'	polehma	'Go see O; visit O'
tek 'mess with'	tek ma	'mess with O'

The following sound symbolic words were not accepted with either -ka or -ma: tumhulop 'jump,' kama 'end,' pokn 'rain,' tatata' tramble' (cf. -lum(i) above), petop 'get dark,' tohtoto 'cough,' sukululu 'mucous running from nose,' kulup 'sink,' woi 'breath,' saktikip 'cut,' sakupululu 'fall fruit,' tenteten 'throw a stick,' som 'stand up,' nama 'finish a task,' suhsu 'walk noisily,' helep 'moving head,' and pulip 'peel penis.'

5.4.1.2.2. Body-part verbalizers. These morphemes occur only with body-parts, though body-parts can occur with other verbalizers (as the ones described above). All derive transitive stems that, following the general pattern, have the O corresponding semantically to the possessor of the body part; the allomorphy of noun stems also follow the general pattern. The body-part verbalizers are *-kma*, *-takma*, *-tama*, and *-pakma* all

mean 'hit O's body-part=N stem,' all apparently non-contrastive. Examples are given below:

a. pehna	'forehead'	pehna kma	'hit O's forehead'
b. jalamata	'chin'	jalamata kma	'hit O's chin'
 c. uputpë 	'head'	uptakma	'hit O's head'
d. pïmï	'neck'	pïm takma	'hit O's neck'
e. malipa	'lower leg'	malipa takma	'hit O's lower leg'
f. wasi	'lower leg'	ewai takma	'Hit O's lower leg'
g. pana	'ear'	pana takma	'hit O's ear'
h. pupu	'foot'	puptakma	'hit O's foot'
i. omo	'hand'	amohtakma	'hit O's hand'
j.		amot pakma	'hit O's hand'
k. uputpë	'head'	up tama	'hit O's head'
	b. jalamata c. uputpë d. pïmï e. malipa f. wasi g. pana h. pupu i. omo j.	b. jalamata 'chin' c. uputpë 'head' d. pïmï 'neck' e. malipa 'lower leg' f. wasi 'lower leg' g. pana 'ear' h. pupu 'foot' i. omo 'hand' j.	b. jalamata 'chin' jalamatakma c. uputpë 'head' uptakma d. pïmï 'neck' pïmtakma e. malipa 'lower leg' malipatakma f. wasi 'lower leg' ewaitakma g. pana 'ear' panatakma h. pupu 'foot' puptakma i. omo 'hand' amohtakma j.

The verbalizers *-tukma* and *-hapakma* may mean 'press O's body-part' but occur in the database only in the examples below:

- 233) a. omo 'hand' b. omohtukma 'Press O's hand' c. omothapakma 'Press O's hand'
- **5.4.2. Valence changing morphemes.** Several morphemes may be attached to verb roots in order to lower or increase the valence of verbs. There is only one prefix lowering the valence of verbs, the detransitivizer *ët* (with allomorphs), but several increasing it, the transitivizers and the causatives.
- **5.4.2.1. The Detransitivizer** $\ddot{e}t$ -, $\ddot{e}h$ -, e-. Transitive stems are detransitivized, i.e., occur with only one nuclear participant specified, and then are marked as an S_A intransitive verb, whenever taking this detransitizing prefix. The allomorphy of the detransitivizer depends on the first segment of the verb stem, as shown in Table 8: (stems starting with a/a/ take $\ddot{e}h$ -, except for two stems which take $\ddot{e}t$ -, $ak\ddot{e}t(\ddot{i})$ 'cut' and $apk\ddot{e}l\ddot{e}$ 'break')

Table 8

The allomorphs of the detransitivizing prefix

		/_Cons	/	/a/, /e/, /	j/	//a/, /o/, /u/, /ï/, /ë/
		e-		ëh-		ët-
234)	a. kïlïma b. lama c. poka d. (u)pï	'leave O' 'turn O' 'untie O' 'bathe O'	→ → →	ekïlïma elama epoka epï	'tur 'un	n oneself; turn around' tie oneself.' the oneself'
235)	a. alë b. epa c. jeka	'take O' 'teach O' 'take O's tooth'	<i>→</i> <i>→</i>	ëhalë ëhepa ëhjeka	'tea	te oneself, go' ach oneself; learn' tract/lose one's own tooth.'
236)	a. kïlïma b. oko c. ulu d. ĭlï e. ë	'leave O' 'cut O' 'talk to O' 'make O' 'eat/bite meat'	\rightarrow \rightarrow \rightarrow \rightarrow	ekïlïma ëtoko ëtulu ëtïlï ëtë	ʻtal ʻfix	t oneself'

Illustrative examples are given below:

- 237) *Ma kutamuu nëtulu jepe,*maa ku-tamulu-Ø n-**ët**-ulu-Ø j-epe-Ø
 So 1+2-grandfather-Pss 3S_A-Det-talk.to.O-RecPst 1-friend-Pss
 'So, our grandfather has talked, my friend.'
- 238) Moloinë tëhelephe kaikui.
 molojinë t-**ëh**-elepï-he kajikuhi
 Then T-Det-make.O.afraid-He jaguar
 "Then, Jaguar got scared."
- 239) Mëlë umpoi lëken ëhmelë tëepuuhe mëlë umpoje lëken ëmelë-h të-w-e-pulu-he DemInanMed cause only all-AvIntens T-S_A-Det-sting.O-He 'Only because of that, all (people) got themselves stung.'

5.4.2.2. The transitivizers -ka, -nïp(ka), -nëp(ka), -ma, and -lë. These suffixes occur on S_O intransitive stems with the property of adding a new nuclear participant to the event described by the verb (S_A verbs cannot be transitivized). This new participant is the A of the new form, and the old S is the new O (Tavares, 1995). The distribution of these forms appears to be phonologically conditioned to some extent. There existed some

variation in the grammaticality judgements by native speakers regarding the free variation between $-n\ddot{\imath}p(\ddot{\imath}) \sim -n\ddot{\imath}pka$ and $-n\ddot{e}p(\ddot{\imath}) \sim n\ddot{e}pka$: sometimes only one allomorph was accepted with a certain stem, while sometimes both occurrences were accepted. For most forms, the free variation was the most accepted case.

The transitivizing suffix $-n\ddot{\imath}p(\ddot{\imath})$, in free variation with $-n\ddot{\imath}pka$, occurs with certain verbs and with stems derived with the verbalizer -ta (cf. section 5.4.1.1), in examples (240h-i). Most examples are of non-reducing stems.

```
240)
       a. ahalap(ï)
                       'to dry up'
                                             → ahalamnïp(ï)~ahalamnïpka
                                                                             'dry O'
       b. alilimam(ï) 'be/get black'
                                             → alilimamnïp(ï)~ alilimamnïpka 'blacken O'
                                             → apënanïp(ï)~apënanïpka
       c. apëna
                       'stop'
                                                                             'stop O'
                                             → ekaktanïp(ï)~ekaktanïpka
                                                                             'give birth to O'
       d. ekakta
                       'be born'
                       'dance'
                                             → uwanïp(ï)~uwanïpka
                                                                             'Make O dance'
       e. uwa
                       'grow'
                                             → uwantanïp(ï)~uwantanïp
       f. uwanta
                                                                             'Make O grow'
        g. awaina
                       'go from night to day' → awainanïp(ï)~awainanïpka
                                                                             'Make O go from
                                                                             night to day.'
       h. ekepta
                       'get sick'
                                             → ekeptanïp~ ekeptanïpka
                                                                             'Make O sick'
                                             → kaimotanïp~ kaimotanïpka
                                                                             'Make O get game'
       i. kaimota
                       'get game'
```

The occurrences of the transitivizing suffix -ka seem more phonologically conditioned, with almost all examples occurring with stems ending with reducing /u/ or /i/:

241)	a. (w)ïptë	'go down'	\rightarrow	(w)ïptëka	'make O go down'
,	b. etomam(ï)	'wake up'	\rightarrow	etomamka	'wake O up'
	c. enat(u)	'finish; end'	\rightarrow	enatka	'finish O'
	d. lëmëp(ï)	'die'	\rightarrow	lëmëpka	'kill O; make O die.'
	e. hmomot(i)	'boil'	\rightarrow	hmomotka	'make O boil'
	f. ukulup(ï)	'dive'	\rightarrow	ukulupka	'make O dive'
	g. utat(ï)	'be/get lost'	\rightarrow	utatka	'make O get lost'

The transitivizing suffix $-n\ddot{e}p(i)$, in free variation with $-n\ddot{e}pka$, occurs mainly with stems having a bilabial as their last consonant (but $cf. \ \ddot{e}t\ddot{i}-n\ddot{e}p$ 'dream O'); this includes forms with the intransitive verbalizers -pam(i) and -lum(i). (examples 242g-h):

242)	a.	(e)wakam(ï)	'sit down'	\rightarrow	ahalamnëp(ï)~ahalamnëpka	'sit O down'
	b.	epam(ï)	'get used.'	\rightarrow	epamnëp(ï)~epamnëpka	'tame O; make O get
						used to'
	c.	akïp(ï)	'be hard, stiff'	\rightarrow	akïmnëp(ï)~akïmnëpka	'make O hard, stiff'
	d.	jasilam(ï)	'dry up.'	\rightarrow	jasilamnëp(ï)~jasilamnëpka	'dry O'

```
e. ëmëm(ĭ) 'enter' → ëmëmnëp(ĭ)~ëmëmnëpka 'make O enter.'

f. kenkapam(ĭ) 'forget' → kenkapamnëp(ĭ)~kenkapamnëpka 'make O forget'

g. asikapam 'be/get angry' → asikapamnëp(ĭ)~asikapannëpka 'make O angry.'

→ tatalumnëp(ĭ)~tatalumnëpka 'make O tremble'
```

The verbal root *elemi* 'sing' can occur with -*ka* and -*nëp(i)*, but with different meanings:

```
243) a. elemi 'sing' → elemika 'Pray over O'
b. → eleminëp(ï) 'Sing O'
```

244) Maipuri meleminëp.
majpuli m-elemi-nëpï-Ø
tapir 2A3O-sing-Transvzr-RecPst
'You sang the 'Maipuli' (song).'

The transitivizing suffixes $-l\ddot{e}$ and -ma occur in only one example each: the S_O verb uika 'defecate' (cf. $siku-l\ddot{e}$ 'urinate on O') and the verb $\ddot{i}n\ddot{i}k(\ddot{i})$, respectively:

245) a. ĭnĭk(ĭ) 'sleep' → ïnĭkma 'make O sleep' b. uika 'defecate' → uikalë 'make O defecate'

5.4.3. The causative -po. The label 'causative' is used for -po here because the resulting construction is often interpreted as expressing causation and because it is a tradition in the Cariban literature to label cognate forms of this morpheme as such (*cf.* Jackson 1972:57, for Wayâna; Meira 1999:264; Derbyshire, 1985:224, for Hixkaryana, among others). In Wayâna, all transitive stems take the suffix -po to indicate the indirectness of A acting on O. The third element, the causee, which is marked by *ja*, is optional and does not influence the pronominal markings on the verb. In its absence, the O is preferentially understood as the one doing the action to himself (by accident or not), or in the case of inanimate O's, as undergoing an event without an external agent. The interpretation that a 'causee' exists is also possible in both cases. This ambiguous interpretation does not exist when the 'causee' is overt:

```
246)
       Eluwa wewaapo.
        eluwa w-ewalu-po-Ø
                1A3O-burn.O-Caus-RecPst
        man
        'I caused the man to get burned.'
        (I asked him to hold a hot pan)
        'I caused the man to burn himself.'
        'I caused someone (else) to burn the man.'
247)
       Eluwa wewaapo
                                           eja
        eluwa
                w-ewalu-po-Ø
                                           e-ja
                1A3O-burn.O-Caus-RecPst 3-Causee
        man
        'I caused him/her to burn the man'
        (*I caused the man to burn himself)
248)
        Pampila wewaapo.
        pampila w-ewalu-po-Ø
        paper
                 1A3O-burn.O-Caus-RecPst
        'I made the paper burn.'
        (I placed it close to the fire, and as a result it caught on fire)
        'I caused someone to burn the paper.'
249)
       Pampila wewaapo
                                         eja.
        pampila w-ewalu-po-Ø
                                         e-ja
        paper
                 1A3O-burn.O-Caus-RecPst
                                                 3-Causee
        'I caused someone to burn the paper.'
```

(*I made the paper burn)

Thus, -po mitigates the involvement of the A in the event, leaving open two possible ways of interpretation, as seen in the examples above, either the O doing the action to himself or as having it done to him by someone else other than the A. This means that a third participant is implicated, the means by which the event is accomplished, more directly involved in the event than A; this participant may be optionally mentioned.

The causative -po is not considered to be a valence increasing morpheme (cf. section 5.4.3 below) because the addition of it to the verbal stem does not formally increase the number of participants marked on the verbal word. The 'causee' is not a nuclear participant (i.e., it is not pronominally marked on the verb stem), and, as described above, it is optional. In the other two cases of valence changing processes, the detransitivization and the transitivization constructions, the resulting stem is treated as a

new form, obligatorily taking pronominal prefixes that are characteristic to intransitive or to transitive stems. In other words, stems originally taking one participant must be marked for two participants when transitivized, and stems originally taking two participants must be marked for one participant when detransitivized. The effect of the 'causative' -po on the verb word, thus, is a semantic one: it marks the indirectness with which the A acts on O. This is corroborated by the fact that events marked by -po are not necessarily interpreted as actually taking place, an indication of a low degree of control of the A over the event:

250) Mule inikmapo wëlisi ja, lome itëla.

mule iniki-ma-po wëlihi ja lome itë-la
child sleep-Transz-Caus woman Causee but go-Neg
'Someone ordered/told/sent the woman to make the child sleep, but she didn't go.'

Jackson (1972:57) reports that -po is in free variation with -nehpo. In our data, -po was always accepted, while -nehpo was mostly rejected. Two examples with -nehpo that were more systematically accepted, with the stems alima 'throw' and ili 'make,' present interesting semantics:

- a. Nalimapo.
 n-alima-po-Ø
 3A3O-throw.O-Caus-RecPst
 'He/she caused someone to throw O'
 'He/she caused someone to let O fall.'

 b. Nalimanehpo.
 n-alima-neppo-Ø
 3A3O-throw.O-Caus-RecPst
 'He/she caused someone to let O fall.'
 ('*He caused someone to throw O.')
- 252) a. Niïpo

 n-ïlï-po-Ø

 3A3O-make.O-Caus-RecPst
 'He/she caused someone to make O.'
 'He/she caused someone to have sex with O.'

 'He/she caused someone to make O.'

 'He/she caused someone to make O.'

 'He/she caused someone to make O.')

Though no other intransitive stems occur with the morpheme -po, the S_A stem ka 'speak' takes it (cf. section 5.2 for the morphosyntactic properties of ka 'say'). The verbal stem remains intransitive:

253) Wikapo eja. wï-ka-po e-ja 1Sa-speak-Caus 3-Causee 'I caused him to speak.'

In general, intransitive stems do not take the causative -po, but they take a homophonous morpheme, the necessitative -po, which indicates that an event is about to occur (cf. section 5.4.4.4). It is interesting that only the transitive stems take the causative and that only the intransitive take the necessitative. Though their semantics are not the same, it is possible that the causative and the necessitative are historically related to a single morpheme, given their synchronic complementary distribution and the fact that, in an abstract way, both refer to the deferral of an event.

5.4.4. Derivational aspectual suffixes. These four morphemes, the completive -kep(i), the perfective -nma, the resumptive necessitative -po, and the resumptive $-(j)(\vec{e})m\ddot{e}$, are all part of a single morphological category occurring in a specific verbal slot, after the applicative suffixes and before the tense suffixes in the case of Set I verbs, and before the second part of the t-V-(h)e ambifix. They do not, however, all carry the semantics of aspect; they are presented in this section under the label of aspect because they have been referred to in the literature by aspectual labels (*cf.* Jackson 1972:57) and because some of the forms do mark aspectual distinctions, although others do not. In addition, all four morphemes are optional in the sense that the verb forms can occur without them with no particular semantic implications (thus, a $-\emptyset$ suffix cannot be posited in a paradigmatic relation with them).

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¹³ Comrie (1976:3) defines aspect as the 'different ways of viewing the internal temporal constituency of a situation. Davis (1987:287) defines aspect as one's 'perspective on the periodicity of the event'. Only the completive -kep(i), focusing on the event on its endpoint, fits these definitions. The habitual past markers

5.4.4.1.The completive -*kep(i)*. This suffix is typically aspectual in that it makes explicit reference to the completion of an event, *i.e.*, it views the event from within, emphasizing the endpoint of it. Examples of the completive suffix are rare in texts; only two examples occurred in the text database. The examples below show this suffix:

254) Wipanakmakepjai. w-i-panakma-**kepï**-ja-he 1A3O-Them-listen.to.O-Compl-NPst-SapAff 'I will finish listening to it.'

255) Wëtuhkep. w-ëtuku-**kep**ï-Ø 1S_A-have.a.meal-Compl-RecPst 'I just finished eating.'

256) Wiikemne ipakolon.
w-ïlï-kepï-ne ï-pakolo-nu
1A3O-make.O-Compl-DistPst 1-house-Pss
'I finished making my house a long time ago'

257) Tëmaminumkephe. t-ëmaminumï-kepï-he T-work-Compl-He '(He/she) finished work.'

5.4.4.2. The perfective *-nma*. Following Jackson (1972:57), this suffix is labeled 'perfective' though it is not marker of perfective aspect. It occurs only with transitive verbs marking situations where the O is affected in its totality. Only one example of *-nma* is found in the texts (261). The examples below show this morpheme:

258) Mënmane ka kanpë.
m-ë-nma-ne ka kanpë
2A3O-eat.meat-Prfct-DistPst Quest smoked.meat
'Did you eat all the roast that day?'

259) Wapësinmane. w-apëhi-nma-ne 1A3O-get.O-Prfct-DistPst 'I got all of it, long ago.'

⁻he and $-(j)(\ddot{e})m\ddot{e}hneja$ mark a combination of tense and aspect. No other aspectual distinctions are formally marked in Wayâna.

- 260) Ulu wilinma. ulu w-ïlï-nma-Ø bread 1A3O-make.O-Prfct-RecPst 'I just made all the bread.'
- 261) Tawanmai. t-awa-nma-he T-dig.O-Prfct-He '(We) finish digging (it).' (plantation 006)
- 262) Tëpësinmai eja. t-ëpëhi-nma-he e-ja T-get.O-Prfct-He 3-Erg 'He/She grabbed all of it.'
- **5.4.4.3.** The resumptive $-(j)(\ddot{e})m\ddot{e}$. The term 'resumptive,' implying the re-taking up of an activity after a pause, does not accurately describe the semantics of $-(j)(\ddot{e})m\ddot{e}$. With verbs of motion, it indicates a returning to a place one has been previously (examples 163 and 164), without any implications that the going back had already begun, though this can be the case if one is addressed in the middle of one's trip (265).
- 263) Malonme emna tumëkëmëi Elamakani malë.
 malonme emna t-umëki-ëmë-he elamakani malë
 then 1+3ExclPro T-come-Resumpt-He Elamakani Inclus.with
 "Then, we came back (to the village), (me) with Elamakani."
 (After a fishing trip)
- 265) *Îtëimëjai*w-îtë-jmë-ja-he

 1S_A-go-Resumpt-NPst-SapAff
 Bona
 on-to
 'I am going back to Bona.'

 (Someone speaking from a canoe on his way to the Bona Village)

With other verbs, it indicates the repetition of a situation, not at the point it was left, but in a completely new instance, a new event with beginning, middle, and end (easily translated with the English word 'again') (examples 266-268); it may also refer, as is the case with motion verbs, to the returning of a participant to a place it has been

before (in example (269), to the hands of people). (The various allomorphs of the resumptive $-(j)(\ddot{e})m\ddot{e}$, all morphophonologically conditioned, are described in section 5.3.1.2.4)

- 267) Ulu wekejëmëjai.
 ulu w-ekeju-**ëmë**-ja-he
 manioc.bread 1A3O-make.bread-Resumpt-NPst-SapAff
 'I will bake bread again.'
- 268) Ukuhkëmëjai.
 w-ukuku-jmë-ja-he
 1A3O-try.O-Resumpt-NPst-SapAff
 "I will try it (the mask) again."
 (After he had tried it once before)
- 269) Kunanïmëmë, mëkjaa pëitopit.
 kun-anïmï-**ëmë** mëkjalë pëjitopiti 3DistPst-pick.O.up-Resumpt DemAnmMedColl kids
 'Those kids picked them (the fruits) back up.'
 (After they had rolled to the ground from another's kid's hands.)

Forms with the resumptive suffix differ from the reduplicated forms (section 5.6 below) in that they refer to one cycle of repetition, while reduplication may refer to many cycles.

5.4.4.4. The necessitative -po. This suffix presents the semantics of a near future, though it co-occurs with tense suffixes. It refers to an eminent situation whose effects or signals are already felt, as the examples below show. Jackson (1972:57) asserts that -po occurs only with verbs designating bodily functions, such as (i)nik(i) 'sleep,' sikta 'urinate,' and uika 'defecate.' While all such verbs in our database take this suffix (270-272), we find -po with other intransitive stems as well (273-276):

- 270) Tohme pa jinikpojai komela.
 topme pa j-ïniki-po-ja-he komela
 Why? Quest 1So-sleep-Necessit-NPst-SapAff
 'Why am I about to sleep?'
- 271) Ewetomampo. ëw-etomamï-po-Ø 2S₀-wake.up-Necessit-RecPst 'You almost woke up.'
- 272) *Ïwenatapojai*. "-wena-ta-po-ja-he 1S₀-vomit-PssNIntrVrblz-Necessit-NPst-SapAff 'I am about to vomit.
- 273) Ankomhak kunëtiïpo hemele. ankomhakë kun-ëtïlï-po hemele at.mid.day 3DistPst-become-Necessit already '(It was) almost noon already.'
- 274) Wëhewaapo. w-ëh-ewalu-po-Ø 1S_A-Det-burn.O-Necessit-RecPst 'I almost burned myself.'
- 275) Ikohmampola ka ne? ikopmamï-po-Ø-la ka ne i?-go.from.nigh.to.day-Necessit-Neg Quest Quest 'Hasn't it dawned yet?'
- 276) Upo nilasilampo. upo n-i-lahilamï-po-Ø cloth 3S_A-Them-dry-Necessit-RecPst 'The clothing almost dried.'
- **5.5. Noun incorporation?** Noun incoporation has been described for a some Cariban languages. Some similar process may exist in Wayâna, but they occur only marginally. The only appropriate examples are *ipanalokma* 'He/she/it pierced my ear' and *jamohlokma* 'he/she/it pierced my hand, where *-lokma* could be analyzed as a verbalizer (with the noun stems presenting the same allomorphy as with the other verbalizers). However, *alokma* 'pierced O' exists as a verb form, perhaps derived from the sound

symbolic word *lok* 'pierce' plus the verbalizer -*ma*. This matter needs futher investigation.

The only other example of incorporation found in the data is *uhpïmï* 'to tie O's forehead,' with *pïmï* 'to tie O' being a full verb form.

5.6. Reduplication. Verbs of both Set I and t-V-(h)e undergo either of the two existing types of reduplication: reduplication at the left edge of the verbal word or reduplication inside the root (*cf.* section 2.3.7). The first type of reduplication indicates continuous repetition of a situation. Depending on the semantics of the verb, the situation necessarily presents a significant pause between the different cycles of it (perhaps durative verbs (277-281)), which can be interpreted in some cases with the non-past tense as habitual (282), or indicating iterativity (perhaps with iterative/punctual verbs (283-284). Some cases of lexicalization were also attested with left-edge reduplication (285).

277) Jinijinikjahe psik.
jini-j-iniki-ja-he phiki
Red2-1S_O-sleep-NPst-SapAff a.few
'I will spend a few days there.'
(*I'm continuously sleeping)

'It has boiled several times.'

279) Titetitei.

tite-t-ite-he

Red2-T-go-He

'He/she/it is going, stopping, going, stopping...'

(*Continuously going, without stopping)

280) Mule nuikanuika.

mule nujka-n-ujka-Ø

mule Red1-3So-defecate-RecPst

'A child (with diarrhea) defecated here, stopped, defecated there again, then stopped, then again...' (*continuously defecating, without stopping).

281) Wëhawëhamo.

wëhë-w-ëh-amo-Ø

Red1-2S_A-Det-cry.O-RecPst

'I cried and I stopped, I cried and I stopped, I cried...'

282) Wëmëwëmëmjai.

wëmë-w-ëmëmï-ja-he

Red1-1S_A-enter-NPst-SapAff

'I always enter.'

283) Tëëtutëëtumihe.

puli, puli,

puli,

tëëtu-t-w-ët-umi-he

puli

puli

puli

Red1-T-S_A-Det-massage.O-He massage.snd

massage.snd massage.snd

jempatak

huwaa,

j-empata-kë

huwalë

1-in.front.of-into as.such

"He masturbated himself, massage, massage, massage, he went in front of me, like this."

284) Mesa uhmouhmo.

mesa upmo-w-upmo-Ø

table Red1-1A3O-hit.O-RecPst

'I was hitting the table.'

285) Wapëwapëhjai.

wapë-w-apëhi-ja-he

Red1-1A3O-grab.O-NPst-SapAff

'I will fight him/her.'

Root internal reduplication is attested with only a few roots. In all attested cases,

it denotes some interativity or intensity (examples are repeated from chapter 2, section

2.3.7.2):

286) Wipkëlëkëlë.

w-i-pïkëlë-këlë-Ø

1A3O-Them-break/cut.O-Red4-RecPst

'I cut it in small pieces; I made several small incisions on it; I broke it in small pieces.'

287) Wapkëlëkëlë.

w-apkëlë-këlë-Ø

1A3O-Them-break.O-Red4-RecPst

'I broke it in small pieces.'

288) Wiwiwipka.

w-i-wï-wïpka-Ø

1A3O-Them-scratch.O-Red5-RecPst

'I scratched someone else continuously'

- 289) Këlelepjahe nma.
 k-ëlepï-le-ja-he nma
 1A2O-make.O.afraid-Red5-NPst-SapAff Intens
 'You are really scaring me.'
- 290) Wimulilikma. w-i-mulikma-li-Ø 1A3O-Them-make.O-Red5-RecPst 'I made it really uneven.'

As not all verbal stem were accepted with a reduplicated form (e.g., *wekewekejai (I am making and making bread), *Ïtaïtatalum (I trembled and trembled)), a more complete description of the scope of reduplication in the Wayâna lexicon is in order.

6.1.2.2. The collective suffix -he. The collective suffix-he occurs with most postpositions (see exceptions below). It behaves in a pattern similar to that of nominal collectives (4.1.2), in that it cannot collectivize the first person singular prefix or full nominal objects, but only 2nd, 1+2nd, and 3rd person object prefixes. The collective form for first person is constructed on the 1+2 prefix (examples (91) and (94)) plus -he. Collective nominal objects take nominal collective suffixes (97-98). (*Cf.* section 5.3.5 for the occurrences of -he on gerundive forms.)

92)

ëmalëhe ë-malë-**he**

2-also-PColl

'also you all'

- 91) kupëkëhe
 ku-pëkë-he
 1+2-busy.with-PColl
 'busy with us all'
- 93) ipëkëhe i-pëkë-he shusy.with-PColl shusy with them' 94) Këpojehe k-ëpo-je-he l+2-above-away-PColl 'above us all'
- 95) epojehe
 Ø-epo-je-he
 3-above-away-PColl
 'above them all'

joloko amëjipa-topo-Ø të-ja-he evil.spirit call-CircmstNmlz-Pss 3Refl-OblAgt-PColl '(in order) to call the evil spirit (to come) to themselves.'

- 97) Kunumusitom ekatau. kunumuhi-tomo ekata-wë old.woman-Coll in.area.nearby-in 'nearby the old women'
- 98) Sinkom jau
 hinï-komo ja-wë
 DemInanProx-Coll inside.of-in
 'inside these'

The collective suffix also modifies the reciprocal prefix:

99) Ëtunohe man tot
ët-uno-he mane toto
Recpr-afraid.of-PColl 3be 3Coll
'They were all afraid of each other.'

100) *ëhekatawëhe*ëhe-ekata-wë-**he**Recpr-in.area.nearby-in-PColl
'all nearby one another'

In the relative order of morphemes, -he occurs after the spatial suffixes (101-106), but before the negative -la (107-108). Unfortunately, no examples of the spatial suffixes followed by both -he and the negative -la are found in the database.

101) kuloptawëhe 102) imkahpojehe ku-lopta-wë-he i-mikappo-je-he 1+2-deep.inside-in-PColl 3-behind-away-PColl 'deep inside of us all' 'behind them all' 103) ekatakëhe 104) eponahe e-po-na-he Ø-ekata-kë-he 3-on-to-PColl 3-in.area.nearby-into-PColl 'onto all of them' 'to their side' 105) 106) istailëhe kupolohe i-tta-jlë-he ku-po-lo-he 3-among-through-PColl 1+2-on-along-PColl 'through the middle of them all' '(moving) on over all of us' 107) 108) ëhehela kupëkëhela ku-pëkë-he-la ë-he-he-la 1+2-busy.with-PColl-Neg 2-Des-PColl-Neg 'not busy with all of us' 'not wanting all of you'

Some postpositions may not take the collective suffix. These are postpositions taking only nominal objects (na 'in boundless location,' hja/hna 'in the sun,' ta 'in permanent location,' and kwata 'in a port'), postpositions taking only a third person prefix or a nominal object which occur in the data only with an object referring to a singular location (lamna 'in the center of,' ahmota 'in the area beside'; in between,' k(u)wa 'in water,' aktuhpo 'up river of; north of,' and ameta 'down the river of; south of'), and, as expected, the objectless postposition talihna 'in the open'. Other

postpositions for which the collective morpheme is not attested are walë 'Uncertainty,' ke 'Instrumental; Source,' wantë 'by one's will,' walë 'Uncertainty,' m(i)ta 'in the mouth of'.

6.2. Formal and semantic classes. The suffixal morphology, in particular the spatial suffixes, separates postpositions into two different classes: the spatial postpositions, with three formal sub-classes, and the non-spatial postpositions, with three semantic subclasses. The members of each class are shown in Table 7: 13

¹² The labels for two non-spatial sub-classes, relational and experiencer, are borrowed from Meira (1999).

¹³ Two additional attested forms may turn out to be postpositions, *mna* 'outside,' *emta* 'reciprocal'. The only existing examples do not suffice for their classification: *pakolo mnau* 'outside the house'; *eile ëhemtak tot* 'They are angry with each other,' *tëkëtse ëhemtak* 'They cut one another'.

Table 7
Classes of Postpositions

	SPATIAL POSTPOSITIONS									
	Container		Surface	Away						
(j)a	'inside of'	po/mo	'on supported'	epo	'above'					
Ta	'in permanent loc.'	ahpo	'on back of'	aktuhpo	'north of'					
Na	'in boundless loc'	pëk(ë)	'on unsupported'	ameta	'south of'					
hja/hna	'in the sun'	opinë	'under'	m(ï)kahpo	'behind'					
k(u)wa	'in water'	uhpo	'on top of'	_						
hta	'among'	uwap(o)	'ahead of'							
lopta	'deep inside of'	ë/etap(o)	'on hammock of'							
empata	'in front of'									
ekata	'in (area) nearby'									
ahmota	'in between; in area beside of'									
walipta	'in (area) behind'									
lamna	'in the center of'	·								
ena	'in the middle of (supported)'									
mita	'hidden in the (area) of'			ļ						
kwata	'in a port'									
M(ï)ta	'in the mouth of'	İ		[
pehna	'in (area of) forehead of'									
pata	'in place of'									
(w)apta	'when/if'									
talïhna	'in the open'									

NON-SPATIAL POSTOSITIONS

Relational			
opikai	'under'	kuptëlë	'following'
pole	'towards'	pune	'fitting; suitable'
wala	'around'	katïp(ï)	'like'
ina	'adjacent; belonging'	kuptë	'each'
akëlë	Comitative 'with'	mna	'without'
malë	Inclusive 'with'		
Experiencer			
eile	'angry at'	he	'Desiderative'
pïnwë	'caring for'	uno	'afraid of'
uwalë	'knowing of'	wake	'wary of; being against'
Grammatical (non lexical)			
ja	'Dative; Ergative; Causee; etc.'	wantë	'by one's will'
ke	'Instrument; Source'	walë	'Uncertainty'
umpoj(e)	'Cause'		·

Semantics appears sometimes to not correlate completely with this classification as some forms have complex meanings. The postpositions *ina* 'adjacent; belonging' and *wala* 'around,' for instance, are concept postpositions with a spatial sense though not bearing the morphology typical of spatial postpositions.

6.2.1. Spatial postpositions. The great majority of Wayâna's postpositions belong to this class. As already discussed above, they are formally divided into three sub-classes: i) container postpositions (the trajector is within the landmark; ii) surface postpositions (the trajector is in contact with the surface of the landmark), and iii) away postpositions (the trajector is away from the landmark).

The semantics of the base is the main triggering factor for the occurrence of the different spatial suffixes. The semantics of the root are clearly shown in nominalizations, where the spatial suffixes do not occur and therefore cannot add to the semantics of the root. This test is not relevant for away postpositions since their nominalized forms take the spatial suffix -j(e) 'away' (see examples (90 a-d\) above).

109) tuna kwalii 110) ona pono
tuna kuwa-lili ona po-no
water in.water-PtNmlz field on.supported-PtNmlz
'one in the water' 'one on the field'

As expected, the semantics of the postpostional root determines the type of object taken by the postposition. The degree of specificity varies, as some postpositions may take the same object, but profiling different parts of it (pakolo tau 'in the house,' pakolo pëk 'on the (walls) of the house,' pakolo po 'on (top of) the house'), and some may take only certain objects, as is the case of kuwa 'in water,' whose object must be a noun referring to 'water' or hja 'in the sun' whose object must be sisi 'sun'. Of course, some degree of conceptualization with regard to the nature of the object exists, as for instance, itu 'jungle' is seen as a complex object and thus can occur as the object of hta 'among' (itu htaliï 'one in the jungle (Lit.: 'one among the jungle').

The selection of the morphological form of the object, whether it is a prefix or a (pro)noun, as well as the person of the object, is by and large determined by the

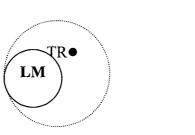
semantics of the postpositional root. These properties are discussed for each postposition in the following sections.

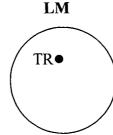
6.2.1.1. 'Container' postpositions. Besides presenting some phonological similarities, all ending in a sequence of a consonant plus /a/, members of this class of postpositions take spatial suffixes (6.1.2.1) and a unique allomorph of the participant nominalizer (-li(li)) (4.2.2.2.1).

The container postpositions may be placed into two main semantic classes (without formal correlates). The first has members expressing situations in which trajectors are located within a landmark encoded by the postpositional object: (j)a 'inside of,' lopta 'deep inside of,' hta 'among,' na 'in boundless location,' hja/hna 'in the sun,' k(u)wa 'in water,' m(i)ta 'in the mouth of,' ta 'in a permanent location,' and , kwata 'in a port'. The second class has members expressing situations in which the trajector is located somewhere within the spatial sphere of the landmark, i.e. somewhere 'in the area' of the landmark, which may indicate contact with it or not, but not within it: mita 'hidden in the area of,' ekata 'nearby,' empata 'in front of,' walipta 'in the area behind,' ahmota 'in between; in the area beside,' lamna 'in the area of a flat surface,' pehna 'in the area of the forehead of,' pata 'in the place of,' ena 'in the middle of (supported); in the lap'. 14

Thus, in the first class, the trajector is inside the landmark, in the second class it is not. Figure 3 schematizes this:

¹⁴ The morpheme (w)apta 'when; if' is not counted here since it refers to a location in time. See section 6.4.1 for a discussion on this form. The postposition talihna 'in the open' stands in a class of its own since it does not take objects.





Semantic classes of container postpostions

Figure 3

In addition to these two features, each container postposition profiles specific semantics of the objects.

The object of the postposition (j)a 'inside of' refers to a homogeneous, usually three dimensional object, which may or may not have well-defined boundaries. It need not be the case that the trajector is totally surrounded by or immersed in the landmark; it may be only partially so. Thus, in (111) the trajector is only partially inside the container, while in (115) the trajector is more like a incision on the surface of the landmark (in example (51), above, it is a crack in a cup). This postposition is the container postposition occurring with the greatest number of objects, hence its generic gloss. (a is an allomorph of the postposition (j)a (cf. 6.4.1.))

- 111) Kasa sakola jau.

 kasa sakola ja-wë
 box bag inside.of-in
 'The box is inside the bag'
- 112) Manale jau, ulu.
 manale ja-wë ulu
 sieve inside.of-in bread
 'The bread is inside the sieve.'
- 113) Tiikë taun jak.
 t-ïlï-kë tawunu ja-kë
 Them-make-Imp wind inside.of-into
 'Place it into the wind.'

- 114) Ulu kopë jau.

 ulu kopë ja-wë

 bread rain inside.of-in

 '(The/a) bread (is) in the rain.'
- 115) Upak tokoi ailë. ëtï їририи pena hnë ïu luwe ja upake t-oko-he ëtï ïwu a-ilë pena tnë luwe ï-pupu-lï ja early T-cut.O-He what Hesitative else 1Pro bamboo Erg 1-foot-Pss inside-through. 'Earlier, something else, bamboo, had cut me on my foot.'

Other postpositions with objects referring to a homogenous landmark take a more restricted class of objects. The postposition k(u)wa 'in water' takes objects that must refer to water: the word for 'water' itself or river names. Other liquids such as different types of beverages are followed by ja, discussed above.

- 116) Mënilëmëpja tuna kwau.

 mën-i-lëmëpï-ja tuna kuwa-wë
 3certnty-Them-die-NPst water in.water-in
 'He is definetly going to die in the water.' (Îmë 036)
- 117) Amat kwalii, ka.
 amati kuwa-lili ka
 river.branch in.water-PtNmlz fish
 '(A) fish (is) a river branch creature.'
- 118) Palu kwak kuntëm.
 palu kuwa-kë kun-tëmï
 Paru.River in.water-into 3DistPst-go
 '(He/She/it) went into the Palu River.'

The postposition *hja/hna* 'in the sun' takes only 'sun' as its object, to our knowledge. The different allomorphs may reflect a dialectal variation, as *hja* is the most frequent form in the database.

119) Malonme jamï tiïtëk, sisi malonme j-amï-Ø t-ïlï-të-kë hihi then 1-blanket-Pss Them-place.O-SapColl-ProxImp sun

> hjak, pëitopiti. hja-kë pëjitopiti in.sun-into children

'Then, place my blanket in the sun, my children.' (Jolokod 650)

120) Tikaptohme, sisi hnak tiïhe.

ti-kapĭ-topo-me hihi tna-kë t-ïlĭ-he
Them-hand.craft-CircmstNmlz-Attrb sun in.sun-into T-make.O-He
'In order to handcraft, (we) put (it) into the sun.' (Malamala 009).

The only objects attested with the postposition *na* 'in boundless location' are *kapu* 'sky,' *ëmuni* 'darkness,' *tupi* 'farm' and *pita* 'the place under the eaves of a house'. It is not clear precisely what feature of the object this postposition profiles. Given the data, the most likely possibility is that it refers to objects encoding a location without clear boundaries.

- 121) Kapu nak ëhanakuu he lep tot. kapu na-kë Ø-ëh-anaku-Ø-lï he lep toto sky in.boundless.loc-into 3-put.up.above-SpcEvntNmlz-Pss Des Advrs 3Coll 'They wanted to go up to the sky.' (Stair 004)
- 122) Ëmuni nau wëtiijai.
 ëmuni na-wë w-ëtili-ja-he
 darkness in.boundless.loc-in 1S_A-become-NPst-SapAff
 'I will be in the darkness.'
- 123) *İtupi nau, kasili.*"-tupi-Ø **na-**wë kahili

 1-farm-Pss in.boundless.loc-in manioc.sp

 'In my far, (there is) kasili (a species of manioc).'
- 124) Pakolo pita nau.
 pakolo pita-Ø na-wë
 house place.under.eaves.of.house-Pss in.boundless.loc-in
 '(It is) in (the) the place under the eaves of a house.'

The postposition *ta* 'in permanent location' takes an object that is typically a permanent location, usually created by humans: houses and buildings, a pathway, a baby carrier net, the edge of a river, *etc*.

- 125) Ma emna tumëkëmëi pakolo tak.
 maa emna t-umëkï-ëmë-he pakolo ta-kë
 So 1+3ExclPro T-come-Resumpt-He house in.permanent.loc-into
 'Well, we came back to (the) house.' (Ïmë 041)
- Wipanakmane imumkuu hospital tau iwaptau.
 w-i-panakma-ne i-mumuku-li hospital ta-wë i-wapta-wë
 1A3O-3-listen-DistPst 1-woman's.son-Pss hospital in.permanent.loc-in 1-when-in
 'I heard my son when I (was) at the hospital.' (Alvina 046)

- 127) Emna tumëkëmëi, monna ëhema tak.
 emna t-umeky-ëmë-he mono-na ëhema ta-kë
 1+3ExclPro T-come-Resumpt-He SpcDistLoc-To trail in.permanent.loc-into
 'We came back there far to the path.' (Ekëi, 084)
- 128) Mule man ëwa tau.

 mule mane ëwa ta-wë

 child 3be net in.permanent.loc-in

 '(The/a) child is in the baby carrier net.'
- 129) Tuna etpii tau, mëklëë mënëtanimja.
 tuna etpili-Ø ta-wë mëklëlë mën-ët-animi-ja
 water edge-Pss in.permanent.loc-in DemAnmMed 3certnty-Det-take-NPst
 'At the edge of the water, he is taking himself (out of the water). (Kaikui2 075)

With a very restricted distribution, *kwata* 'in a port' takes only *tuna* 'water' as its object. It indicates a location used by a particular family as the port for the anchoring of canoes and for the carrying out of house chores.

- 130) Malonme tumëkëmëi iu tuna kwatak.
 malonme t-umëki-ëmë-he iwu tuna kwata-kë
 then T-come-Non-compl-He 1Pro water in.port-into
 'Then, I came back to the port.' (Imë 019)
- Sapotoli man tuna kwatau.
 sapotoli mane tuna kwata-wë
 Sapotoli 3be water in.port-in
 'Sapotoli is in (the) port.'

The postposition m(i)ta in the mouth of, as indicated in its gloss, takes only objects referring to an entity with a mouth.¹⁵

ipehnaa ipehnalii i-petna-liii i-petna-liiii

3-forehead-Pss 3-in.area.of.forehead.of-PtNmlz

'his/her/its forehead' 'his mask; his bandana (i.e., object in the area of one's forehead)'

imtaa imtalï i-mïta-lïlï

3-mouth-PtNmlz

¹⁵ It is not known whether or not roots denoting body parts other than *mita* 'mouth; in the mouth' and *pehna* 'forehead; in the area of forehead' (see below) may take both nominal and spatial postpositional morphology. These forms are considered as postpositions because they present all morphological properties of a container postposition including the nominalizer -li(li). In Hixkaryana (Derbyshire, 1985:210) this is the case for most body part items, though -li is considered as the possessive suffix in the postpositional cases. In Wayâna this is clearly not the case, since the possessive -li and the nominalizer -li(li) are phonemically and semantically distinct:

- 132) Eluwa mitau, tami.
 eluwa mita-wë tami
 man in.mouth.of cigarette
 '(Th/a) cigarette (is) in (the/a) man's mouth.' (Figure. 39)
- 133) Imtau, kaikui oti.
 i-mïta-wë kaikuhi oti
 i-in.mouth.of-in dog meat
 '(The) dog's meat is in his mouth.'

The postposition *lopta* 'deep inside of' takes many of the same objects taken by the postpositions discussed above (objects, locations, humans, *etc.*). The object's referent must, however, be able to function as a container in which an entity is deeply located, made invisible by being totally surrounded by it ('sieve,' 'house,' 'cup,' 'hammock' or 'sun' for instance, cannot occur as the object of *lopta*).

- 134) Eluwa nitëm tuna loptailë.
 eluwa n-ïtëm-Ø tuna lopta-jlë
 man 3S_A-go-RecPst water deep.inside-through
 'The man went deep inside the water'
- 135) Haku loptau.
 haku lopta-wë
 sack deep.inside-in
 '(It's) deep inside the bag.'
- 136) Tawake tëëtiihe iu iloptau.
 tawake të-w-ëtili-he iwu i-lopta-wë
 happy T-S_A-become-He 1Pro 1-deep.inside-in
 'I got very happy deep inside of me.' (Alawaka 040)
- 137) Wajana omii loptailë.
 wajana womilï-Ø lopta-ilë
 Wayâna language-Pss deep.insidep-through
 'deep inside through the language of the Wayâna.'

Complex objects, composed of many parts or of a group of individuals, are followed by the postposition *hta* 'among'. Forms bearing personal prefixes, with the exception of the first person prefix, occur collectivized (147). Nouns referring to objects made of several parts occur only in their non-collectivized form in the database (138-

'his/her/its mouth' 'what is in one's mouth'

- 143); other nouns may be collectivized or not (144-146), with the precise conditioning factors being unknown. It interesting that some referents are conceptualized as having several components (such as *itu* 'jungle,' *wapot* 'fire,' *ewalu* 'dark,' *etc*.)
- 138) Wapot ahkonu htau, ëkëi. wapot akkonu tta-wë ëkahi wapoto firewood among-in snake '(The/a) snake (was) in the firewood.'
- 139) Ai, alika opinë, mëklëë ëkëi, tan ai alika opinë-Ø mëklëlë ëkëhi tanë Then worm.sp under-on DemAnmMed snake SpcProxLoc

huwaa ëti pena malalija psiki htau.
huwalë ëti pena malalija phiki tta-wë
as.such what Hesitative tree.sp small among-in
'Then, under the worm (i.e., under the nuts that contain the alika worm), that snake (was), right here, among the (leaves of the) malalia (tree).' (Ëkëi 022)

- 140) Wajapi htau wehaken. wajapi tta-wë w-eha-kene Wajapi among-in 1S_A-be-DistPst 'I was among the Wajapi (people).'
- 141) Malonme mëlëanumalë mëkjaa üpëinom malonme mëlëanumalë mëkjalë ï-pëj-Ø-nomo then the.next.day DemAnmMedColl 1-child-Pss-Coll

kuntëm itu htak ulakanumhe. kun-tëmï itu tta-kë ulakanumï-he 3DistPst-go jungle among-into hunt/fish-PurpMot 'Then, on the next day, my children went to the jungle to hunt.' (Alawaka 006)

- Munët wapoto htau neha.
 munëtë wapoto tta-wë n-eha-Ø
 scorpion fire among-in 3SA-be-RecPst
 '(A) scorpion was in (the) fire.'
- 143) Tëhalëi tot ewalunu htak elamna.
 t-ëh-alë-he toto ewalunu tta-kë ela-mna
 T-Det-take-He 3Coll dark among-into fear-without
 'They went into the dark without fear.' (Jolokoa 043)
- 144) Kaikuitomo htau, kunumusi kunehak. kaikuhi-tomo tta-wë kunumuhi kun-eha-kë dog-Coll among-in old.woman 3DistPst-be-DistPst 'The old lady was among the dogs.'

- 145) *İtëk nai wëlihamo htak*! itëkë naj wëlihi-amo tta-kë go-Imp Intens woman-coll among-into 'Go to (be) among the women!'
- 146) Wewe man "p" htau.

 wewe mane "p" tta-wë
 tree 3be mountain among-in

 '(The) tree is among the mountain(s).'
- 147) Kalipono kuhtawëhe kunehak. kalipono ku-tta-wë-he kun-eha-kë enemy 1+2-among-in-PColl 3DistPst-be-DistPst 'The enemy was among us.'

The postposition *hta* also marks eventive de-verbal nominalizations with the suffix -Ø 'Specific event,' most frequently, and also with -në 'Generic Event' in reference to time.

- 148) Ta mike pa ëwot elepili htau?
 ta mi'-ka-ja pa ëw-oti'-Ø elepi'-Ø-li' tta-wë
 what 2SA-do-NPst Quest 2 -meat-Pss make.afraid-SpcEvntNmlz-Pss at-in
 'What do you do when scaring your meat (i.e., your game) away?' (Iguana 028, 029).
- 149) Malonme, imë ukali htau, tiitëi malonme imë uka-Ø-li tta-wë ti-w-itë-he then farm set.O.on.fire-SpcEvntNmlz-Pss at-in T-S_A-go-He

Sulalapana imë lamnak.
sulalapana imë lamna-kë
sulalapana farm in.center.of-into
'Then, at the moment the farm was set on fire, Sulalapana went to the middle of the farm'
(Sulalapana 088).

Malonme, tëwelamai Tih kanë htau imnenot.
malonme të-w-e-lama-he tih ka-në tta-wë i-mynenoti-Ø
then T-S_A-Det-turn.O-He alone do-GenEvntNmlz at-in 3-mother.in.law-Pss
'The, (he) came back at his mother-in-law being alone' (Sulalapana 038).

The postposition *ena* marks a relation in which a referent is in the middle of another and supported by it, being away from the ground. In all clear cases, it takes human objects and is translated as 'in one's lap'. In one other example from the database, when occurring with *ipi* 'mountain,' *ena* seems to have fused together with the reciprocal prefix while maintaining (as far as one can tell) the reciprocal meaning. In an interesting

way, it takes 'mountain' as the postpositional object, instead of the reciprocal prefix, a configuration that is not attested anywhere else. One other interesting example is (153), used to refer to two people sharing a hammock, in this case with the reciprocal as the object (thus, $\ddot{e}tat(\ddot{i})$ 'hammock' is another potential object for *ena*).

- 151) Malonme, tënepëmëi tënau eja.
 malonme t-ënepï-ëmë-he t-ëna-wë e-ja
 then T-bring-Resumpt-He 3Refl-in.middle.of.supported-in 3-Erg
 'Then, (he) brought (her) in his own lap.' (Snake 100)
- Wewe man "ip" ëhenau.

 wewe mane "ip" ëh-ena-wë
 tree 3be mountain Recpr-in.the.middle.of.supported-in

 'Trees are (all) on the side of the mountain'.
- 153) Ehenau man tot.

 ëh-ena-wë mane toto

 Recpr-in.middle.of.supported-in 3be 3Coll

 'They are side by side in the middle of (it)'

The postposition *walipta* 'in the area behind' designates a location in the space at the back of an object, either in contact with it (154) or not (155). The referent located in this area (a person, an object, a geographic location, *etc.*) may be visible or not. All occurrences of this postposition in the database come from elicitation.

- 154) Epii pakolo waliptau.

 epij pakolo walipta-wë
 stair house in.area.behind-in

 '(The) stair is behind the house.' (The stair is leaning on the wall of the house) (Figure 58)
- 155) Mësin wïwï ïwaliptau.

 mëhinï wïwï ï-walipta-wë

 DemInanProx ax 1- in.area.behind-in

 'Here (is the) ax, behind me.' (The ax is on the ground.)
- 156) *lpi* waliptau tuna pëtukuu pepta.

 rpi walipta-wë tuna pëtukulu pepta
 mountain in.area.behind.-in water beautiful big

 Behind (the) mountain, (the) water (is) beautiful, a big one.

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¹⁶ The variant walikta has been attested in the speech of Renato, a Wayâna speaker living in Suwisuwimïn.

- 157) Pakolo waliptau, epï.
 pakolo walipta-wë epï
 house in.area.behind-in tree
 '(The) tree (is) behind (the) house'
- 158) Iwaliktau man pakolo weju.
 i-walikta-wë mane pakolo weju
 3-in.area.behind-in 3be house light
 '(The) light (bulb) is behind it.' (Figure 50)

The postposition *mita* 'hidden in the area of' signifies that there is an invisible referent located in the area contiguous to the object. In other words, it does not express where in the sphere of object the referent is located (under, behind, beside, *etc.*), but that it is hidden somewhere in that area. One curious exception to this is shown in examples with *wapot* 'fire,' showing a visible referent (162).¹⁷

- 159) *Imitau* nëtonam.

 i'-mita-wë n-ët-onami-Ø

 l-hidden.in.area.of-in 3S_A-Det-bury-RecPst

 (He/she/it) hid itself (behind) me'

 (Lit.: He/She burried him/herself hidden in me)
- 160) Pampila mitau.
 pampila mita-wë
 paper hidden.in.area.of-in
 '(It is) hidden in (the) paper'
- 161) Apukuita kanawa mitau.

 apukujita kanawa mita-wë
 paddle canoe hidden.in.area.of-in

 '(The) paddle (is) hidden behind (the) canoe.'
- eluwa wapot mitau.
 eluwa wapoto mita-wë
 man fire by?-in
 'The man is by the fire.'
 (Figure 38)

The location of referents anywhere close to the object (which can refer to people, things, places, *etc.*) without the specification of front, back, *etc.* is expressed by *ekata* 'in an area nearby'.

- 163) Putoputoli lampata ekatau.
 putoputoli lampata ekata-wë
 nail light.bulb in.area.nearby-in
 '(The) hook is nearby the lamp.' (Figure 50)
- Malonme, kawë inë nai toma tëëtuhmoi apsikila Siluluhma ekatak.
 malonme kawë jnë naj toma të-w-ëtupmo-he aphiki-la hilulupma ekata-kë
 then high Source Intens Verit T-S_A-fall-He small-Neg Silulupma in.area.nearby-into
 'Then, from high above, it fell, real big, nearby Siluluhma.' (Kaikui 2015)
- 165) Numëkëmë nai jekatak. n-umëkï-ëmë-Ø naj j-**ekata**-kë 3S_A-come-Resmpt-RecPst Intens 1-in.area.nearby-into '(He/She) came close to me.'
- 166) Ëutë ekatau ïu.

 ëwtë ekata-wë ïwu

 village in.area.nearby-in 1Pro

 'I (was) nearby (the) village.'
- 167) Ekatalülütom.
 Ø-ekata-lülü-tomo
 3-in.area.nearby-PtNmlz-Coll
 'one's neighbors'

The postposition *empata* 'in front of' is used for expressing the placement of a referent in front of an object. In all the existing examples *empata* takes animate objects:

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- 168) Mësin hapa pëtukuu jempatak.
 mëhini hapa pëtukulu j-empata-kë
 DemInanProx machete beautiful 1-front.of-into
 'This machete (placed) in front of me is good.'
- 169) Som nïka Anakali empatau. som nï-ka-Ø anakali empata-wë stand.up.snd 3S_A-do-RecPst Anakali in.front.of-in 'He/She stood up in front of Anakali.'
- 170) Meku empatau.
 meku empata-wë
 monkey empata-into
 'in front of the monkey'

¹⁷ Two other consultants used *ekata* 'in nearby' to describe Figure 38.

¹⁸ This postposition is derived historically from *emī* 'face' (*cf.* section 6.4.4). Thus, it is possible that this postpostion only follows objects with a face.

The postposition *lamna* 'in the center of' expresses the location of a referent at a central position in relation to the object. Though this postposition seems historically derived from *lami* 'belly' plus *na* 'in boundless location,' it may take objects other than those possessed of a surface. With nouns encoding places or surfaces (*imë* 'farm,' *pista* 'airstrip,' *itu* 'jungle,' *tuna* 'water,' *etc.*), it means that a referent is located in the center of the object (171-174). With other nouns, it is translated as 'in between,' which is still compatible with the gloss 'in the center of' (examples 175-178).

- 171) Inëlëë tütëi imë lamnak.
 inëlëlë ti-w-itë-he imë lamna-kë
 3AnaphPro T-S_A-go-He farm in.center.of-into
 'She went to (the) center of (the) farm.' (Sulalapana 079)
- 172) Mëk pista lamnau.
 mëkï pista lamna-wë
 DemAnmDist airstrip in.center.of-in
 'That one, in (the) center of (the) airstrip.'
- 173) Upakatonom upak itu lamnau lëken.
 upake-ato-nomo upake itu lamna-wë lëken
 long.ago-PtNmlz-Coll long.ago jungle in.center.of-in only
 'Long ago, (the) ancient people (lived) in (the) center of (the) jungle.' (Jolokod 744)
- 174) Mule man tuna lamnau.

 mule mane tuna lamna-wë
 child 3b3 water in.center.of-in
 '(The) child is in the middle of (the) river (floating/swimming on the surface).'
- Josinetsi etat neha kailentom lamnau.

 johineti etatï-Ø n-eha-Ø kajilentomo lamna-wë

 Josinete hammock-Pss 3S_A-be-RecPst mosquito.net-Coll in.center.of-in

 'Josinete's hammock was between (two) mosquito nets.'
- 176) Pakolo man "p" lamnau.
 pakolo mane "p" lamna-wë
 house 3be mountain in.center.of-in
 '(The) house (is) located in between (two) mountains.'

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¹⁹ Unfortunately, there are no attested cases of *lami* 'belly' as the object of a postposition. Thus, it is not possible to know how the phrase 'in the area of the belly' would be expressed. One possibility is that the root for 'belly' takes spatial morphemes, as is the case for *pehna* 'forehead' and m(i)ta 'mouth'.

- 177) Josinetsitom lamnau.
 josineti-tomo lamna-wë
 Johineti-Coll in.center-in
 'in between (two) of Josinete's people'
- 178) Ëlewee mëk wewe lamnau.

 ëlewelï mëkï wewe lamna-wë
 fly DemAnmDist wood in.center.of-in

 '(A) fly is in (the) corner between (two) sticks.'

Though a container postposition, *pehna* indicates the location of a referent in the area of the forehead, where one would find a bandana, for instance. For obvious reasons, this postposition only takes objects encoding referents with a forehead (people, and presumably animals).

- 179) Tipehnak tipimihe eja jolok pitpë. ti-petna-kë ti-pimi-he e-ja joloko pitpë-Ø 3Refl-in.area.of.forehead.of-into T-tie.O-He 3-Erg evil.spirit skin-Pss 'He tied (the) evils spirit's skin to (the) area of his forehead.'
- 180) Pakolo apulu ja tikiihe ipehnalii.

 pakolo apulu-Ø ja t-ikili-he i-petna-lili

 house cover-Pss Erg T-take.O.from-He 3-in.area.of.forehead.of-PtNmlz

 '(The) door of (the) house took off (the) thing on his forehead.' (Jolokod 673)

The characteristic location of a referent (people or things) is expressed by the postposition *pata* 'in the place of'.

- 181) Moloinë emna kunekilima Jalaki patak.

 Moloinë emna kun-e-kilima jalaki pata-kë
 then 1+3ExclPro3DistPst-Det-leave.O Jalaki in.place.of-into
 Then, we left to Jalaki's village.'
- 182) Maa, moloinë, umëkëmëne Tëpu pona, ïpatak.
 maa molojinë w-umëkï-ëmë-ne tëpu po-na ï-pata-kë
 so then 1S_A-come-Resumpt-DistPst Tëpu on.supported-to 1-in.place.of-into
 'So, then, I came to Tëpu, my land.'
- 183) Molona tilëmëi ipatak.
 molo-na t-ïlï-ëmë-he i-pata-kë
 SpcMedLoc-to T-put-Resumpt-He 3-in.place.of-into
 'He put (it, the mask) again there, to its place.'

The meaning of the postposition *ahmota* is not clear, as the existing examples show various translations as 'in the area beside,' 'in between,' 'inside,' and 'among'.

There are no examples of this postposition in the texts, and only a few examples are attested in elicitation. Some of the existing examples are given here: (SAP prefixed examples were rejected by speakers):

- Pakolo ahmotau, epï.
 pakolo apmota-wë epï
 house inside-in tree
 '(The) tree (grew) inside (the) house.'
- 185) Ëtahmotau ët-ahmota-wë Recpr-in.area.beside.of-in 'one beside (the) other'
- 186) Kanawatom ahmotau.
 kanawa-tomo apmota-wë
 canoe-PtNmlz in.between-in
 'in between (the) canoes'
- 187) Min ahmotalii.
 mini apmota-lili
 DemInanDist among-PtNmlz
 'that one in the middle'

The postpostion *talihna* is exceptional in that it takes no objects. However, it takes some of the morphology specfic to postpositions, such as the spatial morphemes and the nominalizer *-lili*, as well as the negative suffix *-la*. It refers to the open space, the outside environment. Thus, it expresses a situation where a referent is completely exposed and in an extended usage, where someone has nothing to hide. Example (188) was used to describe a man who was becoming visible again after taking off an attire that had made him invisible.

188) Talihnau ka jepe?

talitna-wë ka j-epe-Ø

in.the.open-in Quest 1-friend-Pss

"(Am I) exposed, my friend?"

(Lit.: 'Am I in the open, my friend?')

(Jolokoa 104)

- 189) Talihnau man pasitu mënke tot ipëk.

 talitna-wë mane pahitu mën-ka-ja toto i-pëkë
 in.the.open-in 3be pastor 3Certnty-say-NPst 3Coll 1-about
 '(The) pastor is in the open',' they say about me.' (Walema2 068, 069)
 (I.e., the pastor is now a transparent being, he has nothing to hide.)
- 190) Talihnawëla nma, ëhenela.
 talitna-wë-la nma Ø-ëh-ene-Ø-la
 in.the.open-in-Neg Intens NegAvlz-Det-see-NegAvlz-Neg
 '(It is) not in the open, (it is) not visible.' (Walema2 126)
- **6.2.1.2. 'Surface' postpositions.** This class of postpositions has seven members: po/mo 'on (supported),' *ahpo* 'on the back of,' *uhpo* 'on top of,' uwap(o) 'ahead of,' $\ddot{e}/etap(o)$ 'on the hammock of,' *opinë* 'under,' and $p\ddot{e}k(\ddot{e})$ 'on (unsupported)'. Their main characteristic is the possibility of their taking the spatial suffixes $-\mathcal{O}$ 'on,' -na 'to' and -lo 'along,' though not all spatial postpositions show all the morphological possibilities (see below). The surface postpositions are nominalized with various allomorphs of the participant nominalizer (4.2.2.2.1).

The postposition po 'on (supported),' with allomorph mo (203), conveys the idea that a referent is supported and located on the surface of another referent, encoded by the postpositional object. The object can be thus refer to almost anything that can support a referent.

a) The object can refer to a three-dimensional object: *epii* 'stair,' *hapë eli* 'machete's tooth,' *apulu* 'door,' *etc*. Example (191) shows the most common situation that this postposition refers to, which is the placement of a referent on a horizontal surface. Examples (194) and (195) show that *po* may also be used to refer to a situation in which a referent is located on a vertical surface. In all examples, a referent is being

supported against gravity's pull by the referent encoded by the postpositional object (compare with $p\ddot{e}k(\ddot{e})$ 'on (unsupported) below).²⁰

- 191) Kopu mesa po. kopu mesa po-Ø cup table on.supported-on '(The) cup (is) on (the) table.'
- 192) Ijala epiin polo iwëhanuktopkom.
 i-jala Ø-epij-nu po-lo i-w-ëh-anuku-topo-Ø-komo
 3-floor 3-stair-Pss on.supported -along 3-S_A-Det-put.up.above-CircmstNmlz-Pss-Coll
 'Their going up (was) by the stair of the floor, their going.' (Jolokob 341)
- 193) Malonme kukunïptë inëlëë pisikleta po inë.
 malonme Red6?-kun-ïptë inëlëlë pihikleta po-Ø jnë
 then Red6?-3DistPst-go.down 3AnphPro bicycle on.supported-on from
 'Then, he came down from the bicycle.' (Pear 016)
- 194) Tepripai ejahe kumaka po. t-ëpij-pa-he e-ja-he kumaka po-Ø T-stair-GiveVrblz-He 3-Erg-PColl tree.sp on.supported-on 'They placed (a) ladder on (the) kumaka (tree).'
- 195) Esikata pakolo apulu po.
 ehikata pakolo apulu-Ø po-Ø
 stair house cover-Pss on.supported-on
 '(The) ladder is (leaning) on (the) door.' (Figure 58)
- b) The object can also refer to geographic locations and sites (both physical (196-198) and metaphorical (199)) designated by both common and proper names, and nominalizations with *-top(o)* 'Circumstantial nominalizer' or with *-anu* 'Participant nominalizer':
- 196) Sikola pëk itëk Alimina pona.
 hikola pëkë itë-kë alimina po-na
 school busy.with go-Imp Alimina on.supported-to
 'Go to Alimina get busy with school.' (Walema 044)
- 197) Mon mëi ëtï pena amat etato po.
 mono mëhi ëtï pena amatï etato po-Ø
 SpcDistLoc NspDisLoc what Hesitative river.branch side on.supported-on
 "Over there somewhere (she is), at that one, the side of the river branch." (Tamopoale 073)

²⁰ It has been reported for at least one other language of the Cariban family (Meira, 1999:388, for Tiriyó) that the difference between the cognate forms po and $p\ddot{e}k(\ddot{e})$ is whether a referent is located on a horizontal or vertical surface. In Wayâna the primary difference is whether that referent is supported or not (see below).

- 198) Tiitei nuke pona leken.
 ti-w-ite-he nuke po-na leken
 T-S_A-go-He ant.hill on.supported-to only
 '(He) went only onto (the place of) ant hills.' (Tukusimule 010)
- 199) Witėjai Josineti pona. w-itė-ja-he josineti po-na 1S_A-go-NPst-SapAff Josinetion.supported-to 'I am going to Josinete('s house).'
- 200) Lome oki pona lëken tumëkëmëi iu.
 lome woki po-na lëken t-umëki-ëmë-he iwu
 but beverage on.supported-to only T-come-Resumpt-He 1Pro
 'I came straight to the drink.' (i.e. 'I went back to drinking.') (Walema 100)
- 201) Ulu euhkatop pona tinkii epuu pona ulu ewuku-ka-topo-Ø po-na tinkihi epulu-Ø po-na manioc sap-PrivVbrblz-CircmstNmlz-Pss on.supported -to manioc.juicer pole-Pss on-to

tëwakamëmëi.

t-ëwakamï-ëmë-he

T-sit.down-Resumpt-He

'To the place for taking juice from manioc, to the tinkii pole, she sat down again.' (Jolokoa 212)

- Upake-h wenene kaikui wapuhpan po.
 Upake-h wene-ne kaikuihi wapu-ppe-anu po-Ø
 long.ago-AvIntens 1A3O-see-DistPst jaguar palm.tree.sp-ExistentAvlz-PtNmlzon.supported-on
 'Long ago, I saw (a) jaguar, at the place where there is wapu (fruit).'(Sapotoli 037)
- 203) Wawa lo mo. w-awa-Ø lo mo-Ø 1A3O-dig.O-RecPst ground on.supported -on 'I dug on the ground.'
- c) The object may also be a time word, in reference to any specific point in time (months, hours, years, seasons, etc.). In these uses, po follows both nouns and time adverbials (raising the question of whether or not with adverbials, the always prefixless po is an adverbial correspondent of the postposition. It is interesting that with verbs expressing motion from a source, as $um\ddot{e}k(i)$ 'come,' po is followed by the particle $jn\ddot{e}$ 'from,' in a way similar to that of the spatial uses (206):

- Makapa pona, 'Semana do Indio' po, emna kunëhalë.

 makapa po-na semana do Indio po-Ø emna kun-ëh-alë

 Macapa on.supported-to week of Indian on.supported-on 1+3ExclPro 3DistPst-Det-take.O

 'To Macapa, on (the) 'Week of Indians,' we went.'(Mopelu2 003)
- Hehmalëë pona, hemalëë, doze jalï man, ïweinatop.

 hemalëlë-h po-na hemalëlë doze jalï maneï-wejina-topo-∅

 now-AvIntens on.supported-to now twelveyear 3be 1-to.complete.years-CircmstNmlz-Pss

 'All the way until now, now it's been 12 years,' (Walema2 056)
- 206) Moloinë emna kuntëm, seis ola po inë. ije malë, moloinë emna kun-tëmï i-je malë seis ola po-Ø jnë then 1+3ExclPro 3DistPst-go 3-mother Inclus.with six hour on.supported-on from 'Then, we left with his mother at six o'clock.' (Mopelul 018)
- d) Finally, the object may refer to a body part: the postposition *po* marks body parts when referring to a location where an event takes place. In cases where a more specific location of a referent in relationship to the body part is profiled, other locative postpositions occur (as a ring that may be *omoo jau* 'inside one's hand,' *omoo pëk* 'on one's hand (*i.e.*, on one's finger),' *amoo po* 'on one's hand (*i.e.*, on the back of the hand), *etc.*: (example (209) is repeated from example (62) above)
- 207) *Ëwewasii jetumhakan pona ka ëwewalu?*ëw-ewahi-lï jetu-mhakë-anu **po**-na ka ëw-ewalu-Ø
 2-lower.leg-Pss hurt-ModAdvlz-PtNmlz on.supported-to Quest 3A2O-burn-RecPst 'Did (he/she) burn you on your hurt leg?'
- 208) Emït po inë, emït tïpikai.
 Ø-emï-tï po-Ø jnë Ø-emï-tï tï-pi-ka-he
 3-face-Pss on.supported-on from e-face-Pss T-skin-PrivVrblz-He
 'From its face, (they) skinned its face.' (Jolokoa 075)
- 209) Moloinë, kuntëimë tipupuu polo asimna.
 molojinë kun-të-jmë-Ø ti-pupu-li po-lo ahi-mna
 then 3DistPst-go-Resumpt-RecPst 3Refl-foot-Pss on. supported-along fast-without
 'Then, (he) went by foot, slowly' (Pear 031)

The postposition *ahpo* 'on the back of' has only two classes of objects found in the database: humans and buildings. With human objects, it locates a referent on the object's back, and with buildings, the referent is located on their roof. This suggests that *ahpo* must also take objects other than humans and buildings, as long as they can be

perceived as having a 'back,' as this postposition is clearly derived from *apï* 'back' and *po* 'on (supported)' (*cf.* 6.4.4):

- 210) Jahpo alimi walëjai. j-appo-Ø alimi w-alë-ja-he 1-on.back.of-on monkey.sp 1A3O-take.O-NonPst-SapAff 'I'll take the alimi (monkey) on my back.'
- 211) Malonme emna tumëkëmëi tuna kwatak malonme emna t-umëkï-ëmë-he tuna kwata-kë then 1+3ExclPro T-come-Resumpt-He water in.port-into

*ïmumkulu psik malë jenau katalī jahpo. ï-mumuku-lī phikī malë j-ena-wë katali j-appo-Ø*1-woman's.son little Inclus.with 1-in.middle.of.supported-in basket.kd 1-on.back.of-on 'Then, we came to the port, with my little son in my lap, the basket on my back.' (Kaikui 044)

212) Eluwa man pakolo ahpo.
eluwa mane pakolo appo-Ø
man 3be house on.back.of-on
(The/a) man (is) on the house's top (i.e., on the roof)'

The postposition *uhpo* 'on top of' takes objects referring to entities with a 'top': a human being (213), a mountain (60 above), a stump (55 above), a stone (214), *etc*. In combination with *-lo* 'along,' this postposition can be used metaphorically to mean 'better than; more than' (215-216):

- 213) Hapeu man eluwa uhpo.
 hapew mane eluwa uppo-Ø
 hat 3b man on.top.of-on
 '(The/a) hat is on top of (the/a) man' (i.e., 'On his head').
- 214) Tëpu uhpo, epï.
 tëpu uppo-Ø epï
 stone on.top.of-on tree
 '(There is a) tree on the top of the stone.'
- 215) Mëlë uhpolo nma hemele tëlëi.
 mëlë uppo-lo nma hemele t-ëlë-he
 DemInanMed on.top.of-along Intens now T-take.O-He
 'A lot more than that (they) took now' (Jolokod 576).
- 216) Tanme ëuhpolo psik.
 tanme ëw-uppo-lo phikï
 maybe 2-on.top.of-along little
 'Maybe (I will be) better than you' (Iguana 068).

The postpostions uwap(o) 'ahead of' describes a relation where a referent precedes another in space. This form has been found only with human objects. (The full allomorph of uwap(o) occurs when this postposition is inflected by the collective suffix -he and the negative suffix -la):

- 217) Uwap neha. Ø-uwapo n-eha-Ø 3-ahead.of 3S_A-be-RecPst 'He/She/it was in ahead of him.'
- 218) Witėjai ëwapohe. w-ïtë-ja-he ë-uwapo-Ø-he 1S_A-go-NPst-SapAff 2-ahead.of-on-Coll 'I will go ahead of you.'.
- 219) Juapola neha. j-uwapo-Ø-la n-eha-Ø l-ahead.of-on 3SA-be-RecPst '(It) was not ahead of me.'

The postpostion $\ddot{e}tap(o)/etap(o)$ indicates that a referent is located inside of a hammock. As this form is obviously derived historically from the noun $e/\ddot{e}tat(\ddot{i})$ 'hammock' (cf. 6.4.4), an optionally possessed noun, it presents an objectless form corresponding to that of the unpossessed nominal allomorph, and when there is an object, it refers to the owner of the hammock:

- 220) Mëlë ëtap eikë!
 mëlë ëtapo-Ø ehi-kë
 DemInanMed on.hammock.of-on be-Imp
 'Be in that hammock!'
- 221) Jetamna hek manai!
 j-etapo-na hek manahe
 l-on.hammock.of-to only 2be
 'Darn, (avoid) being in my hammock!'
- 222) Tëtapohe kunehak tot. t-ëtapo-Ø-he kun-eha-kë toto 3Ref-on.hammock.of-on-PColl 3DistPst-be-DistPst 3Coll 'They were in their own hammocks.'

The postposition $p\ddot{e}k(\ddot{e})$ marks a situation in which a referent is attached to an object without support against the pull of gravity (compare with po 'on (supported)' above). Thus, usually, but not always, the referent in question is located on a vertical surface.

- Pampila wewe pëk.

 pampila wewe pëkë-Ø

 paper tree on.unsupported.on

 '(The) paper (is) on the tree trunk.'
- 224) Ipuhtop man iklakun pëk.
 i-putï-topo-Ø mane i-klaku-nu pëkë-Ø
 i-nail.O-CircmstNmlz-Pss 3be 3-ankle-Pss on.unsupported-on
 'The band-aid is on his ankle.' (Figure 35)
- 225) Anon upo pëk.
 anonu upo pëkë-on
 paint cloth on.unsupported-on
 '(The) paint (is) on the cloth.' (i.e., letters on a shirt) (Figure 68)
- 226) Upo man tahmit pëk.
 upo manet-ahmitï-Ø pëkë-Ø
 clothing 3be 3Refl-support-Pss on.unsupported-on
 '(The) clothing was (hanging) on its support (i.e., on a rope).' (Figure 37)
- 227) Sakola pëk ewaa.
 sakola pëkë-Ø Ø-ewa-lï
 bab on.unsupported-on 3-rope-Pss
 '(A) rope is on (the) bag' (i.e., a bag has its handles hanging down) (Figure 66)

The figure below offers a comparison between $p\ddot{e}k(\ddot{e})$ 'on (unsupported)' (white circles) and po 'on (supported)' (dark circles):

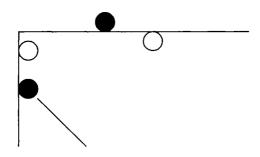


Figure 4

The postpostion $p\ddot{e}k(\ddot{e})$ also has other non-spatial meanings. It marks a referent one is involved with (228)), a referent that will be brought with allative verbs (230), and events in nominalized subordinated clauses with -Ø 'Specific Event' and - $n\ddot{e}$ 'Generic Event' (examples (229) and (231), respectively) (cf. section 4.2.2.1.2 for a discussion of these morphemes):

- 228) Ulu pëk kunehak ïpëinom kajama psik.
 ulu pëkë kun-eha-kë ï-pëj-Ø-nomo kajama phikï
 manioc busy.with 3DistPst-be-DistPst 1-child-Pss-Coll manioc.flower little
 'My children were busy with a little bit of manioc flower.' (Alawaka 012)
- 229) Tëhepai emna emna kaimotaa pëk.
 t-ëh-epa-he emna emna kajimo-ta-Ø-lï pëkë
 T-Det-teach-He 1+3ExclPro 1+3ExclPro game-PssNIntrVrblz-SpcEvntNmlz-Pss about
 'We learned about our killing.' (Jolokod 624-625)
- 230) Ëë, uwa, paluu pëk pitë emna nëtëjai.
 ëë uwa palulu pëkë pitë emna n-itë-ja-he
 oh! Neg banana about a.minute 1+3ExclPro 3S_A-go-NPst-SapAff
 'Oh, no. We'll go in a minute to get bananas. (Kaikui 010)
- 231) Uwanë pëk wai.
 uwa-në pëkë wahe
 dance-GenEvntNmlz about 1be
 'I am dancing.' (Lit. 'I am about dancing.')

The postposition *opinë* 'under; below' indicates a situation in which a referent is located under another. This may refer either to a situation in which the referents are in

contact with one another (232) or to a situation in which they are not in contact (233-234).

```
232) Hupu mëlë kamisa opinë.
hupu mëlë kamiha opinë-∅
spoon DemInanMed cloth under-on
(The) spoon (is) under that cloth.' (Figure 24)
```

- 233) Pola kololo opinë.
 pola kololo opinë-Ø
 ball chair under-on
 '(The) ball (is) under (the) chair'. (Figure 16)
- 234) Eklot man kapu opinë.
 eklotï mane kapu opinë-Ø
 cloud 3be sky under-on
 '(The) cloud is under (the) sky.'

6.2.1.3. 'Away' postpositions. This is the least numerous class of spatial postpositions, with only four members: epo 'above,' m(i)kahpo 'behind', aktuhpo 'up river of; north of' and ameta 'down the river of; south of'. They are characterized morphologically by the position marker -j(e) 'away,' the goal markers -na 'to' (taken by the first three) and -k(e) 'into' (taken by the forth one), and no occurrences of path markers (cf. 6.1.2.1.2). Semantically, all postpositions belonging to this group profile a relationship in which one referent is located away from another.

The postposition depicting a relation where one referent is above the other without contact is *epo* 'above'. There are no examples of this postposition in the collected texts; the following examples are elicited responses:

235) Lampata mesa epoi.
lampata mesa epo-je
light.bulb table above-away
'(The) lamp bulb (is) above (the)
table.' (Figure 13)

They are nominalized with -n(u) or -an(u), but unlike other postpositions the nominalizer occurs after the position marker, instead of replacing it (see section 4.2.2.2.1.).

- 236) Pakolo epoi, wewe.

 pakolo epo-je wewe
 house above-away tree

 '(The) tree (top) (stays) above the house.'

 (Figure 49)
- 237) *Ipi* epoi mutom. ipi epo-je mutom mountain above-away cloud '(The) cloud (is) above (the) mountain.'
- 238) jepoi jala. j-epo-je jala 1-above-away floor '(The) floor (stood) above me'

The postposition m(i)kahpo 'behind' signifies that a referent is located somewhere behind and away from the object (*i.e.*, not in contact with the object). No examples of m(i)kahpo are found in texts, and only a few are found in elicited data. A semantic distinction between m(i)kahpo and walipta 'in the area behind' (see above) is that the first expresses a relation in which a referent cannot be in contact with another, while the second does not. Cf example (154) above showing a situation where a referent is located on the surface of the object of walipta. No examples of this postposition are found in the collected texts; all examples come from elicited data.

- 239) Pakolo mïkahpoi.
 pakolo mïkappo-je
 house behind-away
 '(He/she/it) (is) behind (the) house'
- 240) Pola kaikui mikahpoi neha.
 pola kaikuhi mikappo-je n-eha-Ø
 ball dog behind-away 3S_A-be-RecPst
 '(The) ball was behind (the) dog.'
- 241) mkahpoi neha. "i-m"kappo-je n-eha-Ø 1-behind-away 3S_A-be-RecPst '(He/she/it) was behind me.'

Pola alima kanawa mikahpona.
pola alima-Ø kanawa mikappo-na
ball throw.O-RecPst canoe behind-to
'(He/She) threw (the) ball away to (a place)
behind the canoe.'

The two other away postpositions are *ameta* 'down river of; south of' and *aktuhpo* 'up river of; north of'. They occur almost exclusively without a preceding nominal, since they occur most frequently in reference to the place where the speaker is. Examples with a nominal object are attested for *aktuhpoi* but not for *ameta*, athough presumably that would also be possible.

- 243) Witėjai aktuhpona. w-itė-ja-he Ø-aktuppo-na 1S_A-go-NPst 3-up.river.of-to 'I will go up river.'
- 244) Emna tiïtëi ametak, Sapotoli pëk.
 emna t-w-ïtë-he Ø-ameta-kë sapotoli pëkë
 1+3ExclPro T-S_A-go-He 3-down.river.of-into Sapotoli about
 'We went down the river to get Sapotoli.'
- 245) Tohme ametai meha?
 topme Ø-ameta-je m-eha-Ø
 why? 3-down.river.of-away 2SA-be-RecPst
 'Why were you down the river?'
- 246) Ajamuwaka aktuppo-je
 ajamuwaka aktuppo-je
 Ajamuwaka north.of-away
 'North of the Ajamuwaka (village).'

As for goal markers, the away postpositions ending in /po/ take -na, while ameta takes - $k(\ddot{e})$. It seems the case that the first group is derived historically from po/mo 'on (suported),' while ameta is derived from ta 'in permanent location,' and thus they take - $k(\ddot{e})$ and -na, like those postpositions, as a historical vestige.

6.2.1.4. A conclusion on spatial postpositions. Much research needs to be carried out on the semantics of the spatial postpositions. In this endeavor it is fundamental to

investigate to the full extent what kind of objects each postposition can take.

Nevertheless, an attempt was made here to lay out what each form may mean, and it is possible to present some findings.

One of the most interesting aspects of Wayâna spatial postpositions is the information each postposition carries on the nature of its object. In the case of container postpositions, a sub-class meaning 'in' specifies a particular feature of the object (*kuwa* 'in water,' *hja* 'in the sun,' *ta* 'in permanent location,' *etc.*). Another interesting aspect is the construal of nouns as homogeneous or as complex. The nouns for 'jungle,' 'bush,' and 'fire,' among others, occur with a postposition whose object refers to an entity made of several parts (*hta* 'among'), while nouns for 'rain,' 'wind,' 'sky,' 'house,' *etc.* occur each with a postposition whose object refers to objects constituted homogeneously.

Some nouns may refer to entities which can be construed in slightly different ways, a location or a container, and thus occur with more than one of the 'in' postpositions. For instance, the noun *kapu* 'sky' can occur with *na* 'in boundless location' and *ja* 'inside of a 3D container'. In the first case it refers to the open sky we see, in the second to a place we don't see (where God lives, for instance). The noun *amat(i)* 'river branch' may refer to the water or to the location where it is, thus taking *kuwa* 'in water' and *po/mo* 'on; at,' respectively. This may also explain why nouns such as *ëhma* 'path' and *itu* 'jungle' may occur with container postposition others than the expected *ta* 'in permanent location' and *hta* 'among' (for example, in *ëhema ailë* 'along the path,' *itu polo* 'along the jungle').

Other spatial postpositions may take the same nominal objects as long as the objects are semantically compatible with the postpositions. In these cases, each

postposition profiles a different part of the object (pakolo tau 'in the house,' pakolo pëk 'on the (walls) of the house,' pakolo ahpo 'on the roof of the house,' and so on.).

6.2.2. Relational Postpositions. Postpositions belonging to this class do not take any spatial suffixes, though some have a spatial meaning, and do not take objects referring to experiencers (see section 6.2.3 below) or have a grammatical meaning (see section 6.2.4 below). There are 11 relational postpositions: opikai 'under,' pole 'towards,' wala 'around,' ina 'adjacent; belonging,' kuptëlë 'following,' pune 'fitting; suitable,' katïp(i) 'like,' kuptë 'each,' mna 'without,' the Inclusive malë 'with,' and the Comitative akëlë 'with'.

The postposition *opikai* 'under' occurs rarely in the data, with no examples in texts, and with only a few examples in elicited data. It takes personal prefixes and the collective *-he*, but unlike other postpositions, it does not seem to take the negative suffix *-la*, as negated forms have not been accepted by speakers in elicitation. In all the existing examples, *opikai* marks the location of a referent as below another and possibly in a noncontact relationship. It is also possible that *opikai* marks the position of an invisible referent, as this can also be the reading in all the attested examples:

- 247) Kuje tiïhe ëlimak opikai. kuje t-ïlï-he ëlimakë opikaj spoon T-place.O-He plate under '(He/She) placed the spoon under the plate.'
- 248) Topikai nili kalakuli.
 t-opikaj n-ïlï-Ø kalakuli
 3Refl-under 3A3O-place.O-RecPst money
 '(He/She) place (the) money under himself/herself.'
- Jala opikai munpë neha. jala opikaj munpë n-eha-Ø floor under rat 3S_A-be-RecPst '(The/a) rat was under (the/a) floor'

- 250) Min opikai ka mitëne.
 mini opikaika m-itë-ne
 DemInanDist under Quest 2S_A-go-DistPst
 'Have you been in that (cave)?'
- 251) Oha opikai nili asii.
 oha opikaj n-ĭli-Ø ahili
 clay.pan under 3A3O-place.O-RecPst pepper
 '(He/She) placed pepper under (the/a) clay pan.'

The postposition *pole* occurs only with verbs of motion marking the location that the moving object is approaching:

- 252) Emna kunepolepkaimë ëutë pole hle.
 emna kun-e-polep-ka-jmë ëwtë pole tle
 1+3ExclPro 3DistPst-Det-go.through.snd-SndVrblz-Resumpt village towards Authentic
 'We went right towards the village.'
- 253) Kapau tiitëi emna pole. kapaw ti-w-itë-he emna pole deer T-S_A-go-He 1+3ExclPro towards 'A deer came towards us.' (Pëne 124)
- Pakolo pole numëk ëkëi.
 pakolo pole n-umëkï-Ø ëkehi
 house towards 3S_A-come-RecPst snake
 '(The/a) snake came towards the house'

The partial or total encircling of an object by another referent with no contact between the two is expressed by *wala* 'around'. It takes objects that refer to people, objects, or geographic locations.

- 255) Ikutpë wala tiitëi iu. ikutpë wala t-itë-he iwu lake around T-go-He lPro 'I went around (the) lake'
- 256) Ïwala neha wewe.

 "i-wala n-eha-Ø wewe

 1-around 3S_A-be-RecPst wood

 (The) wood was (scattered) all around me.'
- 257) Lampata wala man takahaktom.
 lampata wala mane takahakë-tomo
 lamp.bulb around 2be spider-Coll
 '(The) spider (and other insects) were around the lamp bulb.' (Figure 52)

The postposition *ina* has two senses, a spatial and a non-spatial one, 'adjacent' and 'belonging'. Only inflected forms of this postposition are attested.

- 258) *iina*i-jna
 l-adjacent/belonging
 'close to me; belonging to me'
- 259) ëina
 ë-jna
 2-adjacent/belonging
 'close to you; belonging to you'
- 260) iina
 i-jna
 3-adjacent/belonging
 'close to him; belonging to him'
- 261) kuinahe
 ku-jna-he
 1+2-adjacent/belonging-PColl
 'close to us; belonging to all of us'

The postposition *kuptëlë* means 'following'. It co-occurs with verbs of motion only and is only attested taking human objects.

- 262) Malonme Pëneimë kuntëm ïkuptëlë.
 malonme pënejmë kun-tëmï ï-kuptëlë
 then Pëneimë 3DistPst-go 1-folowing
 'Then Piranha went following me.' (Pëne 007)
- 263) Ulu talëi ikuptëlë.
 ulu t-alë-he i-kuptëlë
 manioc.bread T-take-He 3-folowing
 '(She/he) took manioc bread following him.'
- 264) Mule kuptëlë kaikui nitëm. mule kuptëlë kaikuhi n-itëmi-Ø child following dog 3S_A-go-RecPst '(The/a) dog went following (the/a) child.'

The postposition *pune* 'fitting; suitable' indicates that the referent encoded by the postpositional object is appropriate or adaptable to some other referent. The object taken by *pune* may refer to people, objects, places, and time.

- 265) Pakolo psik tiïhe emna ja emna nïktop pune lëken. pakolo phikï t-ïlï-he emna ja emna nïkï-topo **pune** lëken house small T-make-He 1+3ExclPro Erg 1+3ExclPro sleep-CircmstNmlz fitting only 'We made a little house suitable as the place of our sleeping.' (Pëne 062)
- 266) Jupo pune man. j-upo-Ø pune mane 1-clothe-Pss fitting 3be 'It fits as my clothing.'
- 267) *Ïmumkuu talë tëhamoi mëwihnë* r-mumuku-lï talë të-w-ëh-amo-he mëwitnë l-womans.son-Pss NspcProxLoc T-S_A-Det-cry-He a.lot

cinco dia pune ispunak.
cinco dia pune ipunak-h
five day fitting very.much-Intens
'My son cried so much here for whole five days.' (Alvina 035)

268) Ïpune wijai.

i-pune w-ili-ja-he
1-fitting 1A3O-make-NPst-SapAff
'I'll make it to fit me.'

The postposition katip(i) 'like' indicates similarity or resemblance. It refers to both physical and psychological attributes. It takes almost any referent as its object, including people, objects, places, and abstract entities (as stories, happenings, etc.).

- 269) Mule hnë katip mëhamojai.
 mule tnë katipi m-ëh-amo-ja-he
 child still like 2S_A-Det-cry-NPst-SapAff
 'You are crying still like a child.'
- 270) Ipoke nma mamak katïp. ipoke nma mamako katïpï good Intens mother like '(She) is nice like my mother.'
- 271) Kulum katip neha. kulumi katipi n-eha-Ø vulture like 3S_A-be-RecPst 'It was like a vulture (i.e., it looked like one).'
- Peptame tuna tëëtiihe hemele ikutpë katip.
 pepta-me tuna të-w-ëtili-he hemele ikutpë katipi
 big-Attrb water T-S_A-become-He already lake like
 (The) water was huge already, like a lake. (Pëne 102)

273) Masike mëlë katïp lëken emna tëëtukhe, mahike mëlë katïpï lëken emna të-w-ëtuku-he With.that DemInanMed like only 1+3ExclPro T-S_A-have.a.meal.He

tïmnoke huwaa, huwaa lëken. tï-muno-ke huwalë huwalë lëken NAdvlz-full.belly-having as.such as.such only

'Then, just like that, we ate, with full belly, as such. (Fishing 014)

The involvement without exception of the individual members of a set is expressed by *kuptë* 'each'. This postposition occurs in the collective form when inflected by personal prefixes (6.1.1.1); thus it must follow objects composed of several members. Nominal objects may be in the collective form or the non-collective form. Given the data, it seems that a set whose members are all identifiable takes the collective (a group of people, a set of objects, *etc.*) and a set whose members are not all identifiable ('years,' 'mornings') does not.

- 274) Papako ja alakapuhatom tëlëi, ikuptëhe.
 papako ja alakapuha-tomo t-ëlë-he i-kuptë-he
 father Erg shotgun-Coll T-take.O-He 3-each-PColl
 'Father took the shotguns, each one of them.'
- Malonme takenaptëi ejahe ëhmelë etatkom kuptë...
 malonme t-akena-ptë-he e-ja-he ëmelë-h Ø-etatï-komo kuptë
 then T-alignment-ProvideVrblz-He 3-Erg-PColl all-AvIntens 3-hammock-Coll each
 'Then, they aligned (them) all, each one of their hammocks...' (Jolokob 359)
- 276) Emna nipanakmei awaina kuptë.
 emna n-i-panakma-ja-he awajna kuptë
 1+3ExclPro 3A3O-Them-hear.O-NPst-SapAff early.morning
 'We hear (this) every morning.' (Walema 048)
- Wei kuptë witëjai Suwisuwimin pona.
 weji kuptë w-itë-ja-he suwisuwimini po-na
 year each 1S_A-go-NPst-Edv Suwisuwimini on.supported-to
 'Each year I go to Suwisuwimin.'

The postposition *mna* 'without' expresses the non-existence or absence of a referent. It takes all of the personal prefixes but does not occur with a nominal object. The reason for that is that whenever it follows a noun or a pronoun, *-mna* presents the properties of an adverbializing suffix (7.2.1.1.1.3) and is thus not analyzed as a

postposition in these contexts. The postposition *mna* is nominalized with -*to*; the adverbializing suffix cannot be nominalized.

- 278) Imnahe neha.
 i-mna-he n-eha-Ø
 3-without-PColl 3S_A-be-RecPst
 'They weren't there.'
- 279) Emna neha.

 ë-mna n-eha-Ø

 2-without 3S_A-be-RecPst

 'You weren't there'
- 280) Imna neha. "i-mna n-eha-Ø 1-without 3SA-be-RecPst 'I wasn't there.'
- 281) Mëklëë nai man imnato.

 mëklëlë naj mane i-mna-to

 DemAnmMed Intens 3be 3-without-PtNmlz

 'That one is the one without any of it.'

The postpositions *malë* and *akëlë* frequently seem to be synonymous, with the meaning of 'with' as in the examples below:

- 282) Nitëm tokon malë. n-itëmi- \emptyset t-okono- \emptyset malë 3S_A-go-RecPst 3Refl-sibling.of.same.sex-Pss with '(He/She) went with his/her own brother/sister.'
- 283) Tokon akëlë niitëm.
 t-okono-Ø akëlë n-itëmi-Ø
 3Refl-sibling.of.same.sex-Pss with 3SA-go-RecPst
 '(He/She) went with his/her own brother/sister.'
- 284) Talë nila malë mesa po.
 talë nila malë mesa po-Ø
 NspcProxLoc Nila with table on.supported-on
 '(I am) here with Nila at the table.' (Alvina 003)
- 285) Emna kaimo emna akëlë.
 emna kajimo-Ø emna akëlë
 1+3ExclPro game-Pss 1+3ExclPro with
 'Our game (was) with us.' (Pëne 068)

In judging the semantic difference between examples (282) and (283), one speaker says that in the first example the two referents are going together to do the same thing, while in the second example the referent followed by *akëlë* is only going along for the ride. The examples of *malë* below, glossed as 'together with,' confirm this:

- 286) Moloinë, ëlësiwë malë tëhanukhe Sulalapana.
 molojinë ëlëhiwë malë të-w-ëh-anuku-he sulalapana
 then smoke with T-S_A-Det-put.up.above-He sulalapana
 Then, Sulalapana went up together with the smoke. (Sulalapana 099)
- 287) Kopë telen pokn tikai tawun malë.
 kopë telenu pokn ti-ka-he tawunu malë
 rain huge rain.snd T-do-He wind with
 '(The) rain went heavily together with together with the wind.' (Pëne 065)
- 288) Anakali Xamore malë ka nelemi.
 anakali Xamore malë ka n-elemi-Ø
 Anakali Xamore also Quest 3SO-sing-RecPst
 'Did Anakali sing together with Xamole?'

tï-ka-he inamolo tï-mïnelumï-Ø **malë** kunumuhi-tomo T-say-He 3ProColl 3Refl-husband-Pss with old.woman-Coll They said (it), **together with** their husbands, the old women. (Jolokod 651)

Though the existing data do not suffice to establish a clear distinction between the two postpositions, some additional differences between them are observed. First, $ak\ddot{e}l\ddot{e}$ occurs only with intransitive verbs in the database; and almost all of its occurrences are with $(\ddot{i})t\ddot{e}(m\ddot{i})$ 'go' and e(s)i 'be,' and only with a comitative meaning, thus its gloss 'with'.²² The postposition $mal\ddot{e}$, on the other hand, has a broader distribution, occurring with many transitive and intransitive verbs.

In the case of transitive verbs, the participant marked with *malë* participates in the event equally with the participant expressed by the direct object of the verbs. The whole

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²² This may also be the case for other Cariban languages. The examples given in the sections discussing the cognate forms of *akëlë* in Tiriyó (Meira, 1999: 411) and Hixkaryana (Derbyshire, 1985: 18), are all glossed as comitative 'with' and occur either with an intransitive verb of motion or with 'be'.

clause refers to a single event; thus, *malë* has a meaning more like that of the English glosses 'and also; together with'.

```
ololi w-ekalë-ja-he kajikuhi malë
iguana 1A3O-tell-NPst-SapAff jaguar with
'I will tell (about) Iguana and also (about) Kaikui'. (Iguana 001)
```

- 291) Eluwa wene kunumusi malë.
 eluwa w-ene-Ø kunumuhi malë
 man 1A3O-see-RecPst old.woman with
 'I saw the man and also the old woman'
- 292) Jetat malë nahek animkë. j-etati-Ø malë nahek anim-kë l-hammock-Pss with just animkë 'Just get it together with my hammock'

Thus, the semantic difference between *akëlë* and *malë* is that the participant marked by *malë* partakes in the event in the same way as one of the nuclear participants, either the S in the case of intransitives or the O in the case of transitive verbs. The possibility that *malë* can also mark a participant that partakes in the event like a transitive A has not been tested. In any case, *malë* is the closest Wayâna form to the English 'and' ('John **and** Mary went,' 'I saw John **and** Mary). The postposition *akële*, on the other hand, merely marks accompaniment, not equal participantion in the event.²³

Both postpositions occur rarely with personal prefixes. In texts, the postposition akëlë occurs only with a third person prefix or a nominal object, though examples with SAP prefixes are attested in elicited data. All the inflected examples for the postposition malë come from elicited data.

6.2.3. Experiencer postpositions. The main characteristic of postpositions of this class is the existence of a participant with the semantic role of an experiencer, which is usually

encoded by the subject of the clause. In all cases, the object of the postposition is the semantic stimulus. The experiences conveyed by the members of this class are those such as fear, anger, love, jealousy, *etc*. Experiencer postpositions occur almost exclusively with the copular verbs e(s)i 'be' and $\ddot{e}t\ddot{u}\ddot{u}$ 'become' (with the exception of *uno* 'be afraid of,' discussed below). The six attested experiencer postpositions are *eile* 'angry at,' $p\ddot{u}nw\ddot{e}$ 'caring for, jealous of,' $uwal\ddot{e}$ 'knowing of,' uno 'afraid of,' wake 'wary of; being against,' and the desiderative he 'wanting, loving, desiring'. A few present an equivalent adverbial form (see below).

The postposition *eile* means 'angry at'. Its equivalent adverbial form is *ëile* 'angrily, bravely, fiercely' (7.1.1.3.1).

- 293) Talala man jeile.

 talala mane j-ejile
 let.be 3be 1-angry.at
 'Let him be angry at me'
- 294) Ëweile tëëtiihe inëlëë. ëw-ejile të-w-ëtili-he inëlëlë 2-angry.at T-S_A-become-He 3AnaphPro 'He/She got angry at him/her/it'

The postposition *pïnwë* 'caring for; jealous of' expresses feelings of possessiveness and emotional attachment towards the object.

- 295) Ëmnelum pinwë lëken!
 ë-minelumi-Ø pinwë lëken
 2-husband-Pss caring.for only
 'You care too much for your husband!' (Kaikui 018
- 296) Ëpinwë man Kan.
 ë-pinwë mane kanu
 2-caring.for 3be God
 'God cares for you. (Walema 130)'
- 297) *Ïnepiï pïnwë hela wai.* r-n-epï-lï **pïnwë** he-la wahe

²³ Meira (1999: 468) states that *malë* and *akëlë* are sometimes synonymous, but does not offer the specifics: '...malë is used to indicate inclusion, corresponding quite well to the English 'too, also'. It can have a comitative meaning, which comes quite close to *akëlë* 'with'.' In Tiriyó, *malë* is a particle.

1-ObjNmlz-eat.soft.food-Pss caring.for Des-Neg 1be 'I do not want to be greedy with my food.' (Walema2 137)

The postposition *uwalë* 'knowing of' indicates knowledge or familiarity about the object. The adverbial correspondent to this postposition is *tuwalë* 'knowingly' (7.1.1.3.2).

- 298) Ehet uwalë wai. Ø-ehe-tï uwalë wahe 3-name-Pss knowing.of 1be 'I know his name'
- 299) Enik uwalëla.

 ëniki uwalë-la

 who knowing.of-Neg

 '(I do) not know who.' (Jolokoc 446)
- 300) Emna kaimotaa uwalë.
 emna kajimo-ta-Ø-lï uwalë
 1+3ExclPro game-PssNIntrVrblz-SpcEvntNmlz-Pss knowing.of
 'We know how to get game.' (Jolokod 622)

The postposition *uno* 'afraid of' is the only experiencer postposition that occurs with verbs other than the copular verbs. The form *tuno* 'fearful' is the adverbial counterpart of this postposition (7.1.1.3.2).

- 301) Malonme emna tëwepei kopïnï htak alimi uno.
 malonme emna të-w-epe-he kopïnï tta-kë alimi uno
 then 1+3ExclPro T-S_A-flee-He bush among-into monkey.sp afraid.of
 Then, we fled to the bushes, scared of the monkey. (Monkey 006)
- 302) Elamhak mëwihnë tatata tïkai emna alimi uno huwaa. ela-mhakë mëwitnë tatata tï-ka-he emna alimi uno huwalë fear-ModAdvlz very tremble.snd T-do-He 1+3ExclPro monkey.sp afraid.of as.such 'Very scared, we trembled a lot, scared of the monkey(2). (Monkey 023)
- 303) Kaikui uno kunehak. kaikuhi uno kun-eha-kë jaguar afraid.of 3DistPst-be-DistPst 'He/She was afraid of (the/a) jaguar.'
- 304) Elamhakë nma tëëtihe iu jolok uno. elamhakë nma të-w-ëtili-he iwu joloko uno fearfull Intens T-S_A-become-He 1Pro evil.spirit afraid.of 'I got really scared, scared of (the) evil spirit.'

The postposition *wake* 'wary of; being against' expresses antagonism toward the object. This postposition is very infrequent, with no examples in texts.

- 305) *Ïwake lë nai eikë.* **ï-wake** lë naj ehi-kë

 1-wary.of Emph Intens be-Imp

 'Beware of me!'
- 306) Ëhewake nai man tot. ëh-ewake naj mane toto Recpr-being.against Intens 3be 3Coll 'They are all against each other.'
- 307) Ewakehela nai wai. e-wake-he-la naj wahe 3-wary.of-PColl-Neg Intens 1be 'I am not distressed with them'

The desiderative postposition *he* express feelings such as affection, desire and necessity toward the object. The allomorph *se* occurs when prefixed with third person *i*-:

- 308) Tilijo womi he hkuu wai, lome Wajana womi he hnë. tilijo womi he kkulu wahe lome wajana womi he hnë. Tiliyo language Des Intens 1be but Wayana language Des also 'I really like the Tiriyo language, but I also like the Wayana language.'
- 309) Ëwëë he hle neha.
 ë-uwë-Ø-lï he tle n-eha-Ø
 2-kill-SpcEvntNmlz-Pss Des Authentic 3S_A-be-RecPst
 'It truly wanted to kill you.' (Kaikui 089.)
- 310) Masike tinepiitom hela.
 mahike ti-n-epi-li-tomo he-la
 With.that 3Refl-ObjNmlz-eat.soft.food-Pss-Coll Des-Neg
 'With that, (she) (does) not want her food.' (Maria 007)
- 311) Ëwemsiikom nai neha ëhe. ëw-emhi-lï-komo naj n-eha-Ø ë-he 2-daughter-Pss-Coll Intens 3S_A-be-RecPst 2-PColl 'Your daughter wanted you.' (Tamopoale 070)
- 312) *Ihi, ise wai.*ihi i-he wahe yes 3-Des 1be
 'Yes, I want it.'

6.2.4. Functional postpositions. The functional postpositions are those presenting a grammatical meaning. There are five of these postpositions, *ja* marking the agent and some other roles, *ke* marking an instrument or source, *umpoj(e)* marking the cause of an event, *wantë* marking volition, and *walë* marking uncertainty. No nominalized forms of the functional postpositions are attested or have been accepted in elicitation.

The postposition ja takes objects encoding sentient beings, usually humans. It marks the agent of a transitive clause in both main t-V-(h)e clauses and non-finite subordinate clauses, both nominalized clauses (314) and adverbialized clauses (315), where the agent is glossed as 'oblique agent':

- 313) Pija mumkë tëpëihe epe ja.
 pija mumukë-Ø t-ëpëhi-he Ø-epe-Ø ja
 eagle animal.offspring T-grab.O-He 3-friend-Pss Erg
 'His friend grabbed (the) eagles chick.' (Eagle 030)
- 314) Lome wai apsik lëken tuwalë lome wahe aphikë lëken tuwalë but 1be little only knowingly

juutoponpii kunitomo ja.

j-ulu-topo-npili-Ø kuni-tomo ja

1-talk.to-CircmstNmlz-Dvl-Pss grandmother-Coll OblAgt

'I am knowledgeable of (the) story my grandmas told me'. (Sulalapana 003)

315) Sisi ja tahalamnaniphe aptau, tukukhe ejahe.
hihi ja t-ahalapi-nipi-he wapta-wë t-ukuku-hee-ja-he
sun **OblAgt** T-dry-Caus-He when-in T-try-He 3-Erg-PColl
'When it (was) sun dried, they tried (it)' (Jolokoa 086)

It also marks dative participants (recipients and experiencers), shown in examples (316) to (318), and causees, shown in example (319).

- 316) Masike, ëti ekalëja kan ëja?
 mahike ëti ekalë-ja kanu ë-ja
 With.that what give-NPst God 2-Dat
 'With that, what is God going to give to you?' (Walema 155)
- 317) Tykai ololi ja, kaikui. tï-ka-he ololi ja kajikuhi T-say-He iguana **Dat** jaguar 'Said Jaguar to Iguana.' (Iguana 020)

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Malë ihpoke nma kunehak ija.
malë ipoke-h nma kun-eha-kë ija.
Also good-AvIntens Intens 3DistPst-be-DistPst 1-Dat

sitpilime iweitop.
hitpili-me i-w-ehi-topo-Ø
ugly-Attrb 1-Sa-be-CircmstNmlz-Pss
'Also, my being ugly was very good to me' (Walema 013)
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319) Mauu walëpo Pipinë ja.
mawulu w-alë-po-Ø pipinë ja
cotton 1A3O-take-Caus-RecPst Pipinë Causee
'I made Pipinë take cotton.'

The fourth function of the postposition ja is to mark an animate goal. In this spatial sense, ja resembles spatial postpositions taking directional suffixes (patu ja-k 'into the pan,' Apalai po-na 'to the Aparai village, etc.). The main distinction between the two cases is that the endpoint of motion in the cases with ja is not a location but a particular animate being (either a person or an animal).

- 320) Malonme, emna tiïtëi ijumi ja.
 malonme emna ti-w-itë-he i-jumi-Ø ja
 then 1+3ExclPro T-S_A-go-He 3-father-Pss Allative
 'Then, we went to her father.' (Kaikui2 081)
- 321) Ëhmelë tolopit tumëkhe lep eja.
 ëmelë-h tolopiti t-umëki-he lep e-ja
 all-AvIntens bird T-come-He Advrs 3-Allative
 'All birds came to him, however.' (Eagle 057)
- 322) Malonme tiitëi kulumi ja.
 malonme ti-w-itë-he kulumi ja
 then T-SA-go-He bird.sp Allative
 'Then (he/she) went to (the) vultures.' (Vulture 063)

The postposition marking instrumental participants is ke. It does not take any of the expected postpositional morphology (personal prefixes, the collective suffix -he, or a nominalizer), except for the negative suffix -la (325). The only test that favors classifying -ke as a postposition is the possibility for forming a phrase with a preceding

nominal. That differentiates it from a nominal particle or an adverb.²⁴ As in many Cariban languages (Aparai (Koehn and Koehn 1995:31; Tiriyó (Meira 1999:382), and Hixkaryana (Derbyshire 1985:18), *ke* marks instruments (323-324) and the cause/source of an event or state encoded in the main verb (326-331).

323) Kapau tuwëi eja alakapuha ke. kapaw t-uwë-he e-ja alakapuha ke deer T-kill-He 3-Erg shot.gun Instr 'He killed (the/a) deer with (the/a) shotgun.'

Malonme Siluhma tëwëtuhmoi

- 324) Tëhjoptëi kupeta ke.
 t-ëh-jo-ptë-he kupeta ke
 T-Det-cover-ProvideVrblz-He kupeta Instr
 'I covered myself with a blanket.'
- 325) Ëti kela, tëlephe kaikui.

 ëti ke-la t-ëlepy-he kajikuhi
 what Instr-Neg T-make.afraid-He jaguar

 '(They) scared the jaguar without (using) a thing.' (Kaikui 105)
- malonme hilulupma të-w-ëtupmo-he wewe telenu po-na
 then Silulupma T-SA-fall-He wood huge on.supported-to

 alimi unonopiï ke.
 alimi uno-no-pï-Ø-lï ke
 monkey.sp afraid.of-PtNmlz-PpNVrblz-SpcEvntNmlz-Pss Source

wewe telen pona,

'Then, Siluhma fell over a huge log from being afraid of the monkey(2).' (Monkey 024)

- 327) Jamoo jetumhak tokolom katop ke. j-amo-lï jetu-mhakë tokolom ka-topo ke 1-hand-Pss hurt-ModAdvlz paddling.snd do-CircmstNmlz Source 'My hand hurt from the paddling. (Alawaka 061, 062)
- 328) Talanme tilëkhem ke tilomohe.
 talanme ti-lëk-he-mi ke ti-lomo-he
 maybe Prtc-be.sick-Prtc-PtNmlz Source T-die-He
 'Maybe from sickness they died... '(Jolokod 730)
- 329) Këmï ken wai kopë ke. këmïj ken wahe kopë ke cold else 1be rain Source 'I am cold from the rain.'

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326)

²⁴ Though ke need not have an immediately preceding noun, it does not behave like a particle. Particles are not class changing and thus alone are not enough to mark an oblique noun with an adverbial function, as is the case of nouns followed by ke.

- 330) Inëlëë asiphak tëëtiihe jemna ke. inëlëlë ahi-phakë të-w-ëtili-he jemna ke 3AnaphPro hot-ModAvlz T-SA-become-He fever Source 'He became hot from the fever.'
- 331) Okï jetun ke tëhnameptëi inëlëë.
 wokï jetun ke të-w-ëh-name-ptë-he inëlëlë
 beverage strong Source T-SA-Det-drink.O-ProvideVrblz-He 3AnphPro
 'He got drunk from (the) strong beverage.' (Walema 112)

It also marks the participant which figures as the means for the achievement of the event/state encoded in the main verb (332 to 334) or by an adverb (335-336).

- 332) Jekïta kulumjek ke.
 j-ekï-ta kulumjekï ke
 1SO-pet-GetVerbalizer bird.sp Instr
 'I got a pet, a kulumjek (bird).'
 (Lit. I pet-got by means of kulum)
- 333) Tëwalimtëi ejahe mauu ke.
 t-ëwa-li-mtë-he e-ja-he mawulu ke
 T-rope-Pss-ProvideVrblz-He 3-Erg-PColl cotton Instr
 'They rope provided (3O) by means of cotton.' (Jolokoa 084)
- 334) Oki wili napi ke.
 woki w-ili-Ø napi ke
 beverage 1A3O-make.O-RecPst potato Instr
 'I made beverage by means of (the/a) napi (potato).'
- 335) Tumëkhe emna ja wewe ke tëmjahe.
 t-umëki-he emna ja wewe ke tëmjahe
 T-come-He 1+3EëclPro Dat wood Instr having.in.hand
 'He came to us, with a piece of wood in hand. (Monkey 038)
 (Lit.: 'having in hand by means of a piece of wood.')
- katnejlu ke tëkïkem kuntëm ekatak ailë.

 katnejlu ke t-ëkï-ke-mï kun-tëmï Ø-ekata-kë ajilë
 goat Instr havingAvlz-pet-havingAvlz-PtNmlz 3DistPst-go 3-in.area.nearby-into right
 '... with a goat as his pet, he went nearby them.' (Pear 009)

 (Lit.: 'Pet-having by means of a goat')

Source, reason, or cause of an event are also marked by the postposition umpoj(e) 'Cause'. Differently from ke 'Instrumental,' which in all cases marks an element that is immediately or intrinsically involved in the event/state it relates to, umpoj(e) takes personal prefixes, and the element that it marks as the trigger of an event is removed, occurring previously to the event itself.

```
337)
       Lome, mëklëë umpoi lëken, uwëtëpinitpë
                                                                    umpoi
       lome mëklëlë
                          umpoje lëken uwë-të-pïnï-tpë
                                                                    umpoje
            DemAnmMed Cause only kill-GenModAvlz-PrivNmlz-Dvl Cause
       lëken, huwaa mënëtiija.
       lëken huwalë mën-ëtili-ja
       only as.such 3certnty-become-NPst
       'Only because of that one, only because of the one who was formerly not able to kill, (it) is now as
       such.' (Tukusimule 076)
338)
       Mëje
                  tamï
                         tëlijëmëi
                                                   ijα,
       mëje
                  tamï
                         t-ëlï-jëmë-he
                                                   ï-ja
       away.distal cigarret T-ingest.fluid-Resumpt-He
       .....
       Masike mëlë
                            umpoi ïïtënutpë
       mahike mëlë
                           umpoje ïlï-të-nu-tpë
       With.that DemInanMed Cause make-GenModAvlz-nuPtNmlz-Dvl
       jakëlepmala
                            kunehak.
                            kun-eha-kë
       j-akëlepma-Ø-la
       1-help.O-NegAvlz-Neg 3DistPst-be-DistPst
       'Around there, I smoke cigarettes. (...) So, because of that, the former maker (i.e., God) did not
       help me.' (Walema2 044,046)
339)
       Jumpoi tïïtëi.
       j-umpoje tï-w-ïtë-he
       1-Cause T-SA-go-He
       '(He/She) went because of me.'
```

The postposition *wantë* 'by one's will' indicates the volitionality of a participant as the cause of an event that is normally unfortunate. It occurs frequently accompanied by the particle *panëk* 'because'.

- 340) Ëhewantë panëk ulaphak tëwesii jau.
 ëhe-wantë panëk ulaphakë të-w-ehi-Ø-lï ja-wë
 Recpr-by.one's.will because disgusted 3Refl-S_A-be-SpcEvntNmlz-Pss inside-in
 'By his own fault, (he was) disgusted inside of his own being.' (Sulalapana 076)
- 341) *Ïwantë* neha. "i-wantë n-eha-Ø 1-by.one's.will 3S_A-be-RecPst 'It was by my own fault.'
- 342) Tiwantë tiitëi.
 ti-wantë ti-w-të-he
 3Refl-by.one's.will T-S_A-go-He
 '(He/She) walked by his/her own will.'

The postposition walë 'Uncertainty' has been attested only in its inflected form. No nominalized forms have been accepted, and no examples bearing the collective marker -he or the negative suffix -la are attested. This makes it more difficult to classify walë as a postposition (Jackson (1972:74) lists iwalë as a particle), but its SAP prefixed examples and the fact that it occurs in the periphery of the sentence without any additional marking (thus, it is not a noun) argue in favor of its classification as a postposition. The third person form, iwalë, and the SAP forms are used in the same fashion, signifying the uncertainty of the proposition as a whole. The third person form iwalë, however, does not mean that a third person holds a judgement ('he/she thinks'), as is the case with examples bearing SAP prefixes (examples 346-349), but directly specifies the status of the proposition ('perhaps, maybe') in the judgement of the speaker. It appears, thus, to be evolving into a discourse particle.

- 343) Kalipono henatke iwalë. kalipono h-enatu-ka-ja i-walë non.Wayana 1+2A3O-be.finished-kaTransvzr-NPst 3-Uncertainty We will finish non-Wayana people up, maybe. (Jolokob 292)
- 344) *Ekëi ene iwalë eluwa*. ëkëhi ene-Ø **i-walë** eluwa snake see-RecPst 3-Uncertainty man 'Maybe (the/a) man saw (the/a) snake.'
- 345) *Elemijai iwalë*.

 ë-lemi-ja-he **i-walë**2-sing-Npst-SapAff 3-Uncertainty

 'Perhaps you will sing'
- 346) Uwamela ïwalë.
 uwame-la ï-walë
 healthy-Neg 1-Uncertainty
 'He is sick, I think'
- 347) Witėjai iwalė. w-itė-ja-he i-walė 1S_A-go-NPst-SapAff 1-Uncertainty 'I'll go, I think'

- 348) Mitëjai ëwalë.
 m-itë-ja-he **ë-walë**2S_A-go-NPst-SapAff 2-Uncertainty
 'Do you perhaps think you will go?'
- 349) Ëlemijai ëwalë.
 ë-lemi-ja-he ë-walë
 2SO-sing-NPst-SapAff 2-Uncertainty
 'You will sing, you think?'
- **6.3.** The de-verbal postpositionalizer -tihwë 'Posteriority'. This suffix occurs on verbal stems, and as in most of the de-verbal nominalizations, the category of the absolutive is the one encoded as the postpositional object. All -tihwë forms take personal prefixes, with the third person prefix in complementary distribution with nominal objects, and are collectivized by -he, the postpositional collective (cf. Jackson, 1972:70, where it is listed as a nominalizer):
- 350) Ipoo enetihwë uwëjai.
 ipoli ene-tihwë w-uwë-ja-he
 mythical.river.being see-Posteriority 1A3O-kill-NPst-SapAff
 'After seeing (an) ipoo, I'll kill it.'
- 351) Mëlë ëutihwë, helep kunka.
 mëlë ëwu-**tïhwë** helep kun-ka
 DemInanMed take.away.from-Posteriority moving.head.snd 3DistPst-do
 'Then, when (she) took his hat away, (he) gave a head shake.' (Pear 024, 025)
- 352) Mamak lamaptihwë timnelumtai.
 mamako lamapi-tihwë ti-minelumi-ta-he
 mother die-Posteriority T-husband-PssNIntrVrblz-He
 'After mother died, (I) got married.'
- 353) Tittetihwehe, weliham tepai ejahe.
 ti-w-ite-tihwe-he welihi-amo t-epa-he e-ja-he
 3Refl-S_A-go-Posteriority-PColl woman-Coll T-teach.O-He 3-Erg-PColl
 'After they came, they taught (the) women.'

When a third person prefixal object is coreferential with the sentence's subject, contrary to the norm that dictates a reflexive prefix, both the reflexive (354-355) and the non-reflexive prefixes (356) are attested, though it is most common for the third person

reflexive form to occur (at least in elicited examples). The reasons for the non-obligatory occurrence of the third person reflexive prefix in such contexts are not well understood:

- 354) Molo tumosiptëtihwë, pili tëëtiihe.
 molo t-umohiptë-tihwë pili të-w-ëtili-he
 SpcMedLoc 3Refi-leave.O-Posterity standing.snd T-S_A-become-He
 'There after (being) left, (she) stood up there.' (Jolokoa, 203, 204)
- 355) Tuwantatihwë Opolana man opalan pëkënme he.
 t-uwanta-tihwë opolana mane opalanu pëkë-nu-me he
 3Refl-grow-Posterity Opolana 3be airplane busy.with-PtNmlz-Attrb Des
 'After growing, Opolana wants to be like an airplane pilot.'
- 356) Masike epïinkatihwë, molo tëëtiihe inëlëë mihen, mahike Ø-epij-nu-ka-tihwë molo të-w-ëtili-he inëlëlë myhen
 With.that 3-stair-Pss-PrivVrblz-Posterity SpcMedLoc T-S_A-become-He 3AnphPro poor

kumaka amat po. kumaka amati po-Ø tree.sp branch on.supported-on 'With that, after (one) depriving (him) of (the) stair, there he stayed poor (one), on the branch of (the) kumaka (tree). (Eagle 037, 038)

6.4. Miscellaneous.

6.4.1. Irregular roots. A few irregular postpositions are found. The first of these is (j)a 'inside of' with its various allomorphs: /a/ when inflected by prefixes (other than k- and t-) and with a full nominal object plus $-il\ddot{e}$ 'through,' /ja/ when taking a full nominal object (minus $-il\ddot{e}$), and $/\ddot{e}/$ when inflected by k- '1+2' and t- '3rd reflexive'. ²⁵

```
357)
            (j)a 'inside'
1
        a. i-a-wë
2
        b. ëw-a-wë
1+2
        c. k-ë-wë
        d. Ø-a-wë
        e. t-ë-wë
3Refl
        f. katali ja-u
                          'in the basket'
           katali ja-k
                          'to the basket'
        g. kopë a-ilë
                           'through the rain'
        h. Ø-a-liï
                           'one inside of it'
        i. ët-a-ilë
                           '(come) out together'
```

The forms with k- and t- resemble those of nouns starting with /w/ and having /e/ as their second vowel. See section 4.1.1.1 for a comparison.

Some forms show a defective paradigm. The postposition *talihna* 'in the open' is listed as a postposition because it takes morphology unique to postpositions (such as the spatial suffixes $-w(\ddot{e})$, $-k(\ddot{e})$, and the nominalizing suffix $-l\ddot{\iota}(l\ddot{\iota})$), but it does not, however, take objects.

The postposition $\ddot{e}/etap(o)$ 'on the hammock of' takes spatial suffixes (-na, - $il\ddot{e}$), the collective -he, and all personal prefixes, but it does not take any nominal objects. It is the only postposition to occur in an objectless ablaut form ($\ddot{e}tat(\ddot{i})$) 'on a hammock'). This postposition is clearly derived from the root for 'hammock' which has both a possessed ($etat(\ddot{i})$) and an unpossessed form ($\ddot{e}tat(\ddot{i})$). The noun must have historically fused with po 'on (supported)' resulting in a new postposition, as the deletion of $/t\ddot{i}/$ in 'hammock' and the deletion of /o/ in the postposition cannot be accounted for synchronically.

The morpheme *mna* 'without' is a form taking postpositional morphology such as the collective *-he* and the nominalizer *-to* and prefixes, but it takes no nominal objects.

The equivalent form with a nominal object has developed into a de-nominal adverbializing suffix (*cf.* 7.2.1.1.1.3).

The case of (w) apta 'when/if,' is a more complicated one. Besides the personal prefixes and the collective -he, the only postpositional morphology it takes are -w(\ddot{e}) 'in' and the nominalizing suffix - $l\ddot{\imath}(l\ddot{\imath})$. The parseability of -w(\ddot{e}), however, is not clear since (w) apta takes no other spatial suffixes, and the only suffix occurring in the same slot is the nominalizing suffix - $l\ddot{\imath}(l\ddot{\imath})$. In addition, in the present database, (w) apta does not occur with third person prefixes. The expected iwaptau or tëwaptau do not occur.²⁶

-

²⁶ This scenario seems different in the Wayâna spoken in Surinam. A quick glance at the gospel of Luke (Schoen & Schoen, 1979) reveals that forms such as *iwaptao* and *tëwaptao* with the third person non-coreferential and with the third person coreferential suffixes are still in use in that dialect. However, *aptau* forms referring to third persons in both coreferential and non-coreferential contexts are also found.

```
358)
            /wapta/
                           'when; if'
                           'when I; if I'
         a. ï-wapta-u
                           'when you; if you'
2
         b. ë-wapta-u
1+2
         c. ku-wapta-u 'when us; if us'
         d. *i-wapta-u
                           (when he/she/it; if he/she/it')
                           ('when 3<sup>rd</sup> self; if 3<sup>rd</sup> self')
3Refl
         e. *të-waptau
N?
         f. ulu aptau
                           'when (it is) bread; if (it is) bread' (Maria 009)
```

In texts, of the 73 occurrences of *(w)apta* only 7 are prefixed ((363) below), and the most frequent prefixless form may be related to both third person and SAP participants (360-361)). The factors triggering the different forms are not well understood.

- 359) Kalipono pëk tëmamine kuwaptau kalipono pëkë tëmamine ku-wapta-wë enemy busy.with have.work 1+w-S_A-if-in 'If we get busy working on the enemy...' (Jolokob 288)
- pasitume eitop tumosiptëi aptau, pahitu-me ehi-topo t-umohiptë-he wapta-wë pastor-Attrb be-CircmstNmlz Prtc-leave.O-Prtc when/if-in

ipokela eitop lëken wapëhjai malalë.
ipoke-la ehi-topo lëken w-apëhi-ja-he malalë
good-Neg be-CircmstNmlz only 1A3O-get/grab-NPst-SapAff same
'If (I) leave being a pastor, I will only get to be bad, likely. (Walema2 179, 180)

361) Tonophe, talilimamhe aptau...
t-onopï-he t-alilimam-he wapta-wë
T-paint.O-He Prtc-be.black-Prtc when-in
'(We) painted (it), when (it) (was/got) black...' (Malamala 11, 12)

It appears, thus, that the inflected forms are falling into disuse, and the prefixless form is being used with all persons. In the example shown in (358 f), we have an instance of a noun followed by the prefixless form, in an apparent object-postposition sequence. However, a look at the distribution of (w) apta reveals that it may also occur immediately after speech classes other than nouns, including adverbs and other postpositions. It appears, thus, that (w) apta is functioning as a particle, which is free to follow any speech class (with the lone exception of main verbs).

In fact, in the cases where *aptau* is glossed as consequential 'thus; therefore,' it is restricted to the sentence initial position, and it does not take any morphology at all:

362) Malonme, aptau pëmït tïkahpok!
malonme aptawë pëmïtï tï-kapï-po-kë
then therefore basket(kd.) Them-hand.craft.O-Caus-ProxImp
'Then, thus make him craft a basket.' (Vulture 018)

What we see here is a continuum from the more prototypically postpositional forms of (w)apta, i.e. the prefixed forms, to the prefixless forms which behave more like grammatical particles.

6.4.2. The infix -h- 'Intensifier'. This infix occurs typically with adverbs (7.2.2). One example in the database, however, suggests that it might also occur with postpositions:

363) mëlë uhwala mëlë wala-h
DemInanMed around-AvIntens
'All around it' (Pëne 107)

This analysis obviously needs further investigation, as the very position of the infix in this example is suspicious. In all other adverbial examples, it comes after the first vowel of the root (/ipoke-h/>[ihpok]). In this example, however, it occurs after a /u/ which is not part of the root as the forms *ïwala* 'around me,' *ewala* 'around him/her/it,' and *ëëtë wala* 'around the village' show.

6.4.3. Verbalized postpositional phrases? The only fully attested derivational process affecting postpositions is nominalization (4.2.2.2.1). One isolated example found in the database, however, seems to indicate that some postpositional phrases may be subject to verbalization. Example (364) seems to be formed with the desiderative postpositions *he* plus what appears to be the verbalizer *-ta*. However, arguing against this hypothesis is

the fact that -ta is a highly productive nominal suffix and that no other similar example is attested in the database. (The example below is parsed for the sake of clarity)

```
364) itunaheta
i-tuna-he-ta
1SO-water-Des-PssNIntrVrblz
'I want water'
```

6.4.4. Historical Complexity. Though Wayâna presents an abundance of derivational processes (verbs from nouns, nouns from verbs, postpositions and adverbs, adverbs from nouns, *etc.*), there are no morphological mechanisms deriving postpositions from any other of the speech classes, with the only exception being the de-verbal postpositionalizing suffix *-tīhwē* 'Posteriority'. The few cases of postpositions that present some sign of being historically derived look like a result of fusion of a postposition with its nominal object. All the attested examples are presented below with their potential historical sources.

```
365)
       ahpo
               'on the back of'
                                                       'back'
                                                                          'on'
                                                 apï
                                                                  + po
366)
       uhpo
               'on top of'
                                             < upu 'head'
                                                                 + po
                                                                          'on'
367)
                                                                 + pata 'land, place'
       empata 'in front of'
                                             < emï
                                                       'face'
368)
       etap(o) 'on hammock of'
                                                 etat(i) 'hammock' + po
                                                                          'on'
369)
       lamna 'in the center of'
                                             < lami 'belly'
                                                                  + na
                                                                          'in boundless obj.'
```

The morphophonological irregularities argue for the existence a synchronically monomorphemic form since all the noun sources presented here end elsewhere with a vowel on the surface (except for *ëtat(i)* 'hammock'), and since postpositions do not cause syllable reduction, the type of syllable reduction witnessed here (in bold in the noun source) is not accounted for synchronically. Furthermore, in the process of creating new postpositions, the nominal possessors became the objects of the new postposition forms. However, with syllable reduction obscuring the noun source, nouns other than the possessor of the noun source can occur as the object of the new postposition. This

indicates that the meaning of the new form is more generic than that of the noun source. For instance, $\ddot{\imath}p\ddot{\imath}$ 'mountain' can be the object of uhpo 'on top,' a postposition derived historically from upu 'head' plus po 'on,' but it cannot be the possessor of either upu or $upu(tp\ddot{e})$ the two synchronic allomorphs for 'head' (* $\ddot{\imath}p\ddot{\imath}$ upu or * $\ddot{\imath}p\ddot{\imath}$ $uputp\ddot{e}$).

7. ADVERBS.

The Wayâna adverbs encode semantic features common to adverbs, as time and location, but also features that would be more common to the class of adjectives (which Wayâna lacks) such as sizes, shapes, and qualities. Formally, adverbs are distinct from other word classes in that, they fail to take the morphology that is specific to those classes, while at the same time taking a few morphemes specific to their own. For instance, adverbs do not take any personal prefixes or number (verbs, nouns and postpositions do), but take specific nominalizing morphology (and this makes them distinct from particles which do not take any morphology). The criteria for the classification of adverbs are:

- a) morphological: they take -la 'Negative', two nominalizing suffixes -an(u) 'Participant Nominalizer' and -pin(i) 'Privative Nominalizer' (see section 4.2.2.2.2 for a detailed discussion on these morphemes and their various allomorphs), and most take -h- 'Adverbial Intensifier'.
- b) syntactic: they present a free distribution in the sentence, with one restriction: they cannot occur in any of the nominal slots (the *3A3O* pre-verbal position in Set I verbs, the slot for the genitive possessor, the slot for the object of postpositions (see section 8.1).

Both a) and b) also apply to postpositions, but postpositions can take specific allomorphs of the 'Participant Nominalizer' (-li(li), and so forth (4.2.2.2), and they do not take -pin(i). Postpositions are a clearly separate word class since they take personal prefixes and numbering suffixes that adverbs do not (section 6.1).

Given the adjectival English gloss of some adverbs (*pëtukuu* 'beautiful', *tekme* 'heavy', *ipok* 'good', *etc.*), the question of whether this class is not one of adjectives that may also function adverbially (as in the English case of 'a *good* woman' vs. 'she works *good*') arises. The answer to this relies on the fact that no adverb may occur in any of the nominal slots unless nominalized. The examples below show that only a nominalized form can occur in the *3A3O* preverbal object slot.

- 1) Wëlïi ene ipok
 wëlïhi ene-Ø ipoke
 woman see.O-RecPst well
 'He/she/it saw the woman well'
- 2) *wëlïi ipok ene
- 3) Wëlii ipokan ene
 wëlihi ipoke-anu ene-Ø
 woman good-PtNmlz see.O-RecPst
 'He/she/it saw the good woman'

Thus, this form class is a peripheral one, syntactically modifying the predicate, as is normally the case for adverbs, and never occurring within nominal slots, as would be the case for adjectives.

One of the most interesting characteristics of adverbs is that they seem all, with a very few exceptions, 'derived'. Even synchronically monomorphemic adverbs show clearly recurrent segmental sequences that indicate their historical complexity. For this reason, it virtually impossible to analyze Wayâna adverbs without touching on their history. Thus, this chapter first presents a discussion on the apparent historical internal complexity of synchronically monomorphemic adverbs, then a discussion of the semantic classes these adverbs fall into, and finally the description of derivational adverbial(izing) morphology.

7.1. Non-derived Adverbs.

7.1.1. Formal classes. Non-derived adverbs can be classified into two large formal classes, one with adverbs that present what seem to be remnants of some old morphology that no longer operates in the language, and one with forms that present phonological sequences that are similar to some synchronic morphology, but that cannot be parsed since the stems that seem to 'inflect' are frozen, non-transparent forms. Borrowing terms from Meira (1999), who reports a similar phenomenon for Tiriyó adverbs, the former are called *primitive* adverbs and the latter *non-primitive* adverbs. ¹

7.1.1.1. Primitive Adverbs. These adverbs can be grouped into several formal classes according to their endings. Adverbs that do not present any of the recurrent endings are listed under the label 'other', as shown in Table 1.

¹ Primitive and non-primitive adverbs are grouped solely on the basis of phonological similarities. Future historical research will determine the legitimacy of such groups, i.e., whether or not some segmental sequences can be reconstructed as morphemes.

Table 1
Classes of Primitive Adverbs

	Adverbs ending with /Ce/ or /Cë/			Adverbs starting with /t/ and/or ending with /Ce/ or /lë/		
/kë/	walunak(ë) ulalak(ë)	'evening' 'soft; malleable'	/t/_	Tala tan(ë) tuno të tïkena ta	'how' 'here (specific)' 'fearful' 'where' 'together' 'what'	
/lë/	ailë anumalë hemalë mïnanumalë mëlëanumalë huwa(lë) malalë mïja(lë) wantë(lë) malë	'truthful' 'tomorrow' 'today; now' 'day after tomorrow' 'on the next day' 'as such' 'same' 'thither' 'later; afterwards' 'also; too'	/t-lë/	taptëlë tuwalë tïwëlë talë	'round 'knowingly' 'different' 'here (Nspc)'	
/në/	ëkëmnë më(w)ihnë më(w)ihnë	'behind' 'nearby' 'a lot'	/t-me/	talilime tuntulam(e) tïnme tekme tïtpëpuume	'black' 'head down' 'quiet; still' 'heavy' 'brown skinned'	
/he/	hekehe jeklawahe	'happy' 'clean'	/t-he/	tïpïnahe	'abandoned'	
/ne/	jahpine kokone mïnkokone	'thin; shallow' 'yesterday' 'day before yesterday'	/t-ne/	tëmamine tëmene tïpïne	'with work' 'stealing' 'dearly'	
/ke/	ëhewake ipok(e) lomok(e) upak(e) ahmek(e?)	'happy'; 'good'; 'low; short'; 'long ago'; 'bothersome; nauseating' 'cracked'.	apsik(ĭ) pëwëi pëkëna jakwe kawë pëtuku(l imna	Other 'small; little' 'alone' 'alone' 'sweet; salty' 'high; tall' u) 'beautiful; well' 'without'		
/le/	ejale kole ulale ëile pëtule	'close'; 'many; a lot'; 'disgusted'; 'angry; fierce'; 'beautiful'.	molo mon(o) mïja sija poptë	'there 'thithe 'hithe 'more	r' or less'	
/je/	ahpoj(e) hej(e) mëj(e)	'much' 'undefined med. loc.' 'undefined dist. loc.'	pïtëna kupepsi	'at hur k(ï) 'short'		

The data in Table 1 show the many recurrent segmental sequences among primitive adverbs.² Though no specific semantic content correlates with them, it is inferrable that some of these sequences must have been morphemes, especially those that may be compared to synchronic morphology (some of today's adverbializers end with -ke, -je or -le). As for the adverbs presented under the label 'Other', they do not present such sequences and thus could be said to be 'truly' primitive. However, for many adverbs, some indications exist that suggest that they may also have been complex historically (see 7.1.1.3).

7.1.1.2 Non-primitive adverbs. These adverbs show phonological sequences that are similar to those of various synchronic adverbializing morphemes (discussed in section 7.2.1). Some end with /me/ and like -me 'Attributive Adverbializer' take the allomorph -an(u) of the 'Participant' nominalizer. Some start with /t/ and end with /ke/, /le/, or /je/, and like the discontinuous adverbializers t-ke, t-le, and t-je, they take allomorph -m(i) of the 'Participant' nominalizer (see section 4.2.2.2.2). Some end with /phakë/ / /mhakë/ and like the discontinuous adverbializer i-phak(ë)/i-mhak(ë) take -an(u). These are considered monomorphemic because what may have been the root or stem do not occur elsewhere in the language (amolime 'next time', but *amoli). Table 2 lists these adverbs.

-

² The final vowels of *ahmek* 'bothersome; nauseating' and *pëwëi* 'alone' are not known. The reason for listing *ahmek* under adverbs ending with /ke/ is that it takes -*anu*, an allomorph of a nominalizer commonly occurring with stems ending with /e/. As for *pëwëi*, there is no evidence for determining its last underlying segment. Surface forms ending with [j] present endings of various phonological shapes: [hej] ←/heje/ 'undefined medial location', [epɨj] ←/epɨj/ 'stair'), and [kajkuj] ←/kaikuhi/.

Table 2
Classes of monomorphemic non-primitive adverbs

/me/,	amolime	'next time'
/pe/	ihme	'existent'
	kupime	'long'
	uwame	'healthy'
	wijo me	'crooked'
	howoime	'light weight'
	maika m(e)	'bitter'
	pïume	'hanging'
	ahpe	'untrue'
	imulikuhpe	'short-waisted'
/t-?-ke/,	tameheke	'careful'
	tïkolok e	'white'
	tupke	'deep'
	tëlentïke	'worried'
	tawake	'happy'
	tëwantëpanëk(e?) 'by oneself' ³
/t-?-le/,	tïmïle	'bloody'
	takpile	'red'
	tapile	'open'
	tïmulihule	'long-waisted'
	tumhehule	'long-haired'
/t-?-je/	tïhule	'a while'
	tïjule	'blue; green'
	tomotaj(e)	'head down'
/t-?-he/	tëklewej(e)	'slippery'
	tëmjahe	'in hand'
/phakë/, /mhakë/	amolephak(ë)	'fast'
	jephak(ë)	'sharp (blade)'
	ïkï phak(ë)	'lazy'
	ëmëmhak(ë)	'greedy'
	ëtakuluhmak(ë)	'ugly'
	ankomhak(ë)	'at mid-day'
	ulaphak(ë)	'disgusted'
	akëlephak(ë)	'far'

7.1.1.3. Complex non-derived adverbs. Evidence of internal complexity of monomorphemic adverbs, other than the sole recurrent phonological sequences in their beginning or end, exists in various degrees. In many cases, what may have been the root occurs in several stems with related meanings, and the possible old forms of adverbializers can be traced (*-ke, *-le, *je, *-ne, *t-, etc.).

³ The last vowel of *tëwantëpanëk* is not known.

7.1.1.3.1. _/Ce/ adverbs. Evidence of historic complexity exists only for a few /Ce/ adverbs: *kokone* 'yesterday' seems to have been an adverbialization of *koko* 'night' (with adverbializer *-ne?), and *lomoke* 'short; low' may have been built upon *lo mo* 'on the ground' (with adverbializer *-ke?).

There are also cases of two different adverbs (apparently with the same meaning) that look as if they have been built with the same root: *ulale* 'disgusted' alternates with *ulaphak(ë)* 'disgusted', and *pëtule* alternates with *pëtuku(lu)* 'beautiful; well'. Though the morpheme *-phak(ë)* exists marginally in the language today, no evidence for the morpheme *-le (or *ku(lu)) is found. Another similar case is that of *ëhewake* 'happy' versus *tawake* 'happy' (which can be compared with verbal root *ewakta* 'laugh; be happy' and *ewakma* 'attract love from O') where /ëh/ seems to be the remains of *ëh(e)-*, the still operative 'Reciprocal', and /t/ a reflex of an old *t- adverbializer (thus, *tawake* seems to be a form displaying *t- rather than *-ke). It seems that *ula, *pëtu, and *e/awake were nominal elements since the best candidates for modern reflexes of *-le, *-ke and *-t (t-N-le and t-N-ke) are denominal adverbializers, and *ëh(e)-* and -ta 'Possessive Verbalizer' and -ma 'Give Verbalizer' all inflect nouns.

A more complex case is that of adverbs ipok(e) 'good', $popt\ddot{e}$ 'more or less' (adverb), and $ipophak(\ddot{e})$ 'lucky, good at hunting'. They are all formed with /po/ which clearly meant 'good' and, it seems with *-ke, *- $pt\ddot{e}$ (unattested), and - $phak(\ddot{e})$. /po/ is also found morphemes that belong to different speech classes such as $ipopt\ddot{e}$ 'bad one; violent one' (noun), i-V- $pophak(\ddot{e})$ 'Satisfactory' and i-V-pola 'Defective' (ambifixes), and pola 'not good' (particle), the last two obviously taking the negative -la. It is not possible to

determine solely on the basis of internal reconstruction the speech class that *po may have belonged to.

Finally, the adverbs $\ddot{e}ile$ 'fierce; angry' and ahpoj(e) 'much' have postpositional equivalents, eile 'angry at' and ahpo 'over'. For $\ddot{e}ile$ vs. eile, it is not possible to determine which may have been the basic form, whether the adverb or the postposition (or even something else), but for ahpoj(e) vs. ahpo, it seems that the postposition was built upon $ap\ddot{r}$ 'back' plus the postposition po 'on' ($ap\ddot{r}+po/\rightarrow[ahpo]$ easily accounted for by syllable reduction rules, and the adverb with the adding of *-je (?) or -j(e) 'away', a suffix that occurs with both adverbs and postpositions (7.2.3).

A similar case is that of the locative adverbs hej(e) 'undefined medial location' and $m\ddot{e}j(e)$ 'undefined distal location', which can be compared to the motion adverbs $m\ddot{i}ja$ 'motion to speaker' and sija 'motion away from speaker', and to the inanimate pronouns sin(i) 'this (proximal)' and $m\ddot{i}n(i)$ 'that (distal)'. The diagram below illustrates that heje and $m\ddot{e}je$ may have been both internally complex. The syllable /he/ may have had the meaning of 'proximal' (cf. /hi/ in sija and sin(i)), and /m \ddot{e} / the meaning of 'distal' (cf. /m \ddot{i} / in $m\ddot{i}ja$ and $m\ddot{i}n(i)$). The final syllable /je/ is comparable to the adverbial (and postpositional) suffix -j(e) (7.2.3) which indicates that the location is away from where the speaker is, and this would be compatible with the sense of an 'undefined' location that both adverbs convey. As an indication that the two are related, hej(e) can occur as the answer to a question with -j(e):

4) - tëi meha
të-je m-eha-Ø
where-away 2S_A-be-RecPst
'Where away were you?'

- 5) hei weha
 heje w-eha-Ø
 NspcMedLoc 1S_A-be-RecPst
 'I was around there'
- 6) Tëi mumëk? wïkane eja. tëë-je m-umëkï-Ø wï-ka-ne e-ja where?-away 2S_A-come-RecPst 1S_A-say-DistPst 3-Dat
 - Hei, kunka inëlëë.
 heje kun -ka inëlëlë
 NspcMedLoc 3DistPst-say 3Pro.Anph
 "Where away did you come?" I said to him. "Somewhere around there", he said.'
 (Pëne 013, 014, 015)

A similar remark can be made for the motion adverbs: /ja/ is comparable to the dative postposition *ja* 'to; by' which frequently occurs with verbs of motion (*alëk mule ja* 'take it *to* the child').

	proximal/medial	distal
undefined location	he je	më je
motion	si ja	mï ja
Pronoun	<i>si</i> n(ï)	mïn(ï)

7.1.1.3.2. /t/_ and /t__ Ce/ adverbs. Among these are two adverbs with pospositional equivalents, *tuwalë* 'knowingly' (vs. *uwalë* 'know') and *tuno* 'fearful' (vs. *uno* 'fear'), in which /t/_ may have been an old *t- adverbializer. This may also be the case for *takpile* 'red' (*akpilam(i)* 'be, become red'), and *tëmamine* 'with work', for which the source, *maminu* 'work', still exists.

Some adverbs more clearly show reflexes of a discontinuous morpheme. For instance, *timulihule* 'long-waisted' seems to be formed with **muli* 'waist(?)' plus **hu* 'long (?)', and with adverbializer **t-N-le* (compare to *imulikuhpe* 'short waisted' and *tumhehule* 'long-haired', and */umhe/* 'hair'). Also, *tipinahe* 'abandoned', seems to be formed with **t-N-he*. *Cf.* adverbs *tipine* 'dearly' and *pinapophak(ë)* 'cute'.

A few adverbs are almost parseable, but the shape of the supposed root is idiosyncratic and not accounted for morphophonologically. Examples of such adverbs are *timile* 'bloody' (*cf. miu* 'blood'), *tikoloke* 'white' (*ewu ekolokit* 'white part of the eye', *ekololi* '(white) bread crumbs', *koloka* 'clean it off', and *akoloka* 'clear brush').

Finally, t = want = pan = k 'by oneself' seems to be formed with the postposition want = vant =

7.1.1.3.3. Other possibly complex adverbs. These are adverbs without the recurrent segmental sequences, but with some indication that they may be complex historically. The locatives molo 'there (medial)' and mon(o) 'there (distal)' seem suspiciously similar to the postposition mo 'on' (lo mo 'on the ground') and to the inanimate demonstrative pronouns with the same deictic value; molo resembles the medial pronoun $m\ddot{e}l\ddot{e}$, and mon(o) resembles the distal pronoun $m\ddot{e}n(\ddot{i})$.

The adverb kawë 'tall, high' seems to have had a nominal correspondent (cf. kawemhak(ë) 'tall' and kawemna 'not tall; short', with de-nominal adverbializers -mhak(ë) and -mna). kawe does not occur anywhere else in the languages. It does not, for instance, occur as either a possessed or a free form. A parallel case is that of ikiphak(ë) 'lazy,' which may be compared to i-ki-pëm 'I was lazy' (with verbalizer -pam(i)). No other form with *(i)ki (lazy) is found, however.

The adverb kupepsik(i) 'short' seems to be composed of *kupV 'long (?)' (cf. kupime 'long', *kupV plus the morpheme *-me) and psik(i). An obvious candidate as the source for the second element is the particle psik meaning little or small. Synchronically,

however, while no nominalizing suffixes may follow *psik*, this adverb may be nominalized with -*an(u)*: *kupepsikan(u)* 'the short one'. Thus, *psik* cannot be synchronically parsed in this form.

The adverb *ihme*~*ihpe* 'existent; having' has a suffixal correspondent, the denominal adverbializer -*hme*/-*hpe*. Both the adverb and the suffix are nominalized with -an(u)):

7) a. ihme~ihpe 'There is; there exists' b. ihman 'one that has (it)' c. wapu-hpe 'There is wapu' d. wapu-hpan. 'one that has wapu (palm tree (sp.))'

The relative distribution of *ihme* and *hme* is somewhat analogous to that of nominal and postpositional phrases where third person prefixes are in complementary distribution with nominal possessors or objects (*i-pëk* 'about **it**', *ulu pëk* 'about **bread**'). Though no synchronic function can be assigned to /i/ in *ihme*, it is conceivable that *ihme* may have been something like a postposition (not a noun because it can be nominalized; not an adverb because adverbs do not take prefixes), with its third person prefix alternating with a (pro)noun. With all other forms of its paradigm lost, except for the third person, it became a suffix when following a noun and fell into the category of adverbs in its third person prefixed form.

Some forms belonging to other speech classes corroborate this idea. The postposition *mna* 'without' is inflected with all personal prefixes (though SAP forms are extremely rare), but when taking a (pro)noun as its object, it shows evidence that it is on its way to grammaticalizing into a suffix (7.2.1.1.1.3). With the disappearance of SAP forms, *mna* will be exactly parallel to (i)hme. The particle itapek 'negation of identity'

occurs in isolation while *tapek* 'Nominal negation' occur when a noun precedes. These may correspond to an even older form that does not take any morphology today.⁴

The adverbs *minkokone* 'day before yesterday', *minanumalë* 'day after tomorrow', and *mëlëanumalë* 'the next day' seem to be built with inanimate demonstrative pronouns *min(i)* and *mëlë* plus either the adverbs *kokone* 'yesterday' or *anumalë* 'tomorrow'. However, no other cases of a demonstrative pronoun modifying an adverb are acceptable synchronically.

7.1.2. Semantic classes. Monomorphemic adverbs are grouped semantically in Table 3 (as an elaboration on Jackson's semantic classification for 'modifiers' (1972, pp. 61)):⁵

Table 3
Semantic classification of monomorphemic adverbs

Time	kokone	'yesterday'	wantë(lë)	'later; afterwards'
	hemalë	'now; today'	upak(e)	'long ago'
	anumalë	'tomorrow'	amolime	'next time'
	walunak	'evening'	tïhule	'a while'
	ankomhak(ë)	'mid day'		
Sizes, shapes,	apsik(e)	'small; little'	taptëlë	'round'
dimensions	jahpine	'thin; shallow'	kupime	'long'
	lomok(e)	'short; low'	wijome	'crooked'
	kawë	'high; tall'	tupke	'deep; full'
Weights,	kole	'many; a lot'	më(w)ihnë	ʻa lot'
measures,	tekme	'heavy'	ahpoj(e)	'much'
quantities	kupepsik	'short (not long)'	poptë	'more or less'
-	howoime	'light weight'		

⁴ The adverb apsik(i) and the particle psik may turn out to result from the same process, but there are no indications that a here could be a third person prefix. The third person prefix does have an a- allomorph, but it occurs only with roots beginning with a-

⁵ Jackson's 'modifiers' correspond by and large to the category of adverbs in this work, though many of his examples correspond to either derived adverbs or roots belonging to other speech classes (*pepta* 'big' is a noun and *katip(i)* 'like' is a postposition). In his semantic classification of modifiers Jackson divided adverbs according to time/seasons, qualities, sizes and shapes, and weights and measures.

D:4:	mïja	'thither'	sija	'hither'	
Direction of	iiiija	uninei	Sija	munei	
Motion			<u> </u>		
Location			non-deictic		
	tan(ë)	'here (Spc)'	më(w)ihnë	'nearby'	
	talë	'here (Nspc)'	ëkëmnë	'behind'	
	molo	'there (medial)'	ejale	'close'	
	mon(o)	'there (distal)'			
	heje	'non-spc. med. loc.'		'	
	mëje	'non-spc. dist. loc.'			
	physical attribu		psychological attributes/		
Qualities	ulalak(ë)	'soft; malleable'	evaluations		
	tëklewej(e)	'slippery'	ailë	'truthful'	
	jephak	'sharp (blade)'	hekehe	'happy'	
	jeklawahe	'clean'	tawake	'happy'	
	tïtpëpuume	'brown skinned'	ëhewake	'happy'	
	tïmulihule	'short-waisted'	tameheke	'careful'	
	imulikuhpe	'long-waisted'	ëmëmhak(ë)	'greedy'	
	jakwe	'sweet; salty'	tëlentïke	'worried'	
	maikam(e)	'bitter'	ipoke	'good'	
	uwame	'healthy'	pëtuku(lu)	'beautiful; well'	
			pëtule	'beautiful; well'	
			ëtakuluhmak(ë)	'ugly'	
	conditions/situa	tions/physical	malalë	'same'	
	orientation	/ 1 1 1 1	tïwëlë	'different'	
	tïpïnahe	'abandoned'	tïpïne	'dearly'	
	tëmamine	'with work'	ahpe	'untrue'	
	pïtëna	'at hunt'	tëmene	'stealing'	
	pïume	'hanging'	ahmeke	'bothersome;	
	tëwantëpanëk(e?	· •		nauseating'	
	tikena	'together'		• , •,•	
	pëwëi	'alone'	sensations/emot		
	pëkëna	'sole/alone'	ulale	'disgusted'	
	tuntulam(e)	'head down'	ulaphak(ë)	'disgusted'	
	tomotaje(e)	'head down'	ëile	'angry; fierce'	
	tïnme	'quiet; still'	tuno	'fearful'	
	tapile	'open'	tuwalë	'knowing'	
	tïmïle	'bloody'	1		
			colors	63-11-2	
			talilime	'black'	
			tïkoloke	'white'	
			takpile	'red'	
0 41	tolo	(horred)	tïjule	'blue; green'	
Question	tala	'how?'			
	të	'where?'			
~ .	ta	'what?'	<u> </u>	·	
Other	huwa(lë)	'as such'			
	imna	'without'			
	ihme	'existent'			
	amolephak(ë)	'fast'			

The most interesting features motivating the semantic sub-classification of this speech class are deixis, the degree of definition of a location, and direction of motion.

The next two sections elaborate on these features.

7.1.2.1. Deixis and the degree of definition of a location. In the same way as pronouns (4.3.2.2), a group of adverbs presents a three way deictic distinction: proximal, medial and distal. The group is also organized according to whether the adverbs refer to well defined or to loosely defined locations.⁶ These adverbs are shown in Table 4 (inanimate pronouns are added for illustrative purposes):

Table 4
Locative and deictic adverbs

		Proximal	Medial	Distal
Adverbs	well defined location	tan(ë)	molo	mon(o)
	loosely defined location	talë	hëj(e)	mëj(e)
Inanimate Pronouns		sin	mëlë	mïn

The adverb $tan(\ddot{e})$ refers to a precise location, one that can be pointed to and is very close to the speaker's body, (8) and (9), and under the speaker's visual field (10), a location in the speaker's body (11), or a location within the speaker's reach (12):

- 8) Tan wai kolome katela po tanë wahe kolo-me katela po SpcProxLoc 1be sit.down.snd-Attrb chair on 'I am here seated on a chair'
- 9) *tan wai macapa po (I'm here in Macapa (city))
- 10) hu, ipoo tanë psik kunehak; hu ipolï tanë phikï kun-eha-kë hu! mythical.river.being here(spc) little 3S_ADistPst-be-DistPst 'Uh, the ipoo was just right here (where I am pointing)' (Kaikui2 079)

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⁶ Jackson (1972:68) uses the label 'definite place' versus 'general area, indefinite' for $tan(\ddot{e})$ as opposed to $tal\ddot{e}$ and for molo as opposed to hej(e). I chose not to use these labels, because, as discussed below, $tal\ddot{e}$ refers to a definite place, one always accessible to both the speaker and the hearer.

```
tan wai jetumhak jetaa pëk tanë wahe jetu-mhakë j-eta-lï pëkë here(spc) 1be hurt-ModAdvlz 1-kidney-Pss about 'I am hurting here, by my kidney'
```

12) ai, alika opinë, mëklëë ëkëi tan ai alika opinë mëklëlë ëkëhi tanë Then worm.sp under DemAnmMed snake SpcProxLoc

huwaa ëtï pena malalija psikï htau huwalë ëtï pena malalija phikï tta -wë as.such what Hesitative tree.sp small among-in 'Then, under the worm (i.e., under the nuts that contain the alika worm), the snake was, right there (lit. 'here') among the (leaves of the) malalia (tree)' (when it bit mother's hand). (Snake 022)

Example (12) above shows an interesting aspect of Wayâna deictic adverbs which is the primacy of adeictic center other than the present location of the speaker. In this story, the speaker is telling about an event that happened in another location, but since the location she is referring to was close to her, she still needs to use $tan(\ddot{e})$ 'here'. She would have failed if she had used molo 'there' (see below), because it would mean that that location was somewhat distant from her.

An extended use of $tan(\ddot{e})$ is that of functioning together with a hand gesture to indicate measurement (how tall or how much):

- 13) tanë psik inëlëë pepta me psik;
 tanë phikï inëlëlë pepta me phikï
 SpcProxLoc little 3Pro.Anph big Attrb little
 'He was about this tall, a little big' (Lit.: 'a little here he (was)...') (Kaikui 043)
 (with speaker gesturing towards the point of her body the child's stature reached)
- 14) tumkahe psik emna ja t-umï-ka-he phikï emna ja T-root-PrivVrblz-He little 1+3ExclPro Erg

tanë psik tanë phikï SpcProxLoc little

'We unearthed (it) about this much' (Lit.: 'We unearthed here little') (Kaikui2 014)

Of all the deictic adverbs, $tan(\ddot{e})$ is the only one not to occur with -na 'Goal' and the particle $in\ddot{e}$ 'source'. In fact, there are virtually no examples of it with verbs

involving motion from one place to another. Almost all of its occurrences are with copular verbs. There are, however, two exceptional examples in texts that suggest that $tan(\ddot{e})$ can be used as a source landmark with verbs of motion (15) and (16). However, due to the scarcity of the data, and to the common problem of reliability with translations (In the examples below, I suggest a second possibility of translation), this matter requires further investigation.

```
15)
        malonme tan
                                                      akename
                              ΪIJ
                                    wïtëne
        malonme tanë
                              ïwu
                                   w -ïtë-ne
                                                      akena -me
                   here(spc) 1Pro 1S<sub>A</sub>-go-DistPst first-Attrb
        'So, (from) here I myself went (ahead) first' (Pëne 005)
        ('So, here I (was); I had gone (there) previously')
16)
        moloinë
                   tan
                             emna
        molojinë
                   tanë
                             emna
                   here(spc) 1+3ExclPro
        then
```

kunelamaimë lep.
kun-e-lama-jmë lep
3S_ADistPst-Det-turn.O-Resumpt Advrs
'Then, (from) there (lit. 'here') we came back.' (Pëne 031)
('Then, here we (were). We came back')

With the same deictic value, but contrasting with $tan(\ddot{e})$, is $tal\ddot{e}$. This adverb indicates a broader area where the speaker (and the hearer) is located: a house (17), somewhere in the forest (18), a village (20) or city (19), etc.

```
17)
       seis diame
                      aptau
                              umëkëmëne
       seis dia-me
                      aptawë w-umëkï-ëmë-ne
       six day-Attrb when
                              1S<sub>A</sub>-come-Resumpt-DistPst
       talëna
                          helë pakolo tak,
                          helë pakolo ta-kë
        talë-na
       NspcProxLoc-to Prsntv house in.permanent.loc-into
        ëhepinëptop
                                               tak.
                                               ta-kë
```

ëh-epi-nëp-topo-Ø ta-kë Det-medicine-Transvzr-CircmstNmlz-Pss in.permanent.loc-into

ituw akiï pakolon tak;
itu akïlï-Ø pakolo-nu ta-kë
jungle breed-Pss house-Pss in.permanent.loc-into
'Within six days, I came here to the place of the medicine (i.e. the clinic),
to the House of the Indians' (Alvina 055)

```
talë pitë tihpokai alawata
talë pitë ti-pupo-ka-he alawata
NspcProxLoc a.minute T-body.hair-PrivVrblz-He monkey.sp
"(Stop) here a minute, (in order to) shave the alawata monkey" (Alawaka 047)
(Somewhere in the jungle, in one of his trips, the speaker is ordering his family to stop in order to shave a monkey they are bringing along)
```

duas ola aptau talë kunehak emna
duas ola aptawë talë kun-eha-kë emna
two hour when here(global) 3DistPst-be-DistPst 1+3ExclPro

macapa po, aeroporto po;
macapa po aeroporto po
Macapa at airport at
'In two hours we arrived here in Macapa, in the airport' (Alvina 021)

malonme talë inë witëimëjai
malonme talë jnë w-itë-jmë-ja-he
then NspcProxLoc Source 1S_A-go-Resumpt-NPst-SapAff

aptau, ipatak;
aptawë i-pata-Ø-kë
therefore 1-village-Pss-into
'Then, from here, I will go therefore, to my village' (Futuro 001)

The two examples below show how $tal\ddot{e}$ contrasts with $tan(\ddot{e})$. In (21) the speaker is telling the hearer not to move from the specific place where he is, while in (22) a mother is telling her daughter not to leave the village alone to go to the farm because of the danger of jaguars.

- 21) piipe aptau tan eikë
 pihi-pe apatawë tanë ehi-kë
 shyness-Attrb if SpcProxLocbe-ProxImp
 'If you are shy, stay right here (where you are)'
 (i.e, do not come to the front of the audience)
- malonme, aptau talë eikë
 malonme aptawë talë ehi-kë
 then therefore NspcProxLoc be -ProxImp
 'Then, therefore, stay here (in the village, where we are, instead of going to the farm)'
 (Kaikui 020)

The co-occurrences of $tan(\ddot{e})$ 'specific proximal location' and $tal\ddot{e}$ 'non-specific proximal location' with demonstrative pronouns further exemplifies the differences between the two. When a proximate demonstrative pronoun occurs with $tan(\ddot{e})$, that indicates that someone is close to the speaker at the moment of the speech act (23).

When one occurs with $tal\ddot{e}$, however, besides the indication that someone is close to the speaker, one gets the indication that this is customarily the case (26). With medial and distal demonstratives, there is a sharper contrast. $tan(\ddot{e})$ may occur with them only when the clause refers to the past tense (24) and (25); $tal\ddot{e}$, on the other hand, may occur with the demonstratives in the present tense, again with the meaning of an enduring location (27) and (28).

- 23) tan mëi 24) tan mëklë
 tanë mëhe tanë mëklë
 SpcProxLoc DemAnmProx
 'This one (is) here (with me)'

 "That one (was) here (close to me)'
 (*That one is here)
- 25) tan mëk
 tanë mëkï
 SpcProxLoc DemAnimDist
 'That one far away (was) here (close to me)'
 (*That one far away is here)
- 26) talë mëi 27) talë mëklëë
 talë mëhe talë mëklëlë

 NspcProxLoc DemAnmProx NspcProxLoc DemAnmMed

 'This one (is) here (always by my side)' 'That one (is always) here' (in the village)
- 28) mëk talë
 mëkï talë
 DemAnmDist NspcProxLoc
 'That one far away (is) here'
 (According to the speaker's judgement this refer to a person that is always inside his home)
- 29) talë ka pa man talë ka pa mane NspcProxLoc Quest Quest 2be 'Are you (living) here?'

The translation in (29) above corroborates with the idea that $tal\ddot{e}$ refers to a non well-defined location. If a person *lives* in a place, she will be moving around in there, and not necessarily be in a unique place. However, though $tal\ddot{e}$ does not refer to a well defined location as does $tan(\ddot{e})$, it still conveys the sense a stable, enduring one, as

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⁷ The distal demonstrative pronoun $m\ddot{e}k(i)$ refers to a distant or to an unseen referent. The fact that this pronoun can refer to an unseen participant allows for the interpretation in (28) that the person in question is always inside his or her home.

indicated by the examples above. The conclusion to this is that $tan(\ddot{e})$ refers to temporary location and $tal\ddot{e}$ to a more permanent one.

The medial deictic adverbial pair is *molo* for a well-defined location and *hej(e)* for a loosely defined location. The distance conveyed by *molo* is highly construable. It may refer to any location from a few meters away from the deictic center, as a room inside of a house, or a dozen meters away, as another group of houses, for instance.

```
30) molo man perpetua funai po
molo mane perpetua funai po
SpcMedLoc 3be Perpetua Funai at
'Perpertua is there at the Funai (building)'
(The speaker is in Marieta's house, about sixty meters away)
```

The mediacy of *molo* puts the object within some sort of familiar boundary: a well-defined reachable distance, even if away from the village where the speaker is. In the example below, one friend is telling another that he has seen an eagle's chick (on a tree which is the location where the story develops). Even though the chick is in the jungle, it is still within walking distance and in a precise location:

```
31) Pija mumkë man molo.
pija mumukë mane molo
eagle animal.offspring 3be SpcMedLoc

Masike këkime hapëita
mahike k-ëkï-Ø-me h-apëhi-ta
With.that 1+2-pet-Pss-Attrb 1+2A3O-get/grab-ImpAblat
'An eagle's offspring is there. With that, let's go get it as our pet.' (Eagle 014, 015)
```

It is interesting, however, that medial molo, instead of the expected distal mon(o), is used to refer to a distal place where the speaker was located at a past time:

```
32) molo apalai po wehaken;
molo apalaj po w-eha-ken
SpcMedLoc Aparai at 1S<sub>A</sub>-be-DistPst
'There, in Aparai (village) I was' (Alvina 013)
(Speaker is in Macapa city)
```

33) molo tipalumke wehaken
molo ti-palumi-ke w-eha-ken
SpcMedLoc Having-son.in.law-Having 1S_A-be-DistPst
'There, I had a son-in-law' (Walema 099)

In fact, *molo* is by far the most frequent deictic adverb found in narratives, and it can refer to almost any location at which an event has taken place. This is the case even for mythical narratives from whose location the speaker is greatly removed. In the excerpt below, from a story about two men who manage to become invisible, we hear the voice of the narrator explaining the fact that, though one of men had become invisible, he was still there, in the same place he was before:

34) *ëhenela* tëëtiïhe. molo lep inëlëë lep, ëh-ene-la të-w-ëtili -he molo lep inëlëlë lep Det-see.O- Neg T-S_A-become-He SpcMedLoc Advrs 3Pro.Anph Advrs

lome ëhenela esike, lome ëh-ene-la ehike but Det-see.O-Neg because '(He) became invisible. But, he was **there**, contrary to the odds, but (it was (i.e., it looked as if he wasn't there)) because he was invisible' (Jolokoa 095, 096, 097)

This shows that, in the narrative of past events, the use of the medial molo is the only option. The choice of the distal mon(o) over molo would imply that the speaker was far away from where he was supposed to be at the time the events she or he is narrating took place. Further, in mythical narratives, it would give a non-immediate feel, as if the events where not vividly happening right there, on the stage. In this case, molo still refers to a well defined location in the sense that that is where the action happens. It still contrasts with both mon(o) and hej(e) (see below).

This is not to say, however, that mon(o) cannot be used in past personal narratives or in mythical narratives. It is well used to encode a far away location in the narrative. In example (35), for instance, the speaker is telling the story of when he and a friend got lost in the jungle, and how they slept in a very far away place. In example (36), in

another piece of the story about the men who could become invisible, one of the characters is looking from the distance to what his invisible friend is doing to a boy. In both cases, the story teller uses mon(o) to convey the idea of a large distance.

- 35) ee mon ëhtë le emna kuninik ee mono ëttë le emna kun-iniki Excl SpcDistLoc Where Intens 1+3ExclPro 3S₀DistPst-sleep 'Ee, there far, where really (was it?), we slept' (Pëne 059)
- 36) epe ja tënei, të upakhapak akëlephak taakanë lëken som lëken, Ø-epe-Ø ja t-ëne-he të upakhapak akëlephakë taakanë lëken som lëken 3-friend-Pss Erg T-see.O-He të? ? far taakanë? only stand.up.snd only

ëhewa nma tëëtanïmhe, kïlim kahe inëlëë, ëhewa nma të-w-ët-anïmï-he kïlim tï -ka-he inëlëlë by.oneself Intens T-S_A-Det-take-He inert.snd T-do-He 3Pro.Anph

mono tumelekai, mono tu-meleka-he SpcDistLoc T-touch-He

'His friend watched it. Far away, (the boy) just stood up. He went away just by himself. He stood inert. **There far**, (he, the invisible man) touched (him, the boy).' (Jolokoa 245, 246, 247, 248, 249)

The fact that both molo and mon(o) can both be used in narratives shows that in narratives about the past, the deictic center shifts from where the speaker is located at the time of the telling to the world of the narrative. Locations are medial or distal depending on the construal of each location in that world, not whether they are medially or distal from where the speaker currently is when she is telling the story (in the example above mon(o) is used to convey a great distance between one participant and another).

In contexts of motion, *molo* takes -*na* 'goal'. There are, unfortunately, no clear examples of *molo* with *inë* 'source', since /*molo-inë*/ ('from there') has developed into *moloinë* 'then', a discourse marker:

37) tëlëi ïu, molona; t-ëlë-he ïwu molo-na T-take-He 1Pro SpcMedLoc-to '(He) took me there (lit.: 'to there') (Sapot 010)

```
38) tīkai moloinë ololi
tī-ka-he molojinë ololi
T-say-He then iguana
'Said, then, Iguana' (Iguana 064)
```

molojinë tumëkhe pija molojinë t-umëkï-he pija Then T-come-He eagle 'Then, came Eagle.' (Eagle 066) (?Eagle came from there.)

The deictic medial adverb contrasting with *molo* is *hej(e)*. It indicates a non-precise location away, but not far, from where the speech act and the action take place. Example (40) exemplifies this. After seeing a jaguar in her farm, a woman goes back to the village and tells her husband that he must come to see it. She uses *hej(e)* to refer to the whereabouts of the jaguar, which is away from where they are and *somewhere* there in the trees. Similarly, in (41) a man tells his wife that he knows a place in the jungle (where he will eventually go to) where there is a tapir cub. The idea here is that both the jaguar and the tapir cub may be in a location where one can get to, but it is a non-well defined one, since both the jaguar and the tapir can move from place to place. Thus, like *talë*, *hej(e)* encodes a location where the object may be moving around.

```
40) - tëë pa ne kaikui;
tëë pa ne kajikuhi
where? Quest ? jaguar
```

- mëk toma enekët hei hnë hapon nai man wewe po; mëkï toma Ø-ene-këtï heje tnë haponu naj mane wewe po DemAnmDist Verit 3-see.O-InImp NspcMedLoc still like Intens 3be wood on - "Where is the jaguar?"
 - "Come to truly see that one. He is still somewhere there in the tree(s)" (Kaikui 086, 087, 088)
- 41) *ënik pena man hei ihpe.*ëniki pena mane **heje** ippe
 who Hesitative 3be NspcMedLoc Exist

Maipuli mumkë wenene.
majpuli mumukë-Ø w-ene-ne
tapir animal.offspring-Pss 1A3O-see.O-DistPst

"Someone exists there somewhere. I saw a tapir cub" (Tamopoale 040, 041)

While *hej(e)* encodes a medial location, it may be used idiosyncratically to refer to a location where the speaker is. In the passage below from a historical narrative, a woman who is starting to turn into a monkey talks to her husband. He is trying to convince her to come down from a tree in the jungle and go back with him to the village. She refuses and tells her husband that she will live now around where she is, in the trees in the jungle. This is an exceptional example, because the woman refers to the place where she is (the jungle) by means of the medial *hej(e)*, instead of by means of the expected proximal *talë*.

```
2S<sub>A</sub>-fall-NPst-SapAff Intens
"You are going to fall." (husband)
"I am really not going to fall" (wife)
jepamjai
                          heje,
j-epamï-ja-he
                          heje
1SO-get.used.to-NPst-SapAff NspcMedLoc
'I am going to get used to around here' (Lit.: 'somewhere around there,'
i.e., to the jungle's whereabouts)
mïja
        nai
               wai ëtïlëmëla
               wahe ëtïlï-ëmë-la
mïia
        nai
thither Intens 1be become-Resumpt-Neg
'I will not turn out to be thither again' (i.e. to be in the village's whereabouts)
(Woman 069, 070, 071, 072)
```

This interesting example suggests that, by taking the perspective of a person in the village, the woman detaches herself from her actual location and talks as if she herself was in the village. When in the village, the speaker refers to it as a whole only by means of the proximal $tal\ddot{e}$, while whereabouts in the jungle are more frequently referred to by means of hej(e). Therefore, the use of hej(e) is subject to how a speaker views a situation.

In the world of the narrative, hej(e) may function like molo in that it may refer to a location where the events are taking place. In the example below, the distance between two characters is contrasted by the use of hej(e) versus the distal $m\ddot{e}j(e)$. In this passage,

one character is invisible and the other visible. The visible one is the one talking and calling for his friend, but he gets no answer. The character that is visible and talking, and therefore 'on stage' is referred to by a nominalized hej(e). Since the location of the invisible character is farther away and non well-defined, it must be encoded with the distal $m\ddot{e}j(e)$:

but DemAnmMed Erg T-see.O-He NspcDistLoc-PtNmlz friend Erg

•••••

lomemëklëëënenelalomemëklëlëën-ene-lathusDemAnmMed3Neg-see.O-Neg

hejelon talïhnalïï, heje-lonu talïtna-lïlï

NspcMedLoc-PtNmlz in.the.open-PtNmlz

'But, that one, the distant friend, could see. [...] But that one did not see him, the one that was around there in the open.' (Jolokoa 126; 129)

It is interesting that while hej(e) takes $in\ddot{e}$ 'source', (44) and (45), there are no example of it with -na 'goal'. The explanation for this seems to lie in the fact that hej(e) is not a specific enough location to function as a goal.⁸ All examples taking -na in the database mark a definite location, frequently a named one (*amat pona* 'onto the branch of the river).

44) nëtuhmo nai heje inë kawë inë n-ëtupmo-Ø naj heje **jnë** kawë jnë 3S_A-fall-RecPstIntens NspcMedLoc Source high Source 'It fell **from** somewhere around there, from above' (Kaikui2 032)

45) malonme, hei inë tëkëtse pëwëina malonme heje jnë t-ëkëti-he pëwëjna

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⁸ Such an asymmetry may exist in English. It seems more comfortable to use an imprecise location as a source than it is to use it as goal:

He came from around there.

[?] He went around there.

then NspcMedLoc Source T-cut-He left 'Then, (She) cut (it) **from** there to there, (with) the left (hand)' (i.e., she cut the snake across its body) (Snake 049)

The distal pair of deictic adverbs is mon(o) and $m\ddot{e}j(e)$. In each of the three examples below, the speaker conveys the idea that the place he is talking about is a particular one: a location where he slept (46), the location of a river branch (47), the spot where a river being has appeared (48).

- 46) ee mon ëhtë le emna kuninik ee mono ëttë le emna kun-iniki Excl SpcDistLoc Where Intens 1+3ExclPro 1+3S₀DistPst-sleep 'Ee, there far, where really?, we slept.' (Pëne 059)
- 47) mëlë wena lëken emna kunmëkëmë mëlë wena-Ø lëken emna kun-umëkï-ëmë DemInanMed river.shore-Pss only 1+3ExclPro 1+3S₄DistPst-come-Resumpt

hummm mon man
hummm mono mane
hummm SpcDistLoc 3be

'Only (on) that shore (of the Kulieuku river), we came. It is very far.' (Pëne 090)

papa, ipoo toma mëk mon
papa ipolï toma mëkï mon
father mythical.river.being Verit DemAnmDist SpcDistLoc
'Father, river being (is) trully there far' (Kaikui2 082)
(After seeing an ipoo down the river, back in the village she says this)

mon(o) takes -na 'goal', but no examples with inë 'source' are found in the database. Further research is needed to determine whether this is due to an incompatibility between mon(o) and -inë or simply to the coincidental absence of such examples. Example (50) shows the dialectal variant monna ([mona]):

- 49) tiïtëi monona lëken
 tï-w-ïtë-he mono-na lëken
 T-S_A-go-He SpcDistLoc-to only
 '(It) went only to far over there' (Sapot 024)
- emna tumëkëmëi, monna ëhema tak;
 emna t-umëkï-ëmë-he mono-na ëhema ta-kë
 1+3ExclPro T-come-Resumpt-He SpcDistLoc-to trail in.permanent.loc-into
 'We came back there far to the path' (Snake 084)

The other member of the distal pair, *mëje* encodes, as expected, a fuzzy, non-clearly delimited location. In the passage below, one of two men lost in the jungle, not having any idea where they are, asks his friends if he thinks they are too far away (from the village).

```
51)
       ma heke tïkai
                                tëëna
                                                     toma kuptëja.
                          ïu.
                                          nma pa
       maa heke tï-ka-he ïwu të-na
                                          nma pa
                                                     toma kup -të-ja
       So only T-say-He 1Pro Where-to Intens Quest Verit 1+2SO-go-NPst
       mëje
                     nma
                             ka
                                  toma ne tïkai
                                                      ïи,
       mëje
                     nma
                                  toma ne tï-ka-he
                                                     ïwu
                             ka
       NspcDistLoc Intens Quest Verit ?
                                           T-say-He 1Pro
                     ëninomtala
                                                        kulieuku
       lome amat
                                            emna
       lome amatï
                     ën-i-nomta-la
                                          emna
                                                      kulijewuku
             branch 3Neg-Them-leave.O-Neg 1+3ExclPro kulijewuku
       ëninomtala
       ën-i-nomta-la
       3Neg-Them-leave.O-Neg
       "Only", I said. "Where (do we) go?" "(Are we) very far away?" I said.
       But, we (did) not live on the branch, we (did) not live on the shore of the Kuliewuku.'
       (Pëne 087, 088, 089)
```

In a pattern parallel to that of medial hej(e), mej(e) occurs with ine 'source', but no examples with -na 'goal' are found in the database.

52) mëje lëlë inë
mëje lëlë jnë
NspcDistLoc Emph Source
'Really far away'

An exceptional combination is mon(o) plus $m\ddot{e}j(e)$ (always in this order). It is possible that this combination refers to a location that is clear and identifiable (a farm, a place in the jungle with a name, a specific branch of a river) but here one may wander around. Thus, it is a combination of the well defined location plus the loosely defined location features. This is, however, a tentative account, and this matter must be further investigated. All the examples found in texts are given below.

```
53)
        malonme, emna
                               tëëtanïmhe.
                                                 mon
        malonme emna
                               të-w-ët-anîmî-he
                                                 mono
                  1+3ExclPro T-S<sub>A</sub>-Det-take-He SpcDistLoc
        then
                                                                  amikhe:
        mëi,
                    jakëtëma po, muhunu amikhe,
                                                       alika
        mëje
                    jakëtëma po muhunu amik-he
                                                       alika
                                                                 amik-he
                                           get-PurpMot worm.sp get -PurpMot
        NspcDistLoc Jakëtëma at bait
        'Then, there far at Jakëtëma we went (around) in order to get bait, alika' (Snake 021)
```

54) lome, elamhak ïu ametai esiike; lome ela-mhakë ïwu Ø-ameta-je ehiike but fear-ModAdvlz1Pro 3-to.down.river-away because

mon mëi.

mono mëje

SpcDistLoc NspcDistLoc

'But, I was afraid because (I was) down the river. (I was) somewhere far over there.'

(Kaikui 035, 036)

(The speaker was in a farm)

- 55) mëi. mon ëtï pena amat etato po. mono mëje ëtï pena amatï etato-Ø po SpcDistLoc NspcDistLoc what Hesitative branch side-Pss on 'There a little far (she is).. what..., at the side of the river branch' (Tamopoale 073)
- 56) mon mëje psik.
 mono mëje phikï
 SpcDistLoc NspcDistLoc little
 "There a little far (she is)" (Tamopoale 083)
- 57) emna kunëhepolëmë mon mëje psik emna kun-ëh-epolï-ëmë mono mëje phikï 1+3ExclPro 1+3S_ADistPst-Det-find.O-Resumpt SpcDistLoc NspcDistLoc little 'We found ourselves somewhere very far away' (Pëne 012)

They, obviously, do not refer to a precise distance (except for $tan(\ddot{e})$ which must be a location within the speaker's reach), but rather to how the speaker conceptualizes a location. The medial molo, for instance, may refer to the location of a referent a few meters away from the speaker or to some location that is away from the village where he is. It may contrast with the distal mon(o) in that the location it encodes is within walking distance, as opposed to something far away for which one needs to take a canoe, or where nobody has ever been.

In conclusion, it is clear that the three degrees of deixis contrast with one another.

The location of a village, however, can be encoded by *molo* but not by *heje* or *mëje* because it too stable and everyone knows where it is. However, it will be referred to with *talë*, because it is imprecise as a proximate location. In contrast, the loosely defined locative adverbs yield the sense of one *wandering around*, due to the fact that one's exact location is not known.

In the well-defined locative adverbs, there exists a sense of stability. Participants are put, or can move in and out of the location, but not within it. The exception is $tan(\ddot{e})$, which seems to refer to too restricted a location to allow for motion to and from. As a consequence, it does not occur with either-na 'Goal' or $in\ddot{e}$ 'Source'. As for the other deictic adverbs, they all take $in\ddot{e}$ (this needs to be confirmed for mon(o)), but they do not all take -na. This the case of adverbs hej(e) and $m\ddot{e}j(e)$, which seem too vague to stand as a goal location.

Finally, the primary organizing deictic center is the speaker. This is unchangeable for the proximal adverbs $tan(\ddot{e})$ and $tal\ddot{e}$, which are always used with reference to the speaker's location. For the medial and distal, the deictic center will remain the speaker's location in the present time (and in reported speech). In past narratives, it will shift from the location of the speaker, and will depend on the narrator's construal: medial or distal locations may be construed in relationship to the location of one character relation $vis-\dot{a}-vis$ another.

7.1.2.2. Motion and direction. The two adverbs encoding motion and direction are *sija* and *mija*, as shown in the diagram below:

------ mija 'thither; motion away from the speaker' speaker speaker

The examples below exemplify this:

58) pola sija alimak rubi pola mija alimak rubi pola hija alima-kë rubi pola mija alima-kë rubi ball hitherthrow-ProxImp Rubi ball thither throw-ProxImp Rubi 'Throw the ball towards here, Rupi' 'Throw the ball that way, Rupi'

60) enepkë sija 61) mïja alëk
Ø-enepï-kë hija mïja Ø-alë-kë
3-bring-ProxImp hither 3-bring-ProxImp thither 3-take-ProxImp
'Bring it towards here' 'Take it that way'

62) * mija enepkë 63) *alëk sija

In narratives, the deictic center for *mija* and *sija* is not necessarily the speaker, but the place where the referent was supposed to be (a path (64), a village (65-66), a canoe (67), *etc.*), or a place where the main events of that narrative take place. This last one is illustrated in examples (68), where two women flee away from a place where a monkey tried to attack them, and example (69) where a man leads a woman away from where she had been working.

- 64) emna kunëtakupjaka hemele mija tiitëi.
 emna kun-ët-akupjaka hemele mija tii-w-itë-he
 1+3ExclPro 1+3S_ADistPst-Det-split now thither T-SA-go-He
 'We went away (from the path). We went thither.' (Pëne 106)
- 65) malonme, ëkëmnë tiitëi emna hemele mija malonme ëkëmnë ti-w-itë-he emna hemele mija then later T-S_A-go-He 1+3ExclPro soon thither

napi umkai;
napi umï-ka-he
potato root-PrivVrblz-PurpMot
'Then, latter we went thither (from the village) in order to unroot potatoes' (Ïmë 018)

66) moloinë, emna kunmëkëmë sija,
molojinë emna kun -umëkï-ëmë hija
Then 1+3ExclPro 3DistPst-come-Resumpt hither
'Then, we came this way' (Alawaka 013)'
(The speaker is telling about one of his trip back to the village where he is now).

```
67)
        moloinë
                   emna kunelamaimë
                                                          sija
        molojinë
                      emna kun-e-lama-jmë
                                                          hija
                 1+3ExclPro 1+3S<sub>A</sub>DistPst-Det-turn.O-Resumpt
        Then
                                                                  hither
        lëlë
               le
                     kanawa jak,
        lëlë
              le
                     kanawa ja-kë
        Emph Intens canoe container.like-into
        'Then, we came back to the canoe.' (Mopelul 025)
        (the canoe which they took in order to get to the jungle and look for their lost son)
```

mïja ïmë

mija imė po-na

pona

1+3ExclPro T-S_A-flee-Hethither farm on-to

ihjan pona
ihjanu po-na
newInan on-to
'We fled **thither** to a plantation, to a new plantation.' (Monkey 012)

tëwepei

të-w-epe-he

(from where the monkey tried to attack us)

68)

emna

emna

- 69) mija etpili stak tumosiptëi inëlëë,
 mija Ø-etpili-Ø tta-kë t-umohiptë-he inëlëlë
 thither 3-edge-Pss among-into T-leave.O-He 3Pro.Anph
 'Thither, to the edge (of the village), (he) left her' (Jolokoa 201)
 (from the middle of the village where she was working)
- 70) malonme, sija tumëkhe inëlëë kajkuli enei malonme hija t-umëkï-he inëlëlë kajikuli ene-he then hither T-come-He 3Pro.Anph jaguar see.O-PurpMot 'Then, he came hither to see the jaguar' (Kaikui2 094)

To a large extent, mija and sija are conditioned by verbs encoding 'come' or 'go'. In texts, mija occurs 100% with verbs of (or in contexts involving) motion, all indicating motion away from the deitic center. sija, however, presents a more complex distribution. Though it occurs in its great majority with $um\ddot{e}k(\ddot{i})$ 'come' and other similar verbs encoding motion towards the deictic center, it also occurs with copular verbs (but still with a sense of motion (72-73), and, unexpectedly, it occurs in two examples in the database, with $(\ddot{i})t\ddot{e}$ 'go' (74-75).

```
71)
        moloinë emna
                             kunelamaimë
                                                             sija
        molojinë emna
                               kun-e-lama-jmë
                                                               hija
        Then
                1+3ExclPro 1+3S<sub>A</sub>DistPst-Det-turn.O-Resumpt hither
        lëlë
              le
                     kanawa jak,
        lëlë
             le
                    kanawa ja-kë
        Emph Intens canoe container.like-into
        'Then, we came back hither to the canoe.' (Mopelul 025)
72)
        uhpak
                           huwaa tëëtiihe
                                                     emna
        upake-h
                           huwalë të -w-ëtïlï-he
                                                    emna
        long.ago-AvIntens as.such T-S<sub>A</sub>-become-He 1+3ExclPro
        sija,
        hija
        hither
        '(It has been a) long time we have been (moving) hither. '(Pëne 045)
73)
        tala
              aptau
                       kalipono
                                         nïke
                                   sija
        tala
              aptawë kalipono
                                   hija
                                            nï-ka-ja
                      non. Wayâna hither 3SA-do-NPst
        how when
        'When are the non-Wâyana people doing (business) hither?'
        (i.e., approaching here) (Jolokob 299)
74)
        uwa, witëjai
                                 sija asiki kum
        uwa w-ïtë-ja -he
                                 hija ahikï kumï
        Neg 1S<sub>A</sub>-go-NPst-SapAff hither Ahikï mouth.(of.river)
        tak
        ta-kë
        in.permanent.loc-into
        'No, I will go there to the Asiki mouth' (Kaikui2 005)
75)
        asimhak,
                       sija tïïtëi
        ahi-mhakë
                       hija tï-w-ïtë-he
        fast-ModAdvlz hither T-SA-go-He
        'It (the venom) went fast hither' (Snake 057)
        As for mija, the only peculiar usages are those of metaphorical extensions in
```

As for mija, the only peculiar usages are those of metaphorical extensions in which it refers to a great length in time. This is compatible with the semantics of mija since it encodes an open ended goal.

- 76) ukukjahe hnë mija, w-ukuku-ja-he tnë mija 1A3O-try-NPst-SapAff still thither 'I will try until the end' (Walema2 131)
- 77) mihja wipohnëmne, mija-h w-i-potnëpi-ne thither-AvIntens 1A3O-Them-think.O-DistPst 'For a long time, I thought about it.' (Walema 143)

Although neither *mija* or *sija* encodes an end point for motion, they are compatible with the overt expresssion of a goal. By themselves, however, they cannot function as goals, and thus they do not take *-na* 'Goal'.

```
78)
                                            ïmë
        emna
                    tëwepei
                                   mïja
                                                  pona
        emna
                    të-w-epe-he
                                   mïja
                                           ïmë
                                                  po-na
        1+3ExclPro T-S<sub>A</sub>-flee-He
                                   thither
                                           farm
        ihjan
                  pona,
        ihjanu
                  po-na
        newInan
                  on-to
        'We fled thither to a plantation, to a new one.' (Monkey 012)
79)
        mija,
                etpilï
                             stak
                                         tumosiptëi
                                                        inëlëë
        mïja
                Ø-etpilï-Ø
                             tta-kë
                                         t-umohiptë-he inëlëlë
        thither 3-edge-Pss among-into T-leave.O-He 3Pro.Anph
        'Thither, to the edge (of the village), (he) left her' (Jolokoa 201)
80)
        kopë tamuu
                      ailë
        kopë tamulu ajilë emna
              mighty right 1+3ExclPro
        tëwemekëmëi
                                       sija pakolo tak
        të -w-emek-ëmë-he
                                       hija pakolo ta-kë
        T-S<sub>A</sub>-come.back-Resumpt-He hither house in.permanent.loc-into
        walunak
        walunakë
        evening
        'Then we came back through a heavy rain, hither, to our home, in the evening.' (Fishing 010)
81)
        *mïjana
82)
        *sijana
```

This section focused on non-derived adverbs. We turn now to the various processes by which new adverbs are derived and to various morphemes that adverbs take.

7.2. Derivation. This section discusses both adverbial meaning changing morphology and adverbializing morphology. With the exception of four morphemes, -la 'Negative', -h- 'Adverb Intensifier', -na 'Goal', and -j(e) 'away', all other morphemes are class changing morphology: five are de-nominal adverbializers (three suffixes and two

ambifixes (7.2.1.1)), and five are de-verbal adverbializers (two suffixes and three ambifixes (7.2.1.2)). No adverbializers are attested for form classes other than nouns and verbs.⁹

7.2.1. Adverbializers. Most adverbializers in Wayâna are discontinuous morphemes. These morphemes present a first part prefixed to the stem, and resembling some synchronic third person prefix allomorphy, and a second part of various shapes, but most frequently a syllable with a consonant plus /e/. However, several adverbializing suffixes also exist.

7.2.1.1. De-nominal adverbializers.

7.2.1.1.1 Suffixes. The three adverbializing suffixes are -me 'Attributive' and -mna 'without', and -hpe 'Existential adverbializer'. All go on nominal stems independently of the degree of possessibility of the noun (i.e., they occur on both possessed and non-possessed stems) and on both derived and non-derived forms.

7.2.1.1.1.1. -me/-pe 'Attributive'. All nouns attested in the data take this suffix. Its two allomorphs are lexically determined, with -me being by far the most frequent one. Of all the adverbializing morphemes, this is the one that presents the most generic meaning. In some cases, it is possible to detect a sense of 'like' or 'as', as in examples in (83 a-b), which could be said about any object shaped like a hammock, but in many cases, especially those of descriptive nouns (as pepta 'big'), the adding of the attributive does

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⁹ Adverbial nominalization is discussed in section 4.2.2.2.2.

¹⁰ Discontinuous adverbializers are common in the languages of the Cariban family. For a discussion see Gildea 1998:140.

not seem to add any meaning (84-88), and it seems to function solely to put an item into the periphery, as an adverb.¹¹

- 83) a. ëtanme neha b. jetanme neha neha j-etatï-**me** n-eha-Ø j-etatï-**Ø-me** n-eha-Ø hammock-Attrb 3S_A-be-RecPst 'It was hammock-like; as a hammock' 'I was my hammock-like; as my hammock'
 - c. kapaume
 kapaw-me
 deer(sp.)-Attrb
 'brownish' (i.e., deer-like, as a deer)'
- 84) peptame tuna tëëtiihe hemele ikutpë katip, pepta-me tuna të-w-ëtili-he hemele ikutpë katipi big-Attrb water T-S_A-become-He already lake alike '(The) water was huge already, like a lake.' (Pëne 102)

The attributive suffix inflects any noun stem, independently of its degree of possessibility, of whether it is inflected with SAP or third person participants (including the reflexive *t*-), or of whether it is derived or non-derived. Examples (83 a-c) above show *-me* occurring with both unpossessable and optionally possessed nouns, and example (89) below shows it with an inherently possessed noun. In examples (90 to 92), it occurs with nouns inflected with SAP prefixes, and in examples (93 to 95) with third person forms. In examples (96-97), it occurs with derived nouns:

89) *ipïtme* esiike i-pï-tï-me ehiike 3-wife-Pss-Attrb because 'because she is his wife'

¹¹ Glossing this morpheme as 'Attributive' is now a tradition within the Cariban family (cf. Gildea

- 90) wantëë ïpakolonme
 wantëlë ï-pakolo-nu-me
 later/afterwards 1-house-Pss-Attrb
 'Later (it will serve) as my house'
- 91) Isela... Isela ka man ëwekïme? i-he-la i-he-la ka mane ëw-ekï-Ø-me 3-Des-Neg 3-Des-Neg Quest 3be 2-pet-Pss-Attrb 'Don't you want it... Don't you want it for your pet' (Tamopoale 042)
- 92) Masike këkime hapëita
 mahike k-ëkï-Ø-me h-apëhi -ta
 With.that 1+2-pet-Pss-Attrb 1+2A3O-get/grab-ImpAblat
 'With that, let's go get it as our pet' (Eagle 015)
- 93) Moloinë totime tiïhe
 molojinët-otï-Ø-me t-ïlï-he
 Then 3Refl-meat-Pss-Attrb T-make-He
 'Then, (he) prepared (it) as his own meal' (Tamopoale 066)
- 94) ise neha tïpatunme
 i-he n-eha-Ø tï-patu-nu-me
 3-Des 3S_A-be-RecPst 3Refl-pan-Pss-Attrb
 'She wanted it as her pan'
- 95) Pasi psik lëken ikaimome
 pahi phikï lëken i-kajimo-Ø-me
 rodent(sp.) small only 3-game-Pss-Attrb
 'Only (a) small agouti (was) his game' (Tukusimule 012)
- 96) masike helë katip wikei nila nipanakmaame
 mahike helë katipi wi-ka-ja-he nila n-i-panakma-li-me
 With.that PrsntvPro alike 1S_A-say-NPst-SapAff Nila ObjNmlz-Them-listen.to.O-Pss-Attrb
 'With that, like this I said (the story), as the thing that Nila listened to'
 (With that, as such I said, as Nila's listening (stuff).' (Alvina 064)
- 97) poptë tëhemme
 poptë t-ë-he-mï-me
 more.or.less Prtc-eat.meat-Prtc-PtNmlz-Attrb
 '(It is) good to eat'

In combination with the circumstantial nominalizer -top(o), the attributive has the meaning of 'purpose'. This is not surprising, since purpose is already one of the semantic features of -top(o) (cf. 4.2.2.1.5). One interesting peculiarity of this sequence, is that, contrary to what is normally expected from grammaticalization principles, which state

1998:138).

that suffixes tend to become integrated into the stems, /-topo-me/ has been turned into a free form, an interrogative particle (99).

- 98) sisi hnak tiihe ilasilamtohme
 hihi tna-kë t-ili-he i-lahilami-topo-Ø-me
 sun in.sun.-into T-make-He 3-dry-CircmstNmlz-Pss-Attrb

 '(They) placed (it) into the sun in order for it to dry' (Malamala 009)
- 99) tohme nïtëm topme n-ïtëmï-Ø why 3S_A-go-RecPst 'Why did he go?'

7.2.1.1.1.2. -hpe/-hme 'Existential adverbializer'. The existential adverbializer is very rare in texts, occurring in only two examples (100-101). Both allomorphs of this morpheme are frequent in elicited examples, with their distribution lexically conditioned. As already clear from its gloss, this suffix indicates that the referent encoded by the nominal stem exists. In some cases, it is translated with the sense of 'having' (102-105). 12

- 100) upak kunehak tamusihme
 upake kun-eha-kë tamuhi-pme
 long.ago 3S_ADistPst-be-DistPst old.man-ExistentAvlz
 'A long time ago there were old men.' (Jolokod 728)
- 101) miuhpe esiike,
 miwu-ppe ehiike
 blood-ExistentAvlz because
 'because there was blood (on it)' (Jolokoc 419)
- 102) kumuhpe manai
 kumu-ppe mana-he
 palm.tree(sp.)-ExistentAvlz 2be-SapAff
 'You have kumu (fruit)' (Lit.: 'kumu-existing you are')
- 103) tëhemihpe wai t-ë-he-mi'-ppe wahe Prtc-eat.meat-Prtc-PtNmlz-ExistentAvlz 1be 'I have meat' (Lit.: 'meat-existing I am')

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¹² This suffix has a corresponding free form, *ihpe/ihme* 'Existent; having'. It takes allomorph -an(u) of the 'Participant Nominalizer'.

104) uluhme wai ulu-pme wahe manioc.bread-ExistentAvlz 1-be

'I have manioc bread' (Lit.: 'manioc bread-existing I am')

105) tïnkïsihme wai tïnkïhi-pme wahe manioc.juicer-ExistentAvlz 1be

'I have manioc juicer' (Lit.: 'manioc juicer-existing I am')

The existential suffix occurs frequently with unpossessed nominal stems, even when the noun in question belongs to the optionally possessed category as in examples (101), (104), and (105) above. A comparison with the attributive -me/-pe reveals that the existential suffix seems more restricted in its distribution. While the attributive occurs with any noun, including forms possessed with SAP and the third person reflexive suffix, examples with the existential suffix on nouns with SAP prefixes are marginally accepted (108-109) and examples with third person reflexive prefix t(i)- are unattested. Perhaps the most interesting aspect of the existential suffix is that it may occur on nominal stems inflected with a non-referential possessive (?) prefix i- (106) and (110). This prefix is glossed here as 'third person' because, as seen in the next sections with other adverbilizers, it presents the same allomorphy as the third person possessive prefix.

Example (94) is repeated here for comparative purposes.

106) 107) (? tipitpilihme man) ipitpïlïhme man i-pitpïlï-Ø-pme

mane 3-skin-Pss-ExistentAvlz 3be

'(It) has skin (as opposed to having scales)

108) 109) *jekepïlïhme wai jepatponuhpe j-epa-tponu-ppe (I have my patient)

1-teach-PstAgt-ExistentAvlz

'I have my former teacher (there)'

110) ipupuluhpe wai i-pupu-lï-ppe wahe 3-foot-Pss-ExistentAvlz 1be

'I have feet'

111) Ise neha tipatunme.
i-he n-eha-Ø ti-patu-nu-me
3-Des 3SA-be-RecPst 3Refl-pan-Pss-Attrb
'She wanted it as her pan'

Although having the same form as a third person possessive prefix, the prefix *i*-does not code the third person possessor in these examples. The co-occurrence of a non-meaningful (?) *i*- with -*hpe*/-*hme* suggests that this combination may be on its way to becoming an adverbilizing discontinuous morpheme, like many others in the language, with its prefixed part resembling a third person prefix. Unfortunately, this claim cannot be tested due to the limited data on forms other than unpossessed ones. There are, for instance, as yet no data with SAP prefixes or with third person reflexive prefix *t*- which may prove stems with -*hpe*/-*hme* to be truly possessed.

In addition, there are no examples in which a possessable noun takes an overt allomorph of the genitive suffix. Such examples are relevant for determining the status of third person-like prefixes in adverbialized noun stems. In all cases of discontinuous adverbializing morphemes, a third person-like prefix does not refer to a third person anymore, the nominal stem occurs in its possessed allomorph form, but no overt allomorphs of genitive suffixes occur (see section 7.2.1.1.2 on adverbializing ambifixes).

The fact that the great majority of examples in the database occur with unpossessed nominal stems represents a clear tendency for the existential suffix to occur with such forms. Because the examples such as the ones in above are not exhaustive, it is obvious that the occurrences of this suffix with possessed forms need to be further investigated.

Finally, this suffix co-occurs only with copular verbs. There are no attested co-occurrences of it with lexical verbs.

7.2.1.1.1.3. -mna 'without'. Like the attributive -me/-pe, -mna can occur with all noun classes, including both possessed and unpossessed stems. Examples below show that unpossessable nominal roots, i.e., animal names, vocative terms, pronouns (112 a-d), as well as the unpossessed allomorph of optionally possessed nouns (112 e) occur with -mna. The meaning of -mna is apparently the same as that of the English without, and thus, depending on the context, it may indicate a non-existent entity (112 a, c, e), an absent one (112 d), or a no longer existing one (112 b).

- a. kajikuhi-mna man kajikuhi-mna mane jaguar-without 3be 'There is no jaguar' (Kaikui 026)
 - c. *ïumna manu wai ïwu-mna manu wahe*1Pro-without Irrealis 1be

 'I wouldn't be here (Snake 026)
 - e. Lome, ïmëmna lome ïmë-mna but farm-without 'But (there was) no farm' (Sulalapana 025)
- b. mamakomna wai
 mamako-mna wahe
 mother-without 1be
 'I do not have a mom (i.e., she has died)'
- d. kunimna kuni-mna grandmother-without 'Grandma is not here'

With possessable nouns -mna behaves similarly to -hpe/-hme in that it triggers idiosynchratic possessive morphology on nouns. Fortunately, abundant data are available for -mna, and one can have a clear picture of its complex distribution.

Nouns taking *-mna* may bear SAP prefixes (114 a-b), but in all such examples, the prefix is non-coreferential with the subject.¹⁴ In co-referential contexts, such occurrences are dubious. Besides not being found at all in texts, such SAP inflected stems are

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¹³ A distinction between the attributive and *-mna* is that the attributive has a wider distribution in relation to different verb types. It co-occurs with both lexical and copular verbs while *-mna* is restricted to copular verbs.

¹⁴ Again, as with stems with the existential *-hpe/-hme*, there is a great tendency of *-mna* to occur with copular verbs, but co-occurrences with lexical verbs are also attested. In any case, all examples of *-mna* inflected stems bearing SAP prefixes co-occur with copula verbs.

inconsistently accepted in elicitation, being more frequently rejected than not (114 c-d, 115 c-d). Similarly, examples with the third person reflexive t(i)-, a prefix that is obligatorily co-referential with the sentences subject, were not accepted (114 e, 115 e). Instead, one finds that performing this semantic function are forms inflected with third person i- and its allomorphs (114 b) and (115 b). In other words, in cases where the nominal prefix would be co-referential with the subject of the sentence, stems take idiosyncratically the non-reflexive third person i-.

The i- inflected forms have also a non co-referential meaning, but that is not preferential (114 b, 115 b). ¹⁶ In sum, i- stems are the preferred ones in contexts where the nominal prefix would be coreferential with the subject of the sentence. This is the most frequent arrangement and almost always the first answer to elicitation prompts.

- 113) a. *ëpatunumna wai*ë-patu-nu-**mna** wahe
 2-pan-Pss-without 1be
 'I do not have your pan'
- b. *ëkalakulinumna wai*ë-kalakuli-nu-**mna** wahe
 2-money-Pss-without 1be
 'I do not have your money'
- 114) a. patumna wai
 patu-mna wahe
 pan-without 1be
 'I do not have a pan'
- b. ipatunumna wai
 i-patu-nu-mna wahe
 3-pan-Pss-without 1be
 'I do not have a pan/her pan'

nitëm tipakolon tak n-itëmi-Ø ti-pakolo-nu ta-kë 3SA-go-RecPst 3Refl-house-Pss Spc.loc-into 'He, went to his, house'

nïtëm ipakolon tak n-ïtëmï-Ø i-pakolo-nu ta-kë 3SA-go-RecPst 3-house-Pss Spc.loc-into 'He_i went to his_i house' (*'He_i went to his_i house')

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¹⁵ The third person reflexive prefix is obligatory when the possessed noun is co-referential with third person subject. In the cases of non-coreferentiality, *i*- occurs:

¹⁶ There are no examples of non-coreferential *i*- with third person subject (?*i-kalakuli-mna neha* 'he_i did not have his_i money'), but based on the examples with SAP subjects, this is presumably also true.

- c. ?ipatunumna wai d. ?ëpatunumna manai ('I do not have my pan') ('You do not have your pan')
- e. *tipatunumna man
- a. kalakulimna weha b. ikalakulinumna weha kalakuli-mna w-eha-Ø i-kalakuli-nu-mna w-eha-Ø money-without 1SA-be-RecPst 'I did not have money' 'I did not have money' 'I did not have money'
 - c. ?ikalakulinumna wai d. ?ëkalakulinumna manai ('I do not have my money') ('You do not have your money')
 - e. *tikalakulinumna man
- 116) a. *ëumna kunehak* b. *eulumna man ëwu-mna* kun-eha-kë Ø-ewu-lï-mna mane

 eye-without 3S_ADistPst-be-DistPst 3-eye-Pss-without 3br

 'He/She/it did not have eyes' 'He/She/it does not have eyes'
- 117) a. *ëpimna* wai b. *epitimna* wai epi-mna wahe medicine-without 1be 'I do not have medicine' b. *epitimna* wahe wahe wahe 'I do not have medicine' 'I do not have medicine'
- 118) a. kahulumna wai b. awonomna wai kahulu-mna wahe bead-without 1be 'I do not have beads' b. awonomna wai a-wono-Ø-mna wahe 3-bead-Pss-without 1be 'I do not have beads' 'I do not have beads'

It seems that for optionally possessed nouns, *i*- stems are in competition with unpossessed forms in co-referential contexts, with the former seeming more automatic. The choice of one over the other, however, apparently shows no distinction in meaning ((116-118) above). Obviously, such a competition does not exist for inherently possessed nouns, which only occur possessed:

i-jumïmna wai
i-jumï-Ø-mna wahe
3-father-Pss-without lbe
' I am without a father (i.e., he has died)'

Possessed de-verbal nominalizations occurring with -mna pattern similarly to noun roots. In all such cases, however, -li is the only overt allomorph of the genitive

suffix to occur, and only with certain nominalizers, as $-\emptyset$ 'Specific Event' and n- 'Object Nominalizer'. Both of these display $-l\tilde{\imath}$ when occurring with -mna:

- 120) ipohnëpilimna man mëlë 121) *tipohnëpilimna man mëlë i-potnëpi-Ø-li-mna mane mëlë 3-know-SpcEvntNmlz-Pss-without 3be DemInanMed 'That it not known' (Jolokoc 438)
- inenepïlïmna kunehak 123) *tinenepïlïmna kunehak i-n-enepï-lï-mna kun-eha-kë 3-ObjNmlz-bring-Pss-without 3S_ADistPst-be-DistPst 'He/She did not have a thing to be brought'

Unfortunately, no non-coreferential examples with nominalizations are found in the data, but one expects that if they follow the general pattern, examples like the one below are presumably acceptable:

124) (?) inenepilimna kunehak
i-n-enepi-li-mna kun-eha-kë
1-ObjNmlz-bring-Pss-without 3 S_ADistPst-be-DistPst
'He/She did not have my thing to be brought'

Thus, *i*-N-mna is on its way to becoming a discontinuous morpheme, as seems to be already the case in contexts where one would expect prefixes that are coreferential with the subject of the sentence to occur. The possessive genitive suffixes, however, still mark the nominal stem.

To conclude, a discussion on the status of -mna as an adverbializing suffix is in order. Though it presents the characteristics of suffix including inseparability and occurring only with nouns (see section 3.1), it behaves differently from most adverbializers in that it does not take a nominalizing suffix. In looking at its distribution, it is clear that -mna is in some sort of complementary distribution with mna 'without', a postposition (see section 6.2). The postposition takes personal prefixes but never occurs with a full nominal object. The potential corresponding postpositional forms with a nominal object are the ones with the suffix -mna. The two, however, are distinct in that

while the postposition takes a nominalizer and a collective suffix (*imnato* 'one without it', *imnahe* 'without them'), the suffix does not. In addition, note that in example (112 c) -mna inflects a SAP pronoun, an ungrammatical pattern for postpositions. Finally, -mna looks like the semantic conterpart of -hpe/-hme which is a clear case adverbializer and one with similar morphosyntactic properties.

7.2.1.1.2. Ambifixes. The adverbializing ambifixes are characterized by having a first part prefixed to the nominal root, a third person like form (with the same allomorphy as the third person reflexive prefix or the non-reflexive third person prefix) and a second part of various phonological shape suffixed to the nominal root. These morphemes are *t*-N-*ke* 'Having' and *i*-N-*phak*(*ë*) 'Modifier' (with their respective allomorphs).

7.2.1.1.2.1. *t-N-k(e)/t-N-le/t-N-je* 'having'. This ambifix occurs only with underived possessable nouns. No examples with a nominalization have yet been found. Where there is a distinction, as with optionally possessed nouns with suppletive allomorphs (125-127), it is clear that only possessed allomorphs occur with this ambifix. It is interesting, however, that there are no traces of the genitive suffixes in such examples (128-133).

```
125)
        a. pïlëu
                   'arrow'
                                  b. iile
                                                'his arrow'
                                                                     c. tïïleke
                                                                                   'having an arrow'
126)
                                               'his farm'
        a. ïmë
                   'farm'
                                  b. itupi
                                                                     c. tïtupike
                                                                                   'having a farm'
127)
        a. pitpë
                  'scales'
                                  b. ipitpïï
                                               'its scale'
                                                                     c. tïpitpïje
                                                                                   'having scales'
128)
                                  b. itumelin
                                               'his bowl'
                                                                     c. tïtumelik 'having a bowl'
        a. tumeli 'clay bowl'
129)
        a. hapatu 'shoe'
                                  b. ihapatun
                                               'his shoe'
                                                                     c. tihapatuk 'having a shoe'
130)
        a. pana
                   'ear'
                                  b. ipanaa
                                                'his ear'
                                                                     c. tipanake 'having ear(s)'
131)
        a. ëpi
                   'medicine'
                                  b. tëpit
                                                'his own medicine'
                                                                     c. tëpije
                                                                                   'having medicine'
132)
                                                'his own wife'
                                                                     b. tïpïje
                                                                                   'having a wife'
                                  a. tïpït
133)
        a. ëu
                   'eye'
                                  b. tëuu
                                                'his own eye'
                                                                     c. tëule
                                                                                   'having an eye'
```

Note that the first part of this suffix shows the same allomorphy as the third person reflexive prefix: (131 b-c), (132 a-b), (133 b-c) above and the examples below.

```
skin disease
                                    male's sister
                                                    lower leg
134)
       1
               a. ïwosii
                                 b. ïwëlisii
                                                c. ïwasii
                                 b. tëwëlisii
135)
       3Refl
               a. towosii
                                                 c. tëwasii
136)
                                 b. tëwëlïike
       t-ke
               a. towosike
                                                 c. tëwasike
```

Thus, differently from the adverbializing suffixes -me/-pe, -hpe/-hme, and -mna, t-N-k(e) and its allomorphs show a true strict sequence in which the first part cannot ever be replaced by either SAP prefixes or non reflexive third person prefix i-.

As for the different allomorphs, they are all lexically conditioned, with *t-N-ke* being the most productive. It occurs in most examples and is the one extended to borrowings (137-139). Examples with the other two allomorphs, *t*-N-*le* and *t*-N-*je*, are few. All the attested ones (in the addition to the ones presented above) are listed below:

137)	a. pampila	'paper; book'	b.	tïpampilak	'having paper, book'
138)	a. hapatu	'shoes'	b.	tihapatuk	'having shoes'
139)	a. kamisa	'cloth'	b.	tïkamisak	'having cloth'
1.40)					
140)	a. omo	'hand'	b.	tomole ~ tomooke	'having a hand'
141)	a. ipupuu	'one's foot'	b.	tïpuple	'having foot'
142)	a. ewaa	'one's rope'	b.	tëwaale	'having rope'
143)	a. ekïï	'sting of an animal'	b.	tëkïje	'having a sting'
144)	a. jakīï	'my farm animal/parasite'	b.	takïje	'having a farm animal/parasite'
145)	a. imumki	uu 'her son'	b.	tïmumkuje	'having a (woman's) son'

7.2.1.1.2.2. *i-N-phak(ë)/i-N-mhak(ë)* 'Modifier'. The available data show only a few forms in which this morpheme is synchronically transparent. These forms show the same pattern as those with other ambifixes: a third person-like non co-referential first part, *i-*, and no genitive suffixes in the nominal stem. All examples occurring in the present database are shown below:

```
147)
       a. imun
                                              b. imumhak
           i-mu-nu
                                                  i-mu-mhakë
           3-edible.root-Pss
                                                  ModAvlz-edible.root-ModAvlz
           'its (edible) root'
                                                  'like a (edible) root'
148)
       a. awomii
                                              b. awomiphak
           a-womilï-Ø
                                                  a-womi-phakë
           3-language-Pss
                                                  ModAvlz-language-ModAvlz
           'his/hers/its language'
                                                  'in a talkative way'
149)
       a. jelemi
                                              b. elemiphakan
          j-elemi-Ø
                                                  Ø-elemi-phakë-anu
           1-song-Pss
                                                  ModAvlz-song-ModAvlz-PtNmlz
           'my song'
                                                  'a singer'
150)
       a. iwenalu
                                              b. iwenaluphakan
           i-wenalu-Ø
                                                  i-wenalu-phakë-nu
           3-vomit-Pss
                                                  ModAvlz-vomit-ModAvlz-PtNmlz
           'his vomit'
                                                  'one that vomits constantly
                                                  (as he who keeps drinking and vomiting)'
```

The adverbializer is clearly parseable in the examples above because the roots it occurs with operate fully in the language (i.e., they occur with regular nominal morphology, as for instance, personal prefixes and adverbializers). In contrast, the forms presented in bold below occur only in the examples given with $-phak(\ddot{e})/-mhak(\ddot{e})$ being substituted with the negative -mna, and in some cases with the negative -la. They do not take any other nominal morphology or occur as free forms. The best indication that these forms are nominal in nature is that they take $-phak(\ddot{e})/-mhak(\ddot{e})$ and -mna, both nominal suffixes (151-154). However, in some cases, instead of -mna, it is -la that occurs (155-157).

151)		kawemhak wewe kawemna	'tall; high' 'the tree is not tall'	152)		jetumhak jetumna	'painful' 'not painful'
153)		anumhak anumna	'strong' 'not strong'	154)	a. b.	apëtumhak apëtumna	'mighty; strong' 'weak' 17
155)	a. b.	umosiphak umosila	'jealous' 'not jealous'	156)		akëlephak akëlela	'far' 'not far'

¹⁷ The form apëtumna 'weak' is not attested in the present database, but it is found in Camargo's *Lexico Wayâna-Português* (1997b:11)

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157) a. jamephak 'happy; in a good mood' b. jamela. 'not happy; not in a good mood'

For two pairs of homophonous stems, a difference in meaning is triggered by the occurrence of either of the two allomorphs of the adverbializer. In all four, either -phak(ë) or -mhak(ë) can be replaced by either -la or -mna, with the choice of the negative suffix also triggering a difference in meaning.

158)	a. ju mhak b. ju la	'peppery' 'not peppery'	159) a. ju phak b. ju mna	'bright (light); lit' 'not bright (light); not lit'
160)	a. asi phak b. asi la	'hot' 'not hot'	161) a. asimhak b. asimna	'fast' 'not fast'

It is interesting that there are no signs of possessive morphology (no i- prefix) in any of the frozen-seeming stems shown above. This contrasts clearly with stems fully operating in the language which occur with $-phak(\ddot{e})/-mhak(\ddot{e})$ only prefixed with i-. One must conclude that with the first group we have a suffix and with the second group we have an ambifix. However, though this analysis reflects the history of this morpheme, it is synchronically inadequate. While all stems with the suffix are non-transparent, those with the ambifix are very much alive in the language. Thus, it is best to describe i-N- $phak(\ddot{e})/i$ -N- $mhak(\ddot{e})$ as a synchronic morpheme.

This pattern suggests that, in a different stage of Wayâna history, $-phak(\ddot{e})/-mhak(\ddot{e})$ was indeed a suffix, which later grammaticalized into an ambifix with i-. There exists, thus, a continuum of transparency with regard to $-phak(\ddot{e})/-mhak(\ddot{e})$ that proceeds from cases where it is not parseable at all (monomorphemic adverbs in 7.1.1.2), to cases where it is semi-parseable ($kawemhak \sim kawemna$, etc.), and ultimately to the clear cases of an ambifix.

Finally, the fact that some nominal roots survived in only a few contexts allows for the interpretation that $-phak(\ddot{e})/-mhak(\ddot{e})$ is sometimes 'negated' with -mna (Jackson's view point (1972:61-2)). This analysis is not adopted here because $-phak(\ddot{e})/-mhak(\ddot{e})$ and -mna are both nominal suffixes, each occurring independently and with distinct properties. While the former seems better analyzed as a discontinuous morpheme, the latter occurs mainly as a suffix that in only one morphosyntactic context may be analyzable as an ambifix (7.2.1.1.1.3). Thus, it is not the case that $-phak(\ddot{e})/-mhak(\ddot{e})$ is negated with -mna, but it is the case that both occur on nominal roots, and while -mna cannot be negated (it is already a negative form), $-phak(\ddot{e})/-mhak(\ddot{e})$ occurs productively with negative suffix -la ($jumhak\ddot{e}la$ 'not peppery').

7.2.1.2. De-verbal adverbializers. Adverbs are derived from verb stems by means of two suffixes, *-të* 'Generic Modifier' and *-tse* 'Specific Modifier', three ambifixes, *i*-V*-pophak* 'Satisfactory', *i*-V*-pola* 'Defective', and *t*-V*-he* 'Participle.

7.2.1.2.1. -të 'Generic Modifier' and -tse 'Specific Modifier'. Jackson (1972:71) describes both -të and -tse as allomorphs of an 'adjectivizing' morpheme with distributional properties conditioned by verbal morphophonology. The data gathered for the present work, however, do not show such distributional constraints, and, though the two morphemes present semantic and morphologic similarities, they are clearly contrastive. The main similarity between the two is that both occur with prefixless back grade forms of verbal stems (see section 5.1.1). Also, in all attested examples both morphemes co-occur with copular verbs. ¹⁸

¹⁸ Jackson (1972:71) states that -tse and $-t\ddot{e}$ are 'used frequently with **e-si** 'be'', a question that must be further investigated.

Both *-tse* and *-të* have attributive meanings, with the former referring to a 'special skill in carrying out the action denoted by the verb' and the latter simply to an 'ability to carry out the action denoted by the verb'. Thus, the semantic difference between *-të* and *-tse* seems to be one of a special, particular attribute versus a usual one. Thus, in (165), *-të* indicates an ability to kill, but not necessarily a skilled one. In contrast, *-tse* in (167) means that the participant is a specialist, always successful in killing. This sometimes allows for the reading of an enduring situation, as in (170). ¹⁹

"Can't you really see?" (Kaikui2 072)

163) panakmatë 164) ütëtëla panakma-të ütë-të-la

listen-GenModAvlz go-GenModAvlz-Neg 'able to listen' 'not able to go'

165) uwëtë manai uwë-**të** mana-he kill-SpcModAvlz 2be-SapAff 'You are able to kill.'

'(The) forest (is) good at making unhappy.' (Pëne 133)

- 167) moloinë ëkëmnë psik uwëtse tëëtihe inëlëë.
 molojinë ëkëmnë phiki uwë-the të-w-ëtili-he inëlëlë
 Then later little kill- SpcModAvlz T-SA-become-He 3Pro.Anph
 'Then later he turned into being good at killing (i.e., at hunting)' (Tukusimule 044)
- it ll-SpcModAvlz be-CircnstNmlz about 1SA-become-Resumpt-DistPst (1 start bad mouthing people again' (Walema2-038) (Lit.: 'I became about being good at telling again').
- 169) anuktatse
 anukta-the
 transform.into.animal-SpcModAvlz
 'good at transfoming (oneself) into an animal'
- 170) akintatse akinta-the work.hard-SpcModAvlz

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¹⁹ In fact the gloss Jackson has given to both -të and -tse is 'by continually doing it.'

'constantly working hard'

Despite the similiarities, the two morphemes present distinct morphological properties: $-t\ddot{e}$ takes the negative suffi -la and can be nominalized with -n(u) 'participant nominalizer', but -tse cannot take either morphemes. This is to say that $-t\ddot{e}$ is a prototypical member of the class of adverbializers, but -tse is not. It must, nevertheless, be considered as an adverbializer because it marks stems that may only occur in the periphery of the sentence and modifying a predicate.

Future research may find that these affixes occur only with transitive verbs, since the only attested cases in texts (ten occurrences of -tse and eight of -të) and in the great majority of cases in the database are with transitive verbs. In elicitation, however, a few intransitive verbs were accepted taking -tse: uwa 'dance', elemi sing; akïp(ï) 'be hard; be stiff'; amita 'germinate', umëk(ï) 'come', etomam(ï) 'wake up', etapam(ï) 'animal sing', etc. Examples of intransitive verbs with -të were usually not accepted with the exception of two SA verbs, umëk(ï) 'come' and (ï)të(mï) 'go'.

7.2.1.2.2. *i-V-pophak* 'Effective' versus *i-V-pola* 'Defective'. This is the only pair of adverbializing morphemes to show positive-negative corresponding forms. All other adverbializers take negative -la (cf. section 7.2.1.3 below). As indicated in the gloss, $i\text{-V-phak}(\ddot{e})$, means satisfactoriness in carrying out the action encoded by the verb, and i-V-pola indicates defectiveness. Like the other discontinuous morpheme (t/he), the resulting form is semantically related to the notional absolutive.

- 171) a. imiliku-pophak
 i-miliku-pophakë
 Effective-write-Effective
 'good for writing (paper; book)'
- 172) a. ipokpophak i-poki-pophakë

- b. imilikpola
 i-miliku-pola
 Defect-write-Defect
 'not good for writing'
- b. *ipokpola* i-pokï-pola

Effective-smell-Effective 'good for smelling (something rotten)'

Defect-smell-Defect 'not good for smelling'

- 173) a. ipanakmapophak
 i-panakma-pophakë
 Effective-listen-Effective
 'good to listen' (music, etc.)
- b. ipanakmapola
 i-panakma-pola
 Defect-listen-Defect
 'not good for listening'.
- a. etunuptëpophak b. Ø-e-tunuptë-pophakë
 Effective-Det-bear-Effective
 'good at bearing'
 (as a strong liana that resists a heavy weight)
 - b. etunuptëpola
 Ø-e-tunuptë-pola
 Defect-Det-bear-Defect
 'not good at bearing'

awainapola
Ø-awajna-pola
Defect-go.from.night.to.day-Defect
'(It) wouldn't dawn' (Pëne 070)
(the speaker said about waiting for the morning when lost at night in the jungle).

7.2.1.2.3. *t-V-he* 'Participle'. This morpheme occurs with all verb roots as a means for deriving adverbs that occur almost always as a complement of copula. Gildea (1998:142), writing on the historical development of this morpheme in the Cariban family, states that "in its most conservative function the [*t-V-he*] participle indicates a state that is attributed to the notional O of a transitive verb (i.e., a passive participle as in English 'broken'/'I saw a broken widow') or the notional S of an intransitive (i.e., a past/completive event)." This conservative function is found for most cases in Wayana (176-178), but other functions are also attested: a change of state (with *ëtili* 'become') (179) and an event (when part of an adverbial clause) (180). A few examples of cognate

²⁰ Though, for the sake of keeping with a tradition within the Cariban literature, I use the label 'participle' here, it is important to clarify that morphologically, t-V-he forms fall categorically under the speech class of adverbs (and like discontinuous de-nominal adverbializers t-N-he, and t-N-he, take -m(i) 'Participant Nominalizer'). However, the same morphology has also grammaticalized into a verbal morphology in the language. This scenario allows for the analysis of historical *t-V-he as two synchronically distinct morphemes: an adverbializer and a verbal morpheme. In this case, calling the Wayâna t-V-he a participle (a form with both nominal and verbal properties) is inappropriate.

²¹ All subordinate clauses are marked morphologically as either nominalizations or adverbializations in Wayâna (see section 8.3.2). Thus, the eventive (? not sure of translation) occurrences of *t-V-he* in subordinate clauses (under the scope of *esiike* 'because' and *aptaw(ë)* 'when; if') are considered likewise as an adverbial.

forms of this morpheme that occur on main verbs, glossed as *T*--*He*, are presented in (180) and (181) (See section 5.3.4 for a discussion on the verbal occurrences of *t*-V-*he*).

- nila tonophe neha kokone
 nila t-onopi-he n-eha-Ø kokone
 Nila Prtc-paint-Prtc 3S-be-RecPst yesterday
 'Nila was painted yesterday'
 (i.e, Nila's body was painted with traditional Wayâna drawings).
- 177) etatïnpiïkom kuptëë tot
 Ø-etatï-npïlï-Ø-komo kuptëlë toto
 3-hammock-Dvl-Pss-Coll aligned 3Coll

tï-lomo-he ehiike
Prtc-die-Prtc because
'They (had) their hammock aligned because they were dead.' (Jolokob 360-361)

- 178) nitëm tëwepihe
 n-itëmi-Ø të-w-e-pi-he
 3SA-go-RecPst Prtc-SA-Det-bathe-Prtc
 'He went bathed.'
- 179) tëpëjephe tëëtiïhe ïu
 t-ëpëjepï-he të-w-ëtïlï-he ïwu
 Prtc-hungry-Prtc T-SA-become-He 1Pro
 'I became hungry' (Pëne 035)
- 180) tukukhe ejahe, t-ukuku-he e-ja-he T-try-He 3Post-Erg-PColl

sisi ja tahalapnaniphe aptau. hihi ja t-ahalap-nipi-he aptawë sun Erg Prtc-dry-Caus-Prtc when 'They tried (it) when the sun dried (it out).' (Jolokoa 086-087)

181) malonme koko tikohmamhe aptau, malonme koko tï-kopmamï-he aptawë then night Prtc-go.from.day.to.night-Prtcwhen tëhalëi tot ewalunu htak elamna. t-ëh-alë-he toto ewalunu tta-kë ela-mna T-Det-take-He 3Coll dark ttaLoc-into fear-without 'Then, when it was night, they went into the dark without fear.' (Jolokoa 043, 046) (Lit.: 'Then, when night nightened')

7.2.1.3. The negative adverbializer -la. This suffix occurs with all major speech classes performing the function of deriving adverbial forms. Different from all other adverbial forms, forms with -la cannot udergo any further derivational process such as

nominalization, for instance. Its occurrences in each particular class are discussed below.

This suffix occurs with almost all attested adverbs independently of whether they are derived or non-derived. Examples with non-derived adverbs are presented first:

182) a. kolela 'not many' b. ahpela 'not untruthful' c. hekehela 'not happy' d. ipokela 'not good' e. talëla 'not here' f. uwamela 'not healthy' 'not little; not a few' g. apsikïla h. ëmëmhakëla 'not greedy'

Adverbs derived with -me 'Attributive', t-N-ke 'Having' (and its allomorphs),

-mhak(e)/-phak(e) 'Modifier', -te' 'Generic Modifier', and t-V-he 'Participle' all take -la:

183) jepemela 184) mulemela mule-me-la l-friend-Pss-Attrb-Neg child-Attrb-Neg

'not my friend; not like my friend' 'not a child; not like a child'

185) tipalekela 186) tipuplela ti-pupu-le-la

Having-daughter.in.law-Having-Neg 'not having a daughter-in-law' 'not having foot'

187) timumkujela
ti-mumuku-je-la
Having-woman's.son-Having-Neg
'not having (a woman's) son'

188) asimhakëla 189) ikaphakëla ahi-mhakë-la i-ka-phakë-la

fast-ModAdvlz-Neg ModAdvlz-fat-ModAdvlz-Neg

'not fast' 'not fat'

190) panakmatëla 191) umëktëla panakma-të-la umëki-të-la

listen-GenModAvlz-Neg come-GenModAvlz-Neg 'not able to listen' 'not able to come'

192) *tëpëjephela* 193) *tëpuihela* t-ëpëjep**ï-he-la** t-epuhi-**he-la** Prtc-be.hungry-Prtc-Neg Prtc-be.fat-Prtc-Neg

'not hungy' 'not fat'

A few adverbializing morphemes do not take -la. It is not clear why this is the case for -mna 'Without' and -tse 'Specific Modifier'. As for i-V-pophak(ë)

'Satisfactory', it has its own corresponding negative form, *i*-V-*pola* 'Defective' (each discussed respectively in sections 7.2.1.1.1.3, 7.2.1.2.1, and 7.2.1.2.2). Unfortunately, there are no examples in the corpus for *-hpe/-hme* 'Existential', but its equivalent free form, *ihmela* 'not having', suggests that it may take *-la*.

The negative suffix -la also negates postpositions, as seen in the following examples:

- 194) Kahu ailëla witëjai.
 kahu a-jlë-la w-ïtë-ja-he
 car inside.of-along-Neg 1SA-go-NPst-SapAff
 'I won't go by car.'
- 195) kupëkëhela ku-pëkë-he-la 1+2-about-PColl-Neg 'Not about all of us'
- 196) *ëhekatipila*ëhe-katipi-la
 Recpr-like-Neg
 'Not like each other'
- 197) *ïpëkëla*"-pëkë-**la**1-busy.with-Neg

 'Not dealing with me'

Three postpositions do not take the negative suffix: ke 'instrumental,' ja 'dative; ergative,' and (w)apta 'when; if,' all belonging the the class of postpositions with a grammatical meaning. There are no attested examples of this morpheme occurring with mna 'without,' walë 'Uncertainty,' m(i)ta 'in the mouth of,' pata 'in the place of,' pehna 'in the area of forehead of,' and opikai 'under'.

The negative suffix -la can also occur on noun stems, with the restriction that they belong to the class of underived possessible nouns. In these cases, the form of the noun stem must be that of a form inflected with a third person (non-reflexive) prefix. No forms bearing the third person reflexive suffix t(i)- or a SAP prefix may co-occur with

-la. These cases present a pattern analogous to the nominal ambifixes (cf. 7.2.1.1.2), where the prefixed part of the ambifix resembles a third person prefix and the nominal stem presents no traces of the genitive suffix, -n(u), -(li) or -t(li).

198)	a.b.d.e.f.	/i-pampila-nu/ /i-ka-tï/ /Ø-elinatu-lï/ /a-womi-lï/ /e-wahi-lï/	→ → → →	ipampilan ikat elinatuu awomii ewasii	'his/l 'his/l 'his/l	ner book/paper' ner/its fat' ner plate' ner language' ner/its lower leg'
199)	a. c.	i-pampila-la i-ka-la	'withou		b. d.	*ipampilan(u)la *ikat(ï)la
	e. f. h.	Ø-elinatu-la a-womi-la e-wasi-la	'withou	t a plate' t language' t a lower leg'	g.	*awomilïla

Some noun stems were not accepted bearing the suffix -la. The same stems, however, were readily accepted with the negative suffix -mna 'without' (cf. section 7.2.1.1.3). It is possible, thus, that -mna and -la fulfill analogous functions with nominal stems, with the former, perhaps, being in the process of replacing that latter.

200)	a.	*umï(tï)la	b.	umï tïmna	'without root'
•	c.	*isi(tï)la	d.	i sitï mna	'without capillar vein'
	e.	*i mi(tï) la	f.	i mitï mna	'without artery'
	g.	*tamu(lu)la	h.	i tamu lumna	'without a grandfather'
	i.	*ekïla	j.	ekï mna	'without a pet'
	k.	*akï(lï)la	Ĩ.	akïlï mna	'without a farm animal/parasite'
	m	*otila	n.	otimna	'without meat'

The patterns of occurrence of the negative suffix with verbs are more complex. Intransitive verbs show a morphology to that almost exactly parallel of nouns. Stems starting with a consonant take i- (an exception to this is ka 'say; do,' which occurs prefixless in (207)) and stems starting with vowels take \mathcal{O} -. Depending on the context, these forms may be interpreted as having either an eventive or an attributive meaning.

201)	itenkapamïla	202)	ilasilamïla
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²² Vowel initial stems that are subject to ablaut (cf. 4.1.1.1.2) occur in their front grade. This is an indication that they take Ø-. Prefixless forms, as those with adverbializers -të or -tse only occur in their back grade (ëne-të-la 'blindly', ëne-tse 'always looking/watching' see section 7.2.1.2.1).

i-tenkapamï-la i-lahilamy-la i?-forget-Neg i?-dry-Neg 'not to forget; not forgotten' 'not to dry; not dry'

203) ikoktïmïla 204) ilomola i-koktïmï-la i-lomo-la i?-scream-Neg i?-die-Neg 'not to scream' 'not to die; not dead'

205) ihmomotila 206) ipëlëpila wai i-pmomoti-la i-pëlëpi-la wahe i?-boil-Neg i?-be.tired-Neg 1be 'It is not boiling/boiled.'

207) kala inëlëë.
ka-la inëlëlë
say-Neg 3Pro.Anph
'She did not speak.' (Woman 036)
('She was speechless')

208) koko lome utatila kunehak
koko lome Ø-utati-la kun-eha-kë
night but Ø?-lost-Neg 3S_ADistPst-be-DistPst
'It was night, but my son did not get/wasn't lost.' (Mopelul 066)

Transitive stems present a more complex pattern. There is a marked distinction between forms with an attributive meaning and those with an eventive meaning. The former are prefixed with i-/ \emptyset - and the latter with both SAP prefixes and an idiosyncratic en- for third person participants (also occurring with forms bearing -pin(i)/min(i) (cf. section 4.2.3). The prefixes in the eventive transitive forms all encode the notional object.

Examples (209) to (212) show forms with -la having attributive meaning. Examples (213) to (216) have eventive meanings. The exclusive personal pronoun emna '1+3' triggers third person emana '1+3' triggers third person emana '1-1.

209) *Ulu isanopïla*ulu *i-he-ano-pï-la*manioc.bread i?-Des-PtNmlz-PpNVrblz-la
'unwanted manioc bread'

- 210) Enela wai
 Ø-ene-la wahe
 Ø?-see.O-Neg 1be
 'I am not examined.'
- 211) Ipanakmala man i-panakma-la mane i?-hear.O-Neg 3be 'He/she/it cannot hear.'
- 212) Ka ipkëlëla neha ka i-pikëlë-la n-eha-Ø fish i?-cut.O-Neg 3S-be-RecPst '(The) fish was uncut.'
- 213) Ha, ïhï, hapa, jakëtïla, nila, ispunaka.

 ha ïhï hapa j-akëtï-la nila ipunaka-h

 ha yes machete 1-cut.O-Neg Nila Advrs-AvIntens

 'Ha! Yes, the machete did not cut me, Nila, contrary to the odds.' (Kaikui 2044)
- 214) Jakëlehmala meha. j-akëlepma-la m-eha-Ø l-help.O-Neg 2SA-be-RecPst 'You did not help me.'
- 215) ëwenela ka neha ëw-ene-la ka n-eha-Ø 2-see.O-Neg Quest 3SA-be-RecPst 'Did he see you?'
- 216) *ëmnelum ënekuptëla manai* ë-mïnelumï-Ø **ën**-ekuptë-la mana-he 2-husband-Pss 3Neg-stop.O-Neg 2be-SapAff 'You do not hear your husband.' (Kaikui 007)
- 217) uwa nma emna ënapënukula uwa nma emna ën-apënuku-la Neg Intens 1+3ExclPro 3Neg-answer.to.O-Neg 'No. Nobody answered us.' (Pëne 079)

Another interesting feature of of -la in transitive stems with eventive meaning is the fact that it takes the collective -he (collectivizing the notional object), a morpheme occurring elsewhere only with postpositions (cf. 6.1.2.2), and the gerundive 'purpose of motion' form of verbs (cf. section 5.3.5.2)):

218) Enenelahe wai
ën-ene-la-he wahe
3Neg-see.O-Neg-PColl 1be
'I did not see them'

- 219) Enipanakmalahe weha ën-i-panakma.O-la-he wahe 3Neg-see.O-Neg-PColl 1be 'I did not hear them'
- 220) Kënelahe inëlëë k-ëne-la-he inëlëlë 1+2-see.O-Neg-PColl 3AnphPro 'He did not see us'

It is clear that for intransitive verbs and for all cases with an attributive meaning (both with intransitive and transitive stems), i-V-la can be analyzed as discontinuous morpheme with very much the same properties as other clear case de-verbal adverbializers, as for instance t-V-(h)e (7.2.1.2.3).

For the eventive transitive stems, however, this analysis is clearly not satisfactory. Their occurrences in the data are restricted to co-occurrences with copula 'be' whose subjects are non-coreferential with the prefixes in the negated forms (as in example 222). This, together with the fact that prefixed forms can be collectivized with *-he* indicates that negative forms with eventive meaning are already a new verb construction together with the copula, though it is possible for the negative forms with a third person to occur with a lexical main verb (221) (*cf.* section 5.3.5.1 on negated verb forms).

- 221) Lomeuwa nma mihen tot tumëkëmëi lome uwa nma mihen toto t-umëki-ëmë-he but Neg Intens poor 3Coll T-come-Resumpt-He

 ënepolila.
 ën-epoli-la
 3Neg-find.O-Neg
 'However, no, they came back without finding (game)' (Alawaka 007)
- 222) imelekala nma manai.
 i-meleka-la nma mana-he
 1-touch.O-Neg Intens 2be-SapAff
 'You did not touch me' (Jolokoa 171)

7.2.2. -h- 'Adverbial Intensifier'. This morpheme intensifies the semantic attributes of the adverbs (as English 'really', 'a lot', 'very', etc.). It is an infix that occurs after the first open syllable of the adverbial root. There are no examples of it on derived adverbs.²³

```
223)
        a. upak
                     'early; long ago'
                                         b. uhpak
                                                    'a long time ago'
        c. mïja
                     'thither'
                                         d. mïhja
                                                    'really thither'
                     'different'
        e. tïwëë
                                         f. tïhwëë
                                                    'really different'
        g. kole
                     'a lot, many'
                                         h. kohle
                                                     'a real lot; very many'
        i. molo
                     'there (medial)'
                                         j. mohlo
                                                    'really there (medial)'
                     'good'
                                         l. ihpok
                                                    'really good'
        k. ipok
        m. hemalë 'now; today'
                                         n. hehmalë 'just today'
```

Some adverbs cannot take -h- for phonological reasons. The adverb *ëile* (/ëjle/) 'fierce; angry', for instance, presents a [VC.CV] which does not allow -h- to occur. First, only one consonant can occur as coda (thus, **ëjh.le*), and second there is a constraint disallowing /h/ to occur in word final position (thus, **ëjleh*).

7.2.3. *-j(e)* 'away'. This suffix occurs with only one adverb in the data (225). It also occurs with postpositions that encode a relationship of non-physical contact with their objects (226) or, in the case of some postpositions, a non-precise location away from that of the speaker's (227). The same meaning is found in the adverbial example:

- 224) të man? 225) tëi meha?
 të mane të-je m-eha-Ø
 where? 2be where?-away 2SA-be-RecPst
 'Where are you?' 'Where away were you to?'
- 226) lampata mesa epoi lampata mesa epo-je light.bulb table above-away 'The light bulb is (hanging) above the table'
- 227) ametai wehaken
 Ø-ameta-je w-eha-kene
 3-down.river-away 1SA-be-DistPst
 'I was down river (somewhere in the south)'

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²³ There is at least one example of this morpheme with a postposition: /uwala+h/→uhwala 'all around it'.

The adverbs hej(e) and $m\ddot{e}j(e)$ referring respectively to a non well-defined medial location and to a non well-defined distal location, also seem to have once been built with -j(e). See section 7.1.2.1 for these adverbs.

- 7.2.4. -na 'to'. Only locative adverbs denoting a well defined location ($tal\ddot{e}$, molo, and mon(o)) and the adverb $t\ddot{e}$ 'where' take -na. It marks the endpoint of motion.
- 228) tumëkëmëi emna talëna t-umëkï-ëmë-he emna talë-**na** Prtc-come-Resumpt-Prtc 1+3ExclPro NspcProxLoc-to 'We came to here' (Alawaka 059)

'Yes, she went back there again' (Jolokoa 211)

- 230) malonme, emna tumëkëmëi, uu monna malonme emna t-umëkë-ëmë-he uu mono-na then 1+3ExclPro T-come-Resumpt-He oh! SpcDistLoc-to 'Then, we (started) coming back, oh, there far' (Snake 089)
- 231) tëna mitëja të-**na** m-ïtë-ja Where-to 2SA-go-NPst 'To where are you going?'
- **7.2.5. Reduplication.** There exist only two examples of reduplicated adverbs in the present database. In both cases the reduplicant seems to convey intensity. More investigation is needed to determine if other adverbs may also be reduplicated.
- 232) jelemijai mijamijalë j-elemi-ja-he Red1-mijalë 1SO-sing-NPst-SapAff Red1-again 'I will sing again and again'
- 233) rwëtuutopo psik apiapsik ihpe ru,
 "-w-ëtulu-topo-Ø phik" Red1-aphik" ippe rwu
 1-SA-talk-CircmstNmlz-Pss little Red1-small Exist 1Pro
 'my little story, I have just a little bit' (Mopelu2 044)
- **7.3.** Conclusion. Perhaps the most striking characteristic of Wayâna adverbs is that, despite their existence as solid form class, they seem to be by and large derived from

other forms. This is the case even for the monomorphemic adverbs, which almost all show traces of some formative components.

There are several mechanisms for the creation of new adverbs. First, new adverbs may arise in the language by the disappearance of a certain root in all environments except when followed by an adverbializer. In the example below, /tapulun/ occurs in only two forms, followed by the adverbializer -me and by the postposition -hta. In the loss of this form with the postposition, a non-analyzable adverb would result (or viceversa, with a new postpostional form).

- 234) a. tapulunme tapulun-me darkness?-Attrb 'dark; cloudy'
- b. tapulunu htau tapulunu tta-wë darkness among-in 'in the dark'

c. *tapulun(u)

Second, besides the increasing of non-analyzable adverbs, there may also be an increase in the adverbializing morphology inventory. Combinations of a third person prefix-like morphology with some of the adverbializing suffixes are a means of creating new adverbializing morphemes. -hpe/-hme and -mna, for instance, are both independent suffixes that occur with nominal stems (discussed in sections 7.2.1.1.1.2 and 7.2.1.1.1.3, respectively). However, they may occur with nominal stems bearing a third person-like prefix that does not refer to any entity and, thus, no longer carries the function of the possessor. In these cases, the nominal stem still occurs marked with genitive suffixes. In contrast, other forms with the same non-referential prefix, such as i-N- $phak(\ddot{e})/-mhak(\ddot{e})$, do not show any occurrences of genitive suffixes at all. A consideration must be made for nominal stems bearing the negative suffix -la, which also take a third person-like prefix, but show no traces of the genitive suffixes (i-pampila-la 'without paper').

This scenario suggests a grammaticalization path for new ambifixes that starts with a third person-like prefix with a generic meaning, and ends with the loss of all allomorphs of the genitive suffixes on the nominal stem, as an indication that those forms are no longer 'possessed', and as the instantiation of reanalysis. The figure below is an attempt to show how far along the grammaticalization path some of the morphemes are:

Finally, figure 1 presents a tentative internal reconstruction of Wayâna's adverbializing morphology. Based on recurrent formative elements of monomorphemic adverbs and on synchronic morphology, it is possible to hypothesize a process leading to the system as we see today.

Monomorphemic adverbs show recurrent sequences that seem to have been once adverbializing suffixes (see 7.1.1.3). These are either a *CV* syllable (as for instance, *-ne, *-he, *-ke, *-le, *-je, *-me, etc.), a *t- prefix (/t/_ adverbs in Table 1 (7.1.1.1), or a combination of the two (*t-?-ne, *t-?-he, *t-?-he, *t-?-me, etc.). It is possible that the source for *t- was the third person reflexive suffix. Evidence for this comes from the fact that t- in all adverbializing ambifixes shows exactly the same allomorphy as the third person reflexive morpheme (see section 7.2.1.1.2.1).

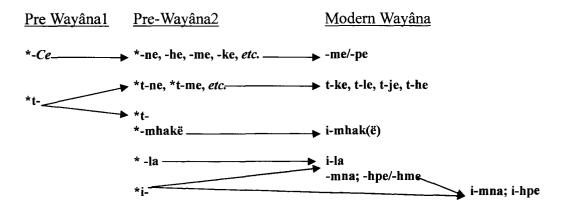


Figure 1
A preliminary internal reconstruction of Wayâna adverbial morphology.

8. SYNTAX.

Wayâna presents some of the common characteristics of the syntax of a Cariban language, such the existence of three types of phrase types, a genitive phrase, a postpositional phrases and a verb phrase (Gildea 1998:16, 105). These are all characterized by a combination of person marking prefixes and, in the case of third persons, complementary distribution between the prefix and a preceding nominal (the possessor, the postpositional object and the verbal O).

One distinctive feature of Wayâna's syntax is the existence of two basic matrix verb types (Set I and t-V-(h)e), both with distinct morphosyntactic properties, the first bearing a complex set of person marking prefixes (which have been labelled *active*-stative, inverse system, etc.) (8.3.1.2) and the second bearing a discontinuous morpheme, t--he, and ergative case (section 8.3.1.4), both of which which occur in discourse without any morphosyntactic conditioning (by contrast, in Tiriyó (Meira 1999:333), t-V-(h)e forms are restricted to the remote past tense). Instead, the choice of one over the other depends on discourse factors. Thus, Wayâna features an apparently unprecedented type of split ergative system.

The subordinate clauses are almost all based on nominalizations, but some adverbialized and postpositionalized clauses also occur (8.3.2).

8.1 Constituency.

8.1.1 Two-word phrases. There are three phrasal types in Wayâna: possessive phrases, postpositional phrases, and verb phrases, in which a dependent noun precedes the head of the phrase, which is, respectively, a possessed noun, a postposition, and a Set I or

nonfinite verb. In each case, the dependent nominal element is in complementary distribution with a third person prefix. Any noun can occur as the dependent element in one of these phrases, but the same is not true for all pronouns: the pronouns that can occur in these positions are the demonstrative pronouns, the interrogative pronouns, and the first person exclusive *emna* 'we (1+3)'; the pronouns that cannot are the speech act participant pronouns $\ddot{\imath}u$ 'I', $kunm\ddot{e}lamkom(o)$ 'we all', $\ddot{e}m\ddot{e}$ 'you' and $\ddot{e}m\ddot{e}lamkom(o)$ 'you all'. As for the dual inclusive $kunm\ddot{e}$ 'we (1+2)', elicited data shows that it can occur as a free-form possessor and postpositional object, but it is not clear whether or not it can occur as a free O.

No other words, except for a few scope particles (*Cf.* section 3.1), can intervene between the two elements of a phrase. In the examples below, for instance, an adverb cannot occur between the possessor and the possessed noun in a possessive phrase, unless in its nominalized form where it constitutes the possessive phrase:

- 1) Sesu malijan. sesu malija-nu Sergio knife-Pss 'Sergio's knife'
- 2) Sesu ailën malijan.
 sesu ajilë-nu malija-nu
 Sergio truthful-PtNmlz knife-Pss
 'The knife of the truthful Sergio'
- 3) *Sesu ailë malijan.

Second position particles are a reliable test for phrasehood, as they have a fixed position within the clause, right after the first constituent. The examples below show the

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¹ Phrases with scope particles are described for Carib of Surinam and for Tiriyó (Hoff (1990) and Meira (1999:539), respectively). The fact that some may occur between the O and the V in a phrase corroborates the idea that they are syntactically bound to the preceding noun. Unfortunately this possibility has not been systematically tested for Wayâna.

behavior of second position particle *ka* 'question' regarding a possessive phrase (4-5), a postpositional phrase (6a-b), and a verb phrase (7a-b):

```
GP
4)
        Malieta patun
                                                      5)
                                                              *Malieta ka
                        ka?
                                                                               patun.
       malijeta patu-nu ka
        Malieta pan-Pss Quest
        '(Is this) Malieta's pan?'
                                                      b.
                                                              *palu ka he man.
6) a.
       Paluu
                he
                     ka
                             man.
        palulu
               he
                     ka
                             mane
        banana Des Quest 2be
        'Do you want banana?'
             OV
                     ]
                                                      b.
                                                              *asii ka anoma.
7) a. Asii
                anoma
                                 ka.
        asilï
                anoma-Ø
        pepper smoke.O-RecPst Quest
        'Did (she) smoke fish?'
8)
       a. imalijan
                         'his knife'
        b. Sesu malijan 'Sergio's knife'
        c. *Sesu imalijan
                                 (Sergio's knife)
```

Pronouns that can occur as the possessor are the demonstrative pronouns (10), the interrogative pronouns (11), *emna* 'we (exclusive) (12), and *kunmë* 'dual (inclusive)' (13); all in alternation with the third person possessive prefix (57-58). The first person pronouns, second person pronouns, and the third person anaphoric pronouns cannot occur as the possessor (14, 16, 19)), though in elicited examples the first and second person pronouns can co-occur with first and second person prefixes for emphasis (15, 17):

- 9) Ikaimo. i-kajimo-Ø 3-game-Pss 'his game'
- 10) Mëk kaimo mëkï kajimo-Ø DemAnmDist game-Pss 'that distant one's game'
- 11) Ënïk kaimo? ënïkï kajimo-Ø who game-Pss

'whose game?'

- 12) Emna kaimotaa.
 emna kajimo-Ø
 1+3ExclPro game-Pss
 'our game'
- 13) Kunmë akon. kunmë akono-Ø 1+2Pro sibling.of.same.sex-Pss 'our sibling (of same sex)'
- 14) *Inëlëë kaimo.
- 15) *lu*, jakon. "wu j-akono-Ø 1Pro 1-sibling.of.same.sex-Pss 'my sibling (of same sex)'
- 16) *ïu akon.
- 17) Ëmëë, ëwakon. ëmëlë ëw-akono-Ø 2Pro 2-sibling.of.same.sex-Pss 'your sibling (of same sex)'
- 18) *ëmë akon

Postpositional phrases are characterized by a postposition taking prefixes for their objects or, a (pro)nominal object in alternation with third person prefixes. Again as with the possessive phrases, SAP pronouns cannot occur as the postpositional object, with the exception of *emna* 'we (exclusive) and *kunmë* 'dual (inclusive)'. The third person anaphoric pronoun *inëlë(lë)* 'third person anaphoric' also cannot occur as the postpositional object. The same pattern holds for forms with de-verbal postpositionalizer *-tihwë* (6.3)

- 19) Ipo.
 i-po-Ø
 3-on.supported-on
 'on it'
- 20) Ale po.
 ale po-Ø
 leaf 3-on.supported-on
 'on a leaf'
- 21) *Ipo.*i-po-Ø

 l-on.supported-on

 on me'
- 22) * Ïu po.
- 23) Ipanakmatihwë.
 i-panakma-tihwë
 3-hear.O-Posteriority
 'after the hearing of him/her/it'
- 24) Mëk panakmatihwë.
 mëki panakama-tihwë
 DemAnmDist hear.O-Posteriority
 'after the hearing of that distant one'

The notion of the verb phrase is more complicated than the preceding phrases because different inflections behave differently. A clear OV verb phrase has been identified with 3A3O verbs bearing Set I inflections (8.3.1.2), 3O verbs in complex predicates (8.3.1.5), and 3O verbs in the habitual past (8.3.1.6). The evidence for a VP in each clause type will be presented in the relevant section..

8.1.2 Possible larger phrases? As discussed above, only nouns can occur in the slot for the dependent element in the various phrases. Thus, in Wayâna, an expression equivalent to the English 'ugly dog', for instance, must be formed with the juxtaposition of two nouns, where the restricted noun is most frequently either a descriptive noun or a

nominalized adverbial form. In example (26), for instance, *sitpïlï* 'ugly is a descriptive noun, and in example (27) *kupiman* 'long one' is a nominalized adverb.

Alimime tanuktai wajana wëlii.
alimi-me t-anukta-he wajana wëlihi
monkey.sp-Attrb T-transform.into.animal-He wajana woman
'A wayana woman transformed into a monkey.' (Woman 001)
(Lit.: like a monkey (self)transformed a person a woman.')

Kaikui sitpili tumëkhe.

kaikuhi hitpili t-umëki-he
dog ugly T-come -He
'The ugly dog came.'
(Lit.: dog ugly-one came)

Such cases of noun-noun sequences may be considers as an unity, since, they all refer to the same constituent, the second noun in a sequence is normally the restrictive one, and since they are distinct from other cases of noun-noun sequences, as for instance a possessed noun plus a generic term (*jot*, *ka* 'my meat, fish') where a pause must occur between the two nouns. However, in nominal modification, the restrictive noun need not to come adjacent to the restricted noun. As is frequently the case, it occurs after the verb in afterthought-like fashion (28).

- N 27) umhetpë kupimankom. Tuwahkomhe mïïja lëë t-uwakkom-he mïja lëlë umhe-tpë kupime-anu-komo T-tie.together-He far.away Emph hair-Dvl long-anuPtNmlz-2Coll '(They) tied all the way the long hair.' (Jolokoc 424) (Lit.: tied all the way hair long-one)
- N N
 28) Tiïhe kawehmakanutpë kolanutpë,
 t-ïlï-he kawe-mhakë-anu-tpë kole-anu-tpë
 T-make-He tall?-ModAdvlz-anuPtNmlz-Dvl many-anuPtNmlz-Dvl
 'They arranged the many tall ones.' (Jolokoc 500)

29) Akulipoti tënatkai kolankom, akulipoti t-ënatu-ka-he kole-anu-komo akulipoty T-finish-Transvzr-He many-anuPtNmlz-Coll '(He) finished up the many Agouti people.' (Jolokod 717) (Lit.:Agouti (he) finished many ones.)

8.2 Grammatical Relations. Various typological traditions and theories of syntax divide nominal participants in two kinds of arguments, nuclear and peripheral. The nuclear arguments are generally understood to be the grammatical relations of Subject, Object and Indirect Object, whereas peripheral participants are considered obliques. Verbs come obligatorily accompanied by a certain number of nuclear participants, one in the case of intransitive stems, two in the case of transitive stems, and three in the case of ditransitive stems.

In Wayâna, the categories of intransitive and transitive verbs are readily identified, as are morphemes that change the number of participants from two to one (the detransitivizer, 5.4.2.1) or from one to two (the transitivizer, 5.4.2.2) However, it is not clear that the category of ditransitive verb is relevant for the grammar of Wayâna. This section first presents the characteristics that suggest A, S and O are nuclear arguments in various clause types, and it then reviews the lack of characteristics that might distinguish a recipient or a causee as Indirect Object, distinct from any oblique.

Patterns that identify A, S and O arguments as unique in the grammar are a mix of: nominal case-marking, verbal person-marking, inclusion in the verb phrase, and control of the third person reflexive prefix. Case-marking, verbal person-marking and inclusion in the VP vary from clause type to clause type, but control of coreference with the reflexive belongs to the A and S in all clause types. In the Set I clause type, the nuclear arguments have no case-marking, whereas all other participants must occur as the object of a postposition. Similarly, the nuclear arguments can all be marked on the verb, whereas peripheral participants cannot be.

In the *t*-V-*he* clause type, no arguments are marked on the verb; S and O are still distinguished as the only arguments that occur unmarked, so A and all other participants are objects of postpositions. However, A is still distinguished as a nuclear participant because, along with the unmarked S, it controls co-reference with the third person reflexive prefix

- 30) Mule tupihe ija.

 mule t-upi-he ï-ja

 child T-find.O-He 1-Erg

 'I found the child.'
- 31) Okï melïjai.
 okï m-elï-ja-he
 beverage 2A3O-drink.O-Npst-SapAff
 'You drink beverage.'
- 32) Nene Alinawale.
 n-ene-Ø alinawale
 3A3O-see.O-RecPst Alinawale
 'Alinawale saw it'
- [O V]
 33) Hapakala ene Alinawale.
 hapakala ene-Ø alinawale
 lizard.sp 3A3O-see.O-RecPst Alinawale
 'Alinawale saw the hapakala lizard'
- [O V]
 34) *Imumkuu nalëla wai.*i-mumuku-lu ën-alë-la w-a-he
 1-woman's.son-Pss 3Neg-take.O-Neg 1SA-be-SapAff
 'I did not take my son.'
- 35) İwakam. "-wakam"-Ø 1SO-sit.down-RecPst 'I sat down'
- 36) Wepei. w-epe-Ø 1SA-flee-RecPst 'I fled.'
- 37) Nelemi tipakolon tau.

 n-elemi-Ø ti-pakolo-nu ta-wë

 3SA-sing-RecPst 3Refl-house-Pss in.permanent.loc-into

```
'He/she sang in his/her house.'
(*He/she sang in someone's else house)
```

38) Aliko alë Anakali tïpakolon tak.
aliko alë-Ø anakali tï-pakolo-nu ta-kë
Aliko take.O-RecPst Anakali 3Refl-house-Pss in.permanent.loc-into
'Anakali_i took Aliko_i to his_i house'
(*Anakali_i took Aliko_i to his_i house)

The participant in the A position can present different semantic roles such as an agent (wakulika 'I broke O)', an experiencer (wene 'I saw O'), an instrument (malija noko 'A knife cut it', and a source (wewakma 'I atracted love from O'), etc. The participant in the S also can present different semantic roles such as more active ones, as in nelemi 'He/she sang' and nuwa 'He/she danced, or more inactive ones, such as nilëmëp 'He/she/it died', nijep 'He/she has fever'. The different semantic roles do not correlate to different morphosyntactic properties within each class. The same is true for the participant in the O position, which can have semantic roles such as a patient, a stimulus, an experiencer, as seen in the transitive examples given above.

Other participants involved in the event are marked as peripheral by postpositions: e.g., ke 'instrumental', ja 'dative, causee, $p\ddot{e}k(\ddot{e})$ 'about; busy with', etc.:

- 39) Ka wipkëlë malija ke.

 ka w-i-pkëlë-Ø malija ke
 fish 1A3O-Them-cut.O-RecPst knife Instr
 'I cut fish with a knife.'
- 40) Wekalëjai wapu Tateu ja.

 w-ekalë-ja-he wapu tatew ja
 1A3O-give.O-NPst-SapAff palm.tree.sp Tateu Dat
 'I will give wapu fruit to Tateu.'
- 41) Kan womii pëk tëpai ejahe.

 Kanu womilï-Ø pëkë tëpai e-ja-he
 God word-Pss about T-learn.O-He 3-Erg-Coll

 'They taught about the word of God.'

As in other Cariban languages, in Wayâna no feature has been found that distinguishes a third nuclear argument, such as and Indirect Object or a Secondary

Object, as distinct from any peripheral argument. The usual candidates for IO are the recipient of a ditransitive verb like 'give', the addressee of a speech verb like 'tell', or the causees of a transitive verb in a causative construction. These are all marked (with the postposition ja), none is ever cross-referenced on the verb, none forms a constituent with the verb (i.e., they are not contained inside the VP), and none controls any kind of coreference phenomena. There is no "dative shift" construction, no applicative, and none are grammatically obligatory. In conclusion, they do not appear to be in any way more privileged than the object of any other postposition, and as a result, there appears to be no reason to posit the existence of an IO-like nuclear argument.

- **8.3 Clause types.** Main clauses stand alone and refer to a single state/event/action; subordinate clauses occur embedded inside main clauses.
- **8.3.1 Main clauses.** Main clauses fall into four clear categories, each with somewhat different morphosyntactic devices for indicating core arguments, as well as different word order properties and different elements that can co-occur in the clause. These are the copular clause, which frequently does not even have a verb (8.3.1.1); the Set I clause, in which grammatical relations are indicated by means of verbal person-marking morphology and the OV verb phrase (8.3.1.2); the *t*-V-*he* clause, in which the A bears the ergative case and the S/O are unmarked (8.3.1.4); and the various kinds of complex predicates, in which the nominative S/A patterns in opposition to the accusative O (8.3.1.5).

8.3.1.1 Copular clauses. The copula can be conjugated for personal prefixes (resembling the SA prefixes on intranstive verbs) and tense. These prefixes are clear for the past tense forms, the recent and the distant past. In the non-past forms, however, no tense marker occurs and there are some suppletive forms (cf. section 5.3.7 for all the forms of the copula). The examples below show personal prefixes and tense markers; the starred examples show that the copula cannot occur in sentence initial position. The parentheses indicate that the occurrence of the copula is optional.

- 42) Tan (wai). 43) * Wai tan. tanë w-a-he
 SpcProxLoc 1SA-be-SapAff
 'Here I am'
- 44) Ëhewake (weha). . 45) * Weha ëhewake. ëhewake w-eha-Ø happy 1SA-be-RecPst 'I was happy'
- 46) Apalai po (wehaken). 47) * Wehaken Apalai po.
 mono po-Ø w-eha-kene
 SpcDistLoc at-on 1SA-be-DistPst
 'I was there far away, long ago.'

The examples 42, 44, and 46 above show respectively two adverbial predicates and a postpositional predicate. A third type of copular predicate is a nominal predicate. These are interesting because the copula can occur in a nominal predicates with all persons and tenses, except with third person non-past forms).

- 48) Ïu wai Mopelu.

 ïwu w-a-he mopelu

 1Pro 1SA-be-SapAff Mopelu

 'I am Mopelu.' (Mopelu1 003)
- 49) Nila neha ulumïn.

 nila n-eha-Ø Ø-ulu-Ø-mïnï

 Nila 3SA-be-RecPst NegAvlz-manioc.bread-NegAvlz-Def-PrivNmlz

 'Nila was the one without manic bread.'
- 50) Malalë eluwa neha pëtukulunu hnë.

 malalë eluwa n-eha-Ø pëtukulu-nu tnë
 same man 3SA-be-RecPst beautiful-PtNmlz also
 'The boy was also the handsome one.'

Given the rich semantic properties of adverbs, nouns and postpositions, copular clause can express a myriad of meanings such as existence (51), location (52-53), possession (54), identification (55), emotional state (56), likeness (57-58), desire (59), knowledge (60), occupation (61), etc.

- 51) Kanawahpe man.
 kanawa-ppe manu
 canoe-ExistentAvlz 3be
 'There is a canoe'
- 52) Tuna sitpïlï molo man.
 tuna hitpïlï molo manu
 water bad SpcMedLoc 3be
 'Bad water is there.'
- 53) Kapu nau man Kan. kapu na-wë manu Kanu sky in.boundless.loc-in 3be God 'God is in the sky.'
- 54) Tijumke man.

 ti-jumi-ke mane

 HavingAvlz-father-HavingAvlz 3be

 'He/she has a father'

```
55) Telesa neha onoptën.

Telesa n-eha- onopï-të-nu
Thereza 3SA-be-RecPst paint.O-GeModAvlz-PtNmlz
'Thereza was the painter.'
```

- 56) Eile man mëklëë.

 ëjile mane mëklëlë
 angry 3be DemAnmMed
 'That one is angry' (Walema 093)
- 57) Imijatame kunehak inëlëë.
 imijata-me kun-eha-kë inëlëlë
 boy-Attrb 3SADistPs-be-DistPst 3AnaphPro
 'He was like a boy.'
- 58) Mëlë katîp man ëpeinom.

 mëlë katîpî mane ë-pej-nomo

 DemInanMed alike 3be 2-child-Coll

 'Your children are like that.' (Tukusimule 034)
- 59) Ulu

 he man tot.

 ulu he mane toto

 manioc.sp Des 3be 3Coll

 'They want manioc.'

 (Lit.: they are desireful of manioc.)
- 60) Kumu uwalë wai. kumu uwalë w-a-he palm.tree.sp knowing.of 1SA-be-SapAff 'I know the kumu tree.'
- 61) Wewe pëk wai.

 wewe pëkë w-a-he

 wood busy.with 1SA-be-SapAff
 'I am busy with wood.'

As seen in the preceding section, nominal predication is possible with the copula 'be' for all persons and tenses, excepting the third person non-past forms. These are, thus, clauses without a verb, all of which have an equative meaning, but examples with pronouns can also function to point out an unexpected event:

62) Ijoi mëkjaa.

ijohi mëkjalë
lizard.sp DemAnmMedColl
'They are the lizards.'

'(Look) it's the lizards!'

- 63) * Ijoi mëkja man.
- 64) Mëi papak.

 mëhi papako
 DemAnmProx father

 'This one is my father.'

 '(Look) it's my father!'
- 65) * Mëi papak man.
- 66) Telesa onoptën.
 teresa onoptë-nu
 Thereza paint.O-PtNmlz
 'Tereza is the Painter.'
 - * Teresa man onoptën

The verb of a simple predicate is subject to elision, as is normally the case for the copula 'be' in copular predicates.

67) Lome, watë katipila mëlë ulu.
lome watë katipila mëlë ulu
but feces like-Neg DemInanMed manioc.bread
'But that manioc bread (was) unlike feces.' (Sulalapana 065)

8.3.1.2 Set I clauses

Set I clauses display a verb conjugated by person prefixes and one or more TAM and Number suffixes (see section 5.3.1.2 for a morphological description of Set I verbs). Intransitive verbs mark their single participant via a personal prefix. The person of the A and of the O are marked by verbal prefixes or, optionally, by additional nominals referring to them. In 3A3O arrangements, a pre-verbal O is in complementary distribution with the third person prefixes.

- 68) Wewe wëkëtjai hapa ke.
 wewe w-ëkëtï-ja-he hapa ke
 wood 1A3O-cut.O-NPst-SapAff machete Instr
 'I will cut the wood with a machete.'
- 69) Lome ulu wikijai hemalëë. lome ulu w-îkï-ja-he hemalëlë but manioc 1A3O-grate.O-NPst-SapAff now 'But, I will grate manioc now.'

- 70) Mon kohmë pëitopit nekalë.
 mono kopmë pëjitopiti n-ekalë-Ø
 SpcDistLoc perhaps children 3A30-tell.O-RecPst
 'Over there, perhaps!.' The kids told it.' (Woman 013)
- 71) Kola ekalë epe ja. kola ekalë-Ø Ø-epe-Ø ja necklace give-RecPst 3-friend-Pss Dat '(She) gave necklace to her friend.'

In the Set I clause type, the third person prefixes *n*- '3A3O', *mën*- '3A3O certainty', and kun- '3A3O distant past' all disappear when the O noun is immediately preverbal (74). Forms in the distant past take *kun*- except when the O is immediately preverbal in which case -*ne* 'Distant past' occurs instead (76a-b). The order of the O and the Verb can alternate, but the prefix must occur when the O is post-verbal (76).

- 72) Mëneneja.
 mën-ene-ja
 3A3OCertnty-see.O-NPst
 'He/she/it will certainly see O'
- 73) Neneja. n-ene-ja 3A3O-see.O-NPst 'He/she/it will see O'
- 74) Nila eneja. nila ene-ja Nila see.O-NPst 'He/she/it will see Nila'
- 75) Nenep pïlasi.
 n-enepï-Ø pïlahi
 3A3O-bring.O-RecPst basket.kd
 'He/she brought a pilasi basket.'
- 76) a. Kunene.
 kun-ene
 3A3ODistPst-see.O
 'He/she/it saw O long ago'
 - b. Jolok enene.
 joloko ene-ne
 evil.spirit see.O-DistPst
 'He/she/it saw the evil spirit long ago.'

While no cases of post-verbal O's form a constituent with the verb, the reverse is not true, and thus not all cases of immediately pre-verbal O's form a constituent with the verb. The (pro)nominal O's occurring with verbs with a SAP participant as the A do not form a constituent with the verb. The O and the verb in these cases can be separated by adverbs (77), second position particles (78a) and even by other phrases (78b), and there are no cases of complementary distribution between a noun and a prefix (cf. 5.1.3. for thematic elements occurring on imperative forms). The pronominal O's referring to a first and second person can co-occur with prefixes encoding first and second person O's at least on elicited data for emphatic purposes (79-80). The dissimilar behavior of *kunmë* 'we (dual) and *emna* 'we (exclusive)' is discussed above, at the beginning of this section.

- 77) Sulalapana eitoponpë hemalëë wekalëjai sulalapana ehi-topo-npë-Ø hemalëlë w-ekalë-ja-he sulalapana be-CircmstNmlz-Dvl-Pss now 1A3O-tell.O-NPst-SapAff 'I am going to tell the story of Sulalapana.' (Sulalapana 005)
- 78) a. *Euu* **ka** *mumka hemele, kami*?

 ëw-ulu-Ø ka m-umï-ka-Ø hemele kami

 2-manioc-Pss Quest 2A30-root-PrivVrblz-RecPst already younger.relative

 'Have you already unearthed your manioc, darling?' (Sulalapana 134)
 - b. Upo sisi hnak wili.

 upo hihi tna-kë w-ïlï-Ø

 clothing sun in.sun.into 1A3O-place.O-RecPst

 'I place the clothing in the sun.'
- 79) *Ïu*, *jene* inëlëë.

 ïwu j-ene-Ø inëlëlë

 1Pro 3A1O-see-RecPst 3AnaphPro
 'Me, he/she/it saw me.'
- 80) Ëmëë, ëwene.

 ïwu ëw-ene-Ø

 2Pro 3A2O-see-RecPst

 'You, (he/she/it) saw you.'

In morphosyntactic terms, forms with the causative suffix *-po* are indistinguishable from other transitive stems (this suffix is described in section 5.4.3).

The causee, marked as a peripheral participant, is optionally expressed by a postpositional phrase. This is a pattern similar to non-causativized transitive verbs presenting peripheral participants (compare example 82 with 84).

- 81) Talanme juhmopoja kapu ja.
 talanme j-upmo-po-ja kapu ja
 maybe 3A1O-kill.O-Caus-NPst sky Causee
 'Maybe he is going to make the sky kill me.' (Iguana 109)
- 82) Ilimona ëkëi uhmopo.

 ilimona ëkëhi upmo-Ø
 Ilimona snake kill.O-RecPst
 'Ilimona had a snake killed.'
- 83) Étilë wekalëne hepï eja.

 ëtilë w-ekalë-ne hepï e-ja
 belongings 1A3O-give.O-Dpst habitual 3-Dat
 'I always gave her/him things.'
- 84) Étilë wekalëne.

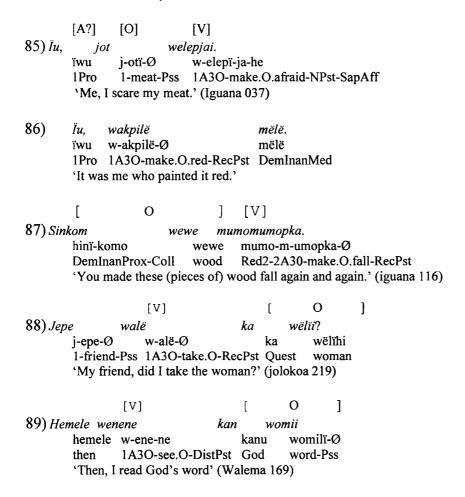
 ëtilë w-ekalë-ne
 belongings 1A30-give.O-Dpst
 'I always gave away things.'

In order to describe the word order patterns of this set, it is useful to separate the four different types of person marking configuration on the transitive verb (as proposed by Gildea (1998:57): a) *direct* (when SAP participant acts on third person), b) inverse (when a third person acts on a SAP participant), *local* (when SAP participants act on each other), and *3A3O* (when a third person acts on a third person). Intransitive verbs are discussed last in this section.

a) Word order in the *direct* configuration. In direct configurations, if any overt participants occur at all, the most common pattern is that of a verb bearing pronominal prefixes co-occurring with an overt O. Free personal pronouns encoding the A may occur pre-verbally for emphasis (and always with a pause separating them from other elements in the sentence). The diagram below summarizes the pattern for the direct cases: (the parentheses indicate that the O can occur in any of the two orders regarding the verb)

((Pro)NO) direct-V-TAM((Pro)NO)

This is to say that for the direct configuration VO and OV are the most common word order, and though it is possible to gather elicited examples with all six orders (i.e. with examples including SAP pronouns), speakers were reluctant to accept postverbal A SAP pronouns. Pre-verbal SAP pronouns were easily accepted, but always indicate emphasis (the translation given for example (86) corresponded to an English cleft). This indicates a specific function for the SAP pronouns in Set I verbs, that of emphasis, thus their occurrence sentence initially. The idea of such a restricted function is corroborated by the fact that in texts, almost no examples occur of SAP pronouns with Set I transitive verbs. The only text example is shown in example (85). Below we show examples of the most common orders, OV and VO:



The examples above show that in the direct situation the free nominals encoding nuclear participants do not disturb the personal prefixes in the verb.

b) Word order in the inverse configuration. In the inverse group we see word order patterns that represent an almost mirror-image of the direct configuration. The most common word order is AV and VA, with A being expressed either by a noun or a third person pronoun. This is represented in the diagram below, and examples with the common AV and VA orders are given right after:

((Pro)NA) inverse-V-TAM ((Pro)NA)

[V] [A]
90) Molo jepaimëne më tot.
molo j-epa-jmë-ne vmë toto
SpcMedLoc 3A1O-teach.O-Resumpt-DistPst Emph 3Coll
'There, they taught me again' (walema 189)

[V] [A]
91) Mëlë katip ëwepiike ëpawanaa.

mëlë katipi ëw-epii-ka-ja ë-pawana-li
DemInanMed alike 3A2O-stair-PrivVerblz 2-partner-Pss
'Like that your friend will deprive you of a stair.' (Eagle 034)

[A] [V]
92) Kaikui nai këja.
kajikuhi naj k-ë-ja
jaguar Intens 3A1+2O-eat.meat-NPst
'The jaguar will eat us.' (kaikui2 026)

[A] [V]
93) Mëklëë jalëne mija psik.
mëklëlë j-alë-ne mija phiki
DemAnmMed 3A1O-take.O-DistPst thither little
'He took me a bit thither.' (Pëne 006)

Any occurrence of a SAP pronoun in any order is rejected in the inverse configuration. Below we see rejected examples with SAP pronouns in pre-verbal position:

94) a. * Ĭu jenep ('Me, he/she/it saw me') b. * Ĭu enep ('Me, he/she/it saw me') 95) a. * Ëmë ëwenep. ('You, he/she/it saw you')
b. * Ëmë enep. ('You, he/she/it saw you')

The examples above also show that first and second person pronouns in the syntactic role of the O cannot co-occur with a prefixless verb form, as is normally the case for pre-verbal (pro)nominal O's (see below). One case of a personal pronoun, however, deserves an explanation, that of the dual inclusive $kunm\ddot{e}$ '1+2nd pronoun'. There are a few examples in our database where this pronoun co-occurs with the prefix k(u)- '3A1+2O' (96-97), and one example in which it occur with a prefixless verb stem (310). Unfortunately, these data only serve to call for future research on the syntactic behavior of $kunm\ddot{e}$, as they do not inform, for instance, whether $kunm\ddot{e}$ is in free variation or even in complementary distribution with the verbal prefix (like a pre-verbal noun in 3A3O situations. Given the fact that $kunm\ddot{e}$ can occur in complementary distribution with the prefix k(u)- '1+2' in possessive constructions ($kunm\ddot{e}$ pakolo-n 'our house-gen' vs. ku-pakolo-n 'our-house-gen'), a complementary distribution between a pre-verbal $kunm\ddot{e}$ and k(u)- '3A1+2O' is plausible. On the other hand, given the fact that other SAP pronouns cannot co-occur in pre-verbal position in the inverse situation, the reliability of the data presented here is questionable.

- 96) Kulas kunmë këne. kulahi kunmë k-ëne-Ø rooster 1+2Pro 3A1+2O 'The rooster saw us'
- 97) Kunmë kumeleka. kunmë ku-meleka-Ø 1+2Pro 3A1+2O-touch.O.-RecPst '(He) touched us.'
- 98) Mëk kunmë wipka.

 mëkë kunmë wip-ka-Ø

 DemAnmDist 1+2Pro scratch.snd-SndVrblz-RecPst

 'That one scratched us.'

For both direct and inverse situation the

c) Word order in local configuration. The local configuration only allows for first and second persons. Thus, the only possible overt free participants are the pronouns $\ddot{\imath}u$ 'first person pronoun' and $\ddot{e}m\ddot{e}(l\ddot{e})$ second person pronouns (and their collective forms. We see an interesting asymmetry in the occurrences of the pronouns, while the second person pronouns can occur as both the O and the A, the first person pronouns can only occur as the A, but not as the O. Again as with the direct and inverse configurations, the personal pronouns do not occur post-verbally, and their occurrence in first position in the sentence has the function of emphasis.

- 99) Ëmëë, kuwene. ëmëlë kuw-ene-Ø 2Pro 1A2O-see.O-RecPst 'You, I saw you'
- 100) *lu*, kuwene.

 "wu kuw-ene-Ø

 1Pro 1A2O-see.O-RecPst
 'Me, I saw you.'
- 101) Ëmëë, këne. ëmëlë k-ëne-Ø 2Pro 2A1O-see.O-RecPst 'You, you saw me.'
- 102) **Ïu këne*.
- d) Word order in 3A3O configuration. Of the six possible word orders in 3A3O situation, four are equally felicitous, and in all these the order of participants does not affect their syntactic role (103). The only restriction holds for the cases where both the A and the O occur postverbally (104). The speakers' intuition about these cases is that they are confusing, as one cannot understand who is doing what to whom. As described in section (8.1.1), when the O is immediately pre-verbal in 3A3O instances the verb stem

occurs without its usual 3A3O prefix, and both O and V form a constituent. In all other arrangements, the prefix occurs (103a, c). In the examples below: akuli 'agouti', kaikui 'jaguar', \ddot{e} 'eat O', and the prefix n- '3A3O.

```
103)
       a.
               kaikui
                               akuli.
                                       (OAV)
                       n-ë-ja
       b.
               kaikui
                       akuli
                               ë-ja
                                       (AOV)
       c.
               kaikui
                       n-ë-ja
                               akuli
                                       (AVO)
               akuli
                       ë-ja
                               kaikui
                                       (OVA)
               '(The/a) jaguar will eat (a/the) agouti.'
104)
               ??n-ë-ja akuli
                               kaikui (VAO)
               ??n-ë-ja kaikui akuli
                                       (VOA)
```

It is interesting to say that both the O and the A can be encoded either by a pronoun or by a noun. Compare example (103) above with example (105) below. The only restriction to pronouns applies to $in\ddot{e}l\ddot{e}(l\ddot{e})$, a pronoun marking a central carachter in discourse, which cannot occur in the OV order.

```
105) Mëklë ëja inëlëë (OV) mëklëlë ë-ja inëlëlë DemAnmMed eat.O-Npst 3AnpPro 'He/she/it will eat that one.'
```

Finally, the first person exclusive *emna* '1+3rd pronoun, which is probably historically related to a noun, still retains most of the morphosyntactic properties of its historical source, and like nouns is in complementary distribution with *3A3O* prefixes (106b). Whenever in the position of A, however, *emna* must occur immediately preverbally otherwise third person A is inferred.

```
106)
       a. Emna
                         kunupi.
           emna
                         kun-upi
           1+3Pro
                         3A3ODistPst-find.O
           'We found it'
       b. emna
           emna
                         ene-Ø
           1+3ExclPro
                         see.O-RecPst
107)
       Kunupi
                          emna.
       kun-upi
                          emna
       3A3ODistPst-find.O 1+3Pro
```

'(he/she/it) found us'

Now, we turn our attention to the word order patterns for Set I intransitive stems. What we see here is a much simpler pattern. *SAP* pronouns, as with the transitive stems, can occur before the verb with an emphatic function, as well as after the verb in a less emphatic occurrence. Nouns and third person pronouns can occur either pre-verbally or postverbally. The order of free arguments does not alter the verbal prefixes:

- 108) *lu*, wikei. iu wi-ka-ja-he iwu 1SA-say-NPst-SapAff 'Me, I spoke.'
- 109) alonme, itëjai iu lëken.
 malonme w-ïtë-ja-he ïwu lëken
 then 1SA-go-NPst-SapAff 1Pro only
 'Then, I will go, only me' (kaikui 025)
- 110) Molo kunehak inëlëë.
 molo kun-eha-kë inëlëlë
 SpcMedLoc 3SADistPst-be-DistPst 3AnpPro
 'He was there.'
- 111) Inëlëë kunehak molo.
 inëlëlë kun-eha-kë molo
 3AnpPro 3SADistPst-be-DistPst SpcMedLoc
 'He was there.'
- 112) Nika mamak. nï-ka-Ø mamako 3SA-say-RecPst mother 'Mother said.'
- 113) Mamak nika. mamako ni-ka-Ø mother 3SA-say-RecPst 'Mother said.'

The pronoun *emna* must occur pre-verbally, or third person is assumed.

- 114) Emna kunmëkëmë.
 emna kun-umëkï-ëmë
 1+3ExclPro 3DistPst-come-Resumpt
 'We came back.'
- **8.3.1.3.** Imperative/Hortative clauses. These clauses are characterized by (a) lack of explicit index of S/A, (b) lack of OV verb phrase, (c) lack of control over 3rd person

reflexive prefix. The O or A are not marked morphologically on imperative forms, the only exception being the transitive verbs which take k- '2A1O' and intransitive SO verbs which take a 2^{nd} person prefix. SA intransitive forms take no prefixes (see section 5.3.2.1 for the morphological properties of imperative forms). Transitive stems starting with a consonant take the thematic prefix i- (5.1.3). Only the O can occur as an overt nominal, either pre-verbally or post-verbally; when pre-verbally, it does not create a formal constituent with the verb, (as seen in the preceding section, this is also true of Set I verbs with SAP A). Other material, as the postpositional phrase in example (119) and the second position particle hek in example (120), can occur between the two.

```
115)
       Ëwïnïkta!
       ëw-ïnïkï-ta
        'Go (there) to sleep.'
116)
       Kaikë
               le!
       kaji-kë le
       do-Imp Intens
        'Do (it) again.'
       [0]
                              [V]
117)
       Elemitop
                          ipanakmak.
       elemi-top
                          i-panakma-kë
       sing-CircmstNmlz Them-listen.to.O-ProxImp
        'Listen to the singing.'
                              0
                                         ]
       [V]
                    118)
       Enek
                    mëi
                                   mïphak japëtumuu
                                                            po.
        ene-kë
                    mëhi
                                                            po-Ø
                                   mïphakë j-apëtumu-lï
        see-ProxImp DemAnmProx ant.sp
                                            1-upper.arm-Pss on.supported-on
        'Look at this ant here on my shoulder.'
        [O]
                  [PP]
                                  [V]
119)
        Upo,
                                ipïmïkë.
                 ewaa
                            kе,
                 Ø-ewa-lï ke i-pïmï-kë
        clothing 3-rope-Pss Instr Them-tie.O-ProxImp
        'Tie the clothing with rope.'
        [O]
              2ndPart [O]
120)
        Ka
              hek
                     ekalëk.
                                 pilasisi.
                     ekalë-kë
                                pilahihi
        ka
              hek
                                 Pilasisi
              only
                     give-Imp
        'Only give fish, Pilasisi!'
```

- 121) Kinikisi hkuu. k-iniki-hi kkulu 1+2SO-sleep-ProxHort Intens 'Let's really sleep.'
- 122) Këtukui. k-ëtuku-hi 1+2SA-have.a.meal-ProxHort 'Let's have a meal.'
- 123) Ulu hek henepta, Jamai.
 ulu hek h-enepï-ta jamai
 manioc only 1+2A3O-bring.O-HortAblat Jamai
 'Let's go get manioc, Jamai.' (kaikui2 003)
- 124) Heneta mëlë.
 h-ene-ta mëlë
 1+2A3O-see.O-HortAblat DemInanMed
 'Let's go see that one.'

Another characteristic of this construction is the obligatory intensifying particle *nai*, which as second position particle, must occur after the first constituent, either the verb or the pre-verbal O:

- 125) Kupanakma nai. ku-panakma-Ø naj 1+2A3O-listen.to.O Intens 'Do not listen to it.'
- 126) Ewepe nai kupanakma. ëw-epe-Ø naj ku-panakma 2-friend-Pss Intens 1+2A3O-listen.to.O 'Do not listen to your friend.'
- **8.3.1.4.** *t*-V-*he* **clauses.** These clauses are characterized by a verb bearing a discontinuous morpheme, *t -he*, and by the ergative case marking of participants. The A is marked by *ja* 'Ergative' and the S and O occur unmarked. The third person reflexive prefix is controlled by the S and the A (129-130):
- [O] [V] [A] 127) Jolok tëmëipai ejahe. joloko t-ëmëjpa-he e-ja-he

evil.spirit T-call-He 3-ErgPts-PColl 'They called the evil spirit.' (Jolokoa 042)

[V] [S]

128) Malonme tëwelamaimëi wëlii.
malonme të-w-e-lama-jmë-he wëlihi
then T-SA-Det-turn.O-Resumpt-He woman
'Then, the woman came back.' (Jolokoa 202)

- 129) Tikai tëpe ja. tï-ka-he t-ëpe-Ø ja T-say-He 3Refl-friend-Pss Dat 'He said to his friend.' (Jolokoa 003)
- 130) Moloinë, tipit tipimihe eja.
 molojinë ti-pi-ti ti-pimi-he e-ja
 then 3Refl-wife-Pss T-tie-T 3-Erg
 'Then, (he) tied his own wife up.' (Tamopoale 058)

Gildea (1998:218) proposes a historical development for *t*-V-*he* ergative clauses from a participial source for many languages of the Cariban family. In short, the participle plus a copula evolve into a main verb plus an auxiliary, as in the examples below for Tiriyó (from Meira 1995, presented in Gildea 1998:24), and in the lastest stages of the development, the copula is optional and rare:

- S (Aux) V
 131) Wëli nai t-të-e
 woman 3:be Compl-go-Compl
 'The woman went.'
- O (Aux) V [A]

 132) Wëli nai t-eeka-e ëkëi ya
 woman 3:be Compl-bite-Compl snake Erg
 'The woman bit the snake.'

Given the translations, while an analysis involving a main verb plus an auxiliary can be argued for Tiriyó, the same does not clearly hold for Wayâna. First of all, the *t*-V
he forms are formally adverbs denoting a resulting state (these forms may co-occur with lexical verbs and undergo nominalization (cf. section 4.2.2.2.2)) as in the example below where it is glossed as a participle:

133) Tokohe psik wai.

t-oko-he phikï w-a-he

Prtc-cut.O-Prtc little 1SA-be-SapAff
'I am a little bit cut.'

In elicitation, *t*-V-*he* examples co-occurring with a copula had a participial translation, having either the semantics of a resulting state or of a present perfect even in the presence of an agent expressed in a oblique phrase. The examples show the translation as the speaker uttered it in Portuguese:

- 134) Ulakanumhe tiïtëi kunehak.

 ulakanum-he tï-w-ïtë-he kun-eha-kë hunt/fish-MotPurp Prtc-SA-go-Prtc 3Dpst-be-Dpst 'He had **gone** hunting.'
- 135) Inëlëë tëkëtse neha Anakali ja malija ke. inëlëlë t-ëkëtî-he n-eha-Ø anakali ja malija ke 3AnaphPro T-cut.O-He 3SA-be-RecPst Anakali OblAgt knife Instr'It was cut with a knife, it was Anakali.'
- 136) Ilimawa kunehak tëlëi Josineti ja.
 Ilimawa kun-eha-kë t-ëlë-he josineti ja
 lime 3SADistPst-be-DistPst Prtc-take.O-Prtc Josinete ja
 'Josinete had already taken the lime.'

On the other hand, examples without the copula were always translated as referring to an event rather than a state. The morphology in these examples is simply glossed as *T--he*:

- 137) *İmumkulu psik tanımhe ija.*r-mumuku-li phiki t-anımı-he r-ja
 1-woman's.son-Pss little T-take.O-He 1-Erg
 'I took my little son' (kaikui 038)
- 138) Tipit tonomai eja.
 ti-pi-ti t-onoma-he e-ja
 3Refl-wife-Pss T-smoke-He 3-Erg
 'He smoked his wife.' (Tamopoale 036)

Our analysis is that the copula cannot occur in examples were the *t*-V-*he* form refers to an independent verb, but only with examples in which the morphology still resembles its historical source, those with the adverbial forms. This is corroborated by the

fact that *t*-V-*he* and the copula only co-occur in two examples, both from a personal narrative, and both with a participial interpretation, as reflected in their English translations:

```
139) Uwa
               nma
                       tënephe
                                  psik
                                           kunehak
                                                              tolopïtï
                       t-ënepï-he phikï kun-eha-kë
                                                              tolopïtï
               nma
       Neg
               Intens Prtc-bring-Prtc small
                                              3DistPst-be-DistPst bird
       ptïle lëken.
       ptïle lëken
       tiny
               only
       'Not really, only a little was brought, a tiny bird.' (alawaka 009)
140)
       İmumkuu
                                       pïtëna kunehak.
                           tïïtëi
                           tï-w-ïtë-he pïtëna kun-eha-kë
       ï-mumuku-lï
       1-womans.son-Pss
                          Prtc-SA-go-Prtc hunt
                                                  3DistPst-be-DistPst
        'Then, my son had gone hunting.' (mopelul 014)
```

All six word orders are attested for *t*-V-*he* verbs. And all are considered equally well formed by Wayâna speakers. In the examples below, *apukuita* 'paddle' and *apëi* 'take O':

141)	a.	Apukuita mujale ja t-ëpëi-he	(OAV)
	b.	Mujale ja apukuita t-ëpëi-he	(AOV)
	c.	T-ëpëi-he Mujale ja apukuita	(VAO)
	d.	T-ëpëi-he apukuita Mujale ja	(VOA)
	e.	Mujale ja t-ëpëi-he apukuita	(AVO)
	f.	Apukuita t-ëpëi-he Mujale ja	(OVA)
		'Mujale took the paddle.'	

Different from Set I verbs, pronouns referring to all persons can occur in all orders. In addition, the pronominal system occurring with *t*-V-*he* is much more elaborate and more numerous than that of Set I, since it includes the A marker -*ja* (-*ja-he* for the collective). With A having a specific pronominal form, all the other pronouns are relegated to encoding the absolutive role. It is interesting that though the third person pronoun *inëlë(lë)* may also refer to inanimate referents in elicited examples and in conversations, it does not do so in narratives. Inanimate referents are encoded in texts

only by the medial inanimate pronoun *mëlë* Table 1 shows these pronouns, and examples are given after:

Table 1
Set I prominal forms

		Ar	imate	Inanimate	
		singular	collective	singular	collective
	ABS ERG	inëlëë eja	inamolo/tot ejahe,	mëlëë	mëlëkom
		mëklëë	mëkja		

[S]

142) Tîkai inëlëë, tï -ka-he inëlëlë T-say-He 3AnphPro 'He said.' (Jolokoa 069)

[O]

143) Mija etpili stak tumosiptëi inëlëë, mija Ø-etpili-Ø tta-kë t-umohiptë-he inëlëlë thither 3-edge-Pss among-into T-leave.O-He 3AnphPro 'Thither, to the edge (of the village), (he) left her.' (Jolokoa 201)

[S]

144) Tëhalëi tot ewalunu htak t-ëh-alë-he toto ewalunu tta-kë T-Det-take.O-He 3Coll dark amongPts-into

> elamna. ela-mna fear-without

'They went into the dark without fear.' (Jolokoa 043)

[0]

145) Maa timomhe tot
maa ti-momi-he toto
So T-scoop.up.O-He 3Coll
'Then, they scoop them up.' (Jolokob 348)

[A]

146) tipehnak ti-petna-kë ti-pimi-he e-ja joloko 3Refl- in.area.of.foreheadPts-into T-tie.O-He 3-Erg evil.spirit

pitpë, pitpë-Ø skinPss

'He tied the evil spirit's skin to the area of his forehead.' (Jolokoa 091)

[A]

147) jolok pitpë tikiihe ejahe, joloko pitpë-Ø t-ikili-he e-ja-he evil.spirit skin-Pss T-take.O.from-He 3-Erg-PColl 'They took off the skin of the evil spirit,' (Jolokob 354)

[S]

- 148) malonme mëklëë tumëkëmëi
 malonme mëklëlë t-umëkï-ëmë-he
 then DemAnmMed T-come-Resumpt-He
 'Then, he went back' (jolokoa 214)
- [A]
 149) tëmikai **mëlë ja**,
 t-ëmika-he mëlë ja
 T-make.O.disappear-He DemInanMed Erg
 'It (the skin) made him disappear' (jolokoa 099)

[O]

150) malonme tipokaimëi mëlë.
malonme ti-poka-jmë-he mëlë
then T-untie.O-Resumpt-He DemInanMed
'Then (he) untied that off again.' (jolokoa 100)

Since the syntactic role of verbal arguments is so explicitly marked, word order is free. However, in the cases where there are oblique oblique participants such as the recipient or the causee, we see some interesting patterns. With verbal stems indicating the possibility of three semantic roles, as $ekal\ddot{e}$ 'give O', the first -ja is understood as the A and the second -ja is understood as the recipient:

- [Erg] [Rec]

 151) Kahulu tëkalëi Avina ja Pintutu ja. kahulu t-ëkalë-he avina ja pintutu ja beads T-give.O-He Avina Erg Pintutu Dat 'Avina gave beads to Pintutu'
- [Erg] [Rec]

 152) Pintutu ja kahulu tëkalëi Avina ja.
 pintutu ja kahulu t-ëkalë-he avina ja
 Pintutu Dat beads T-give.O-He Avina Erg
 'Pintutu gave beads to Avina'

An extra complexity exists in the case of causativized examples, since the causee is also marked by -ja in causative constructions. The preferred order in these cases is Erg-Causee-Dat:

[Erg] [Caus]

153) Alakapuha tëkalëpoi Tateu ja Polonildo ja.
alakapuha t-ëkalë-po-he tateu ja polonildo ja
shot.gun T-give.O-Caus-He Tateu Erg Polonildo Causee
'Tateu had Polonildo give the shotgun (to someone else)'

[Erg] [Caus] [Rec] 154) Patu tëkalëpoi Konsa ja Nila ja ja. Avina patu t-ëkalë-po-he konsa ja nila ja avina ja T-give.O-Caus-He Konsa Erg Nila Causee Avina Dat 'Konsa had Nila give a pan to Avina'

Cases with both *ja* phrases pre-verbally were considered confusing:

155) ??Pintutu ja Avina ja patu tëkëlëpoi.

It is important to say that such examples are not attested in texts, and thus could not be further confirmed.

8.3.1.5. Complex Predicates. The three complex predicates share a clear nominative-accusative pattern, with the A/S as subject of the auxiliary (when the auxiliary occurs), and the O as either a (pro)noun immediately preceding the verb, and forming a strong VP constituent, or as a personal prefix on the verb. There are three different subtypes of complex clause: the negative and progressive utilize a copular auxiliary, and the purpose of motion utilizes an intransitive movement verb as auxiliary.

The progressive clause takes nominalized verb forms, with either of the two event nominalizers -në 'generic event nominalizer' or -Ø specific event nominalizer (as described in 4.2.2.1.2.). It describes an ongoing situation for the non-past tense (156), for the recent past (157) and the for the distant past (158):

156) Apësii pëk wai. Ø-apëhi-Ø-lï pëkë w-a-he 3-hold.O-SpcEvntNmlz busy.with 1SA-be-SapAff 'I am holding it.'

157) Kokone upo akuwaa pëk weha kokone upo akuwa-Ø-lï **pëkë** w-eha-Ø

yesterday clothing wash.O-SpcEvntNmlz-Pss busy.with 1SA-be-RecPst

josineti mëkïlï htau. Josineti mëkï-Ø-lï tta-wë Josinete come-SpcEvntNmlz-Pss among-in

'Yesterday I was washing clothing when Josinete came.'

- 158) Molo wehaken opalan elaimaa pëk.
 molo w-eha-kene opalanu elajma-Ø-lï pëkë
 SpcMedLoc 1SA-be-DistPst airplane wait.for.O -SpcEvntNmlz-Pss busy.with
 'There I was waiting for the airplane.
- 159) Ëtuunë pëk wai.
 ët-ulu-në pëkë w-a-he
 Det-talk.to.O-GenEvntNmlz busy.with 1SA-be-SapAff
 'I am talking.'
- 160) Jelemii pëk weha.
 j-elemi-Ø-lï pëkë w-eha-Ø
 1-sing-SpcEvntNmlz-Pss busy.with 1SA-be-RecPst
 'I was singing.'

As far as we are aware, this construction is the only way to express progression in the past tenses. As for the non-past tense, apparently there are no semantic distinctions between the progressive construction and the progressive occurrences of forms with the non-past suffix -ja (5.3.1.2.1).

The negated form of verbs results from the process of adverbialization plus the suffix -la 'Negative', a suffix that occurs with both adverbs and postpositions (cf. section 7.2.1.3). The most common occurrences of negated verb forms are with an optional copula 'be', but examples where the negated verbs occur as an adverb of lexical verbs are also attested (163). Negated intransitive stems take no person marking, but SO stems starting with consonants which take *i*- (161). Transitive stems take O prefixes encoding the underlying O (206). The S of the copula corresponds, thus, to the underlying A or S of the negated verb:

161) Imnelumtala kunehak. i-mïnelumï-ta-Ø-la kun-eha-kë

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NegAvlz-husband-PssNIncoVrblz-NegAvlz-Neg 3SADistPst-be-DistPst 'She did not get married.'

- 162) *Imelekala nma manai*.

 i'-meleka-la nma mana-he
 l-touch.O-Neg Intens 2be-SapAff

 'You are not touching me.' (Jolokoa 171)
- 163) Kanija kala tëkulephe, kaikui.
 kanija ka-la t-ëkulepï-he kajikuhi
 win.snd NegAvlz-do-NegAvlz-Neg T-be.left.without-He jaguar
 'Jaguar was left with not winning.' (iguana 002)

Contrary to what we see with all other phrases in the language, the third person prefix *ën*- is not in complementary distribution with a nominal immediately preceding the negated verb, though they form a syntactic constituent (see discussion in section 8.1):

164) Wajana ënëla wai.
wajana ën-ë-la w-a-he
people 3Neg-eat.meat-Neg 1SA-be-SapAff
'I do not eat people.' (walema 053)

The postposition pëkë has both a spatial 'on unsupported' and non-spatial meaning 'about; busy with; occupied with' (6.2.1.2). As far as we can tell $p\ddot{e}k(\ddot{e})$ clauses never show a clausal spatial meaning. But clauses with the two other meanings are very frequent. Below, we show examples of clauses with the sense 'about' or 'target of concern':

165) Helë neha helë n-eha-Ø PrsntvPro 3SA-be-RecPst

imëkëmëtoponpii pëk.
i-mëki-ëmë-topo-npili-Ø pëkë
l-come-Resumpt-CircmstNmlz-Dvl-Pss about
'This (story) was about my past coming back.' ((alawaka 064, 065)

166) *Tëhepai emna* t-ëh-epa-he emna T-Det-teach.O-He 1+3ExclPro

emnakaimotaapëk.emnakajimo-ta-Ø-lïpëkë1+3ExclProgame-PssNIncoVrblz-SpcEvntNmlz-Pssabout

'We learned about our getting game.' (jolokod 625, 624)

167) Wepohnëp jepane pëk. w-e-potnëpï-Ø j-epa-ne-Ø pëkë 1SA-Det-think.O-RecPst 1-teach.O-AgtNmlz-Pss about 'I thought about the one who taught me/about my teacher.'

'Topic of concern' clauses follow the usual pattern for most postpositional clauses. Clauses where $p\ddot{e}k(\ddot{e})$ occurs with the sense of 'busy with' or 'occupied with' are most interesting. They take almost always an intransitive verb (most frequently the copula 'be') as the matrix verb whose S is always coreferential with the underlying S or A of the nominalized verb (168-169). The verb stems take only the nominalizers that exclusively refer to an event: $-\theta$ 'Specific Event' and $-n\ddot{e}$ 'Generic Event'.

The whole 'construction' conveys an apectual meaning, that of a progressive, which is the only way to express the progressive aspect in the past tenses. Whether we have a new construction with Aux-MainV is open to discussion. On one hand, the meaning of the 'construction' is easily extractable from the meaning of the postposition. If one is 'occupied' with something, that must only refer to a progressive situation, and the matrix verb can be either a copula or a lexical verb. On the other hand, the marking of participants in the nominalized verb is not totally independent from the matrix verb. Prefixes on intransitive verb stem are accepted in elicitation, but not attested in texts, and an oblique agent of the nominalized verb which is marked in other postpositional clauses by ja does not occur with the progressive $p\ddot{e}k(\ddot{e})$. Of all the postpositional clauses, this is the best construction for a candidate for a new verbal construction.

168) tïkohmamhe Molo tot tï-kopmamï-he toto SpcMedLoc T-go.from.day.to.night-He 3Coll pëkëë тë pola. akuwaa Ø-akuwa-Ø-lï pëkë Vmë pola 3-wash.O-SpcEvntNmlz-Pss busy.with Emph Defect 'There they went into the night washing it in a hard way.' (Jolokod 563)

- 169) Tamusi man, upëtiï pëk.
 tamuhi mane Ø-upëtï-Ø-lï pëkë
 old.man 3be 3-pick.fruit-SpcEvntNmlz-Pss busy.with
 'The old man was picking it (i.e., fruits).' (Pear 019)
- 170) Enee pëk kunehak tamusi ene-Ø-lï pëkë kun-eha-kë tamuhi see.O-SpcEvntNmlz-Pss busy.with 3DistPst-be-DistPst old.man 'The old man was just looking at it.' (Pear 039)
- in the state of th
- 172) Wenene eluwa w-ene-ne eluwa 1A3O-see-DistPst man

tëpelem pëtïï pëk.
t-ëpelï-le-mï pëtï-Ø-lï pëkë
NAdvlz-fruit-having-PtNmlz pick.fruit-SpcEvntNmlz-Pss busy.withPts
'I saw a man picking up fruits.' (Pear 003,004)

173) Wene Alina pakolo pëk.
w-ene-Ø Alina pakolo pëkë
1A3O-see.O-RecPst Alina house busy.with
'I saw Alina buiding a house.'
(Lit. 'I saw Alina busy with the house.')

Verbs forms bearing the purpose of motion suffix -(h)e behave like a participle, taking some personal prefixes in the case of transitive stems, but not deriving morphology as, for instance, nominalizations (4.2.2). Intransitive stems do not take prefixes, but SO stems take the thematic prefix i- (174) (5.1.3). Transitive stems take O prefixes encoding the underlying O (175). The S of the motion verb is co-referent with the semantic S or A of purpose of motion verb. The occurrence of the main verb indicating motion is optional (174):

174) Koko elamhak mihen isiktai koko elahi-mhakë mihen i-hiku-ta-he night fear-NAdvlz poor Them-urine-PssNIncoVrblz -PurpMot kajikuhi uno jaguar afraid.of 'At night (I go) to urinate, afraid of the jaguar'

175) Ëwenei witëjai.

ëw-ene-he w-ïtë-ja-he
2-see.O-PurpMot 1SA-go-Npst-SapAff
'I will go to see you.'

The third person prefix on the purpose of motion form alternates with the preverbal O and forms a syntactic bound with it (8.1):

176) Nitëm ipikëlëi.
n-ïtëmï-Ø i-pïkëlë-he
3SA-go-RecPst 3-cut.O-PurpMot
'He/she went to cut it.'

177) Nitëm kopin pikëlëi.

n-itëmi-Ø kopini pikëlë-he

3SA-go-RecPst grass cut.O-PurpMot
'He/she went to cut grass.'

Elision is frequent in cases where the deleted verb carries the least lexical information as in the case of ka 'do' occurring with sound symbolic words (178), the copula plus negated verb (179), and verbs of motion plus a purpose of motion form (180):

- 178) Tokn alakapuha ke.
 tokn alakapuha ke
 shoot.snd shotgun Instr
 '(We) shot with the shotgun' (Pëne 078)
- 179) Më, jelepila nma.

 më j-elepi-la nma

 So 1-make.afraid-Neg Intens

 'So, it does not scare me at all.' (iguana 033)
- 180) Malonme imnelum amëipaimëhe lep.
 malonme i-minelumi-Ø amëjipa-jmë-he lep
 then 3-husband-Pss call.O-Resumpt-PurpMot Advrs
 'Then, her husband (went) in order to call her, in vain.' (woman 030)
- **8.3.1.6.** Past Habitual clauses. The habitual past -(h)e clauses refer semantically to a situation that was characteristic of a time in the remote past. The A and the S are marked optionally by a free nominal, instead of by pronominal prefixes as with other verbs

functioning as simple predicates. Meira (1999:) reports that the cognate forms in Tiriyó take O prefixes, a pattern that could not be confirmed for Wayâna given the existing data. For the attested examples, stems starting with consonant take a prefix *i*- (184), but it is not possible to tell whether this is a third person prefix or the thematic prefix i-. The order of participants is free for S and A, but unknown for O, as all the examples of overt O's occurring in the database are pre-verbal.

- [S] [V]

 181) Mamak, muleme ïwaptau, elemihe ïnipanakmaame.

 mamako mule-me ï-wapta-wë elemi-he ï-n-i-panakma-lï-me

 mother child-Attrb 1-when-in sing-HabPst 1-ObjNmlz-Them-listen.to.O-Pss-Attrb

 'When I was a child, mother used to sing as the thing I would listen to.'
- [V] [S]
 182) Kai kuni.
 ka-he kuni
 say-HabPst grandmother
 'Grandma used to say.' (Tukusimule 047)
- [A] [V]
 183) Kuni ekalëi.
 kuni ekalë-**he**grandmother tell.O-HabPst
 'Grandma used to tell it.'
- [V] [A]

 184) Ipanakmai ïu.
 i-panakma-he ïwu
 Them/3?-hear.O-HabPst 1Pro
 'I used to hear it.'
- Upakaptau umëkhe talëna kanawa ailë.
 upakapataw umëkï-he talë-na kanawa a-jlë
 long.ago come-HabPst NspcProxLoc-to canoe inside.of-through
 'Long ago, (one) used to come here by canoe.'
- 186) pitpë Upakaptau, kaikui alëi tot katelu ja. upakaptaw kaikuhi pitpë-Ø alë-he toto katelu ja jaguar skin-Pss take.O-HabPst 3Coll jaguar.skin.hunter Dat long.ago 'Long ago, they used to take jaguar skin to the jaguar skin dealer.'

Gerundive forms with the suffix -(h)e 'Purpose of motion' (5.3.6) also present the same prefix vs. pre-verbal O alternation (79-80), and examples (81-82) show that a

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second position particle must follow both the pre-posed noun and the purpose of motion verb: ²

- 187) Nitëm ipanakmai.
 n-ïtëmï-Ø i-panakma-he
 3SA-go-RecPst 3-hear.O-PurpMot
 'He/she went in order to hear he/she/it'
- 188) Nitëm timnelum panakmai.
 n-itëmi-Ø ti-minelumi-Ø panakama-he
 3SA-go-RecPst 3Refl-husband-Pss hear.O-PurpMot
 'I will go in order to paint my husband.'
- 189) Malija enei hek witëm.

 Mary ene-he hek witëm:-Ø

 Mary see.O-PurpMot only w-ïtëmï-RecPst

 'I only went to see Mary.'
- 190) *Malija hek enei witëm.

An interesting case is that of the negative verbs. In 3A3O situations, the nominal preceding the negated verb co-occurs with the third person negative prefix en, as shown in examples (191) and (193). However, presenting a behavior characteristic of phrases, no intervening material may occur between the pre-posed nominal and the verb. In the examples below, for instance, the second position particle $ext{ka}$ 'question' must go after both the pre-posed noun and the negated verb.

- 191) Upo ënekalëla ka neha ëja.
 upo ën-ekalë-la ka n-eha-Ø ë-ja
 clothing 3Neg-give.O-Neg Quest 3SA-be-RecPst 2-Dat
 'Didn't he/she give clothing to you?'
- 192) * upo **ka** ënekalëla neha ëja.
- 193) Mëklëë ënenela.

 mëklëlë ën-ene-la

 DemAnmMed 3neg-see.O-Neg

 '(He/she/if) did not see that one'

² It is possible that the -(h)e 'Habitual past' forms present a similar pattern regarding the OV phrase (see footnote 11 in section 5.3.2.8). However, the existing data on this matter is insufficient to be conclusive.

8.3.1.7. Desiderative clauses. The desiderative postposition *he* indicates desire towards the postpositional object (194). Basically the same meaning occurs in the clausal examples with a nominalized verb. As usual, the marking on the nominalized verb follows an absolutive pattern, the O or S (195-196), but in desiderative clauses the S is optional when coreferential with the S of the copula (the only verbal form to occur with *he*). Compare examples (196) and (197).

```
194) Epeliï he wai.
epelïlï he w-a-he
fruit Des 1SA-be-SapAff
'I want fruit.'
```

- 195) Kaikui neha jëë he. kajikuhi n-eha-Ø j-ë-Ø-lï he jaguar 3SA-be-RecPst 1-eat.meat-SpcEvntNmlz-Pss Des 'The jaguar wanted to eat me.' (kaikui 116)
- 196) Jelemii he nma wai.
 j-elemi-Ø-lï he nma wahe
 l-sing-CircmstNmlz-Pss Des Intens 1Sa-be-SapAff
 'I want me to sing.'
 (Lit.: I want my singing')
- 197) Elemi he nma wai.
 elemi-Ø he nma wahe
 sing-CircmstNmlz Des Intens 1Sa-be-SapAff
 'I want to sing.'

A similar pattern of coreference occurs when the oblique agent is not overt. The S of the copula is coreferential the A of the nominalized verb:

- 198) Nunuwë enee he wai
 nunuwë ene-Ø-lï he w-a-he
 moon see.O-SpcEvntNmlz-Pss Des 1SA-be-SapAff
 'I want to see the moon.' (*I want him/her/it to see the moon)
- 199) Nunuwë enee he wai Anakali ja.
 nunuwë ene-Ø-lï he w-a-he anakali ja
 moon see.O-SpcEvntNmlz-Pss Des 1SA-be-SapAff Anakali OblAgt
 'I want Anakali to see the moon.'

The nominalizing suffixes that occur with the nominalized verbs in the desiderative clauses are only -Ø 'Specifi event' and -në 'Generic event', as in all the

examples above. The only other eventive suffix, the circumstantial -top(o), to co-occur with the postposition he in the database only appears in examples making reference to entities. Cf. section 4.2.2.1.5 for a description of -top(o) as a nominalizer that can derive forms encoding either a referent or an event.

200) Ipkëlëtop he wai. i-pïkëlë-topo-Pss he w-a-he 3-cut.O- SpcEvntNmlz-Pss Des 1SA-be-SapAff 'I want the cutting instrument.'

8.3.1.8. *ka* 'say, do' clauses. All the verb phrases described above are cases of constructions with transitive verbs where there exists a bound between a preposed nominal and the verb. There exists, however, one case of a phrase involving an intransitive verb: a sound symbolic (which are grammatically nouns (4.4.4)) plus the intransitive SA verb verb *ka* 'say, do' in any of its forms (Set I form, *t*-V-*he*, negative form, nominalizations, etc.). This construction displays a bound that parallels that of other verb phrases. As with other verb phrases, members of form classes other than nouns cannot occur between the preceding nominal and the verb, e.g., no adverbs, or postpositions) and the second position particles must occur after the two elements. Compare (201) to (202). An additional feature of this phrase is that it presents a rigid word order, the sound symbolic word-*ka*; the order *ka*-sound symbolic word is ungrammatical (204-206). Examples with Set I (5.3.1) and *t*-V-*he* (5.3.4) verb forms are presented below:

201) Pokn nïka ka.
pokn nï-ka-Ø ka
rain.snd 3SA-do-RecPst Quest
'Did it rain a lot?'
(Lit. 'Did it go "pokn" [=heavy raining]')

202) * pokn ka nïka.

```
203) Tuk tikai.

tuk ti-ka-he
pull.snd t-do-He
'He/she pulled (it).'
(Lit.: (He/she) did 'tuk=pull')

204) * Tuk hek tikai.
* Nika pokn.
206) * tikai tuk.
```

8.3.2 Subordinate clauses. All subordination in Wayâna is restricted to nominalized or adverbialized verb forms. The only unnusual exception is that of verbal forms inflected by the postpositionalizing suffix –*tühwëë* 'posterity' (cf. section 6.3), which function as adverbial clauses.

Functionally, there are three basic types of subordinate clauses: a) complement clauses, b) relative clauses, and c) adverbial clauses. The specifics of each type are discussed in the next sections.

8.3.2.1 Complement clauses. These clauses are based on nominalizations that function syntactically as arguments of a matrix verb, A, O and S. The great majority of S clauses are occurrences with the copula 'be', but this need not to be the case as seen in the examples below:

```
207)
        Wewe
                 apëkatpon
                                 tïkai.
        wewe
                apëka-tponu
                                 tï-ka-he
                get.O-PstAgt
                                 Prtc-say-Prtc
        'The one who had gotten the wood said' (stair 020)
208)
                ïweitop
        Ipok
                                              kunmëk.
        ipoke
                ï-w-ehi-topo-Ø
                                              kun-umëkï
                                              3SADistPst-come
                 1-SA-be-CircmstNmlz-Pss
        'My being good came about' (walema 147)
        No A clauses occur in texts, but they do occur in elicited data:
        [
                      Α
                                   ]
```

```
209)
                        alëtponu
                                                               inëlëë.
       Etat
                                              ja
                                                   tënei
       Ø-etatï-Ø
                       alë-tponu-Ø
                                                               inëlëlë
                                                   t-ëne-he
                                              ja
       3-hammock-Pss take.O-PstAgtNmlz-Pss Erg T-see.O-He 3AnphPro
       The one who had taken his hammock saw him.
               Α
210)
       Jepane
                           ëtuutop
                                            ekalëne.
       j-epa-ne
                           ëtulu-topo
                                            ekalë-ne
        1-teach.O-AgtNmlz talk-CircmstNmlz tell.O-DistPst
       'The one who taught me told a story.'
       Examples of O clauses are given below:
211) Hemalëë wenejai
       hemalëlë w-ene-ja-he
                  1A3O-see.O-NPst-SapAff
       now
                  O
                    iweitop
                                              mïhen.
       uwamela
        uwame-la
                    i-w-ehi-topo-Ø
                                              mïhen
       healthy-Neg 3-SA-be-CircmstNmlz-Pss poor
        'Now I see her being unwell, poor (one).' (Maria 036, 037)
               O
                       ]
212)
       Inekalëë
                                          wipanakma.
       i-n-ekalë-Ø-lï
                                          w-i-panakma-Ø
        3-ObjNmlz-tell.O-SpcEvntNmlz-Pss 1A3O-Them-hear.O-RecPst
        'I heard what she said.'
```

8.3.2.2 Relative clauses. Clauses labeled as 'relative clauses' are nominalized verb forms that occur juxtaposed to other nouns in a noun-noun modification fashion, thus their label (213-215). Though such an arrangement is accepted with easy in elicited examples, they are not attested in texts. In texts, we observe a different strategy for modification or restriction of a participant: the extensive use of 'afterthoughts' (216-218). Such a common strategy is linked to the idea that Wayâna clauses tend to express one idea at a time. Thus, such occurrences in final position are not truly afterthoughts, in the sense that they are not necessarily mentions of something the speaker forgot. They are a means of offering additional information about a participant without having to lump it together with the mentioning of that participant.

```
NP
                      NP
                                              V
213)
        Eluwa, ëkëi
                                          tïlëmëphe.
                         nëtpii
                ëkëhi
                         n-ë-Ø-tpïlï-Ø
        eluwa
                                          tï-lëmëpï-he
        man
                snake
                         ObjNmlz-bite.O-
        'The man who was snake-bitten died.' synt150
                     NΡ
                                 NP
214)
        Helë
                     malija
                             ipun
                                          pikëlëtop.
        helë
                     malija
                             i-punu-Ø
                                          pïkëlë-topo-Ø
                             3-meat-Pss cut.O-CircmstNmlz-Pss
        PrsntvPro
                    knife
        'This (is) the knife that cuts meat.'
        NP
                           NP
                                           V
215)
        Mëklëë
                      jenetpon
                                           tïïtëi.
        mëklëlë
                      j-ene-tponu-Ø
                                           t-ïtë-he
        DemAnmMed 1-see.O-PstAgt-Pss T-go-He
        'That one came, the one who saw me' synt151
        NP
                   V
216)
        Luwe
                tanuptëi
        luwe
                t-anuptë-he
        flute
                T-play.instr-He
                     NP
                                ]
        jolok
                     amëipatop
                                              tëjahe.
        joloko
                     amëjipa-topo-Ø
                                              të-ja-he
                     call.O-CircmstNmlz-Pss 3Refl-OblAgt-Coll
        'They played the flute, the thing used by them to call jolok.' (Jolokoa 040, 041)
                NP
                                                  [
                                                               NP
                                                                               ]
217)
                mëklëë
                                                  mëjelon
        Lome
                                 ja
                                      tënei
                                                                               ja.
                                                                       epe
        lome
                mëklëlë
                                                  mëje-lonu
                                 ja
                                      t-ëne-he
                                                                       epe
                                                                               ja
        but
                DemAnmMed
                                 Erg T-see.O-He NspcDistLoc-PtNmlz friend
        'But, that one, the distant friend, could see.' (Jolokoa 126)
                     NP
                                                   V
218)
        Malonme
                     tëpitkom
                                                  tïïhe
                                                                   hemele
        malonme
                     t-ëpi-tï-komo
                                                  t-ïlï-he
                                                                   hemele
                     3Refl-medicine-3Refl-Coll
        then
                                                  T-make.O-He
                                                                   soon
                NP
                         ]
        kalipono
                         ekalëne.
        kalipono
                         ekalë-ne
        non.Wayâna
                         give.O-AgtNmlz
        'Then, soon they made their medicine, that which would give away the non-Indian enemy.'
        synt153
```

8.3.2.3. Adverbial clauses. All adverbial clauses all are based on nominalized verb forms that occur syntactically as the object of postpositions or on adverbialized verb forms.

Both function as modifiers of matrix clauses. In this section, we present three clause types based on nominalizations that occur as object of postpositions, *ke* 'because' clauses, *htau* 'when; if' clauses, one clause type that takes the postpositionalizer *-tihwë* 'posteriority' clause, and one clause type with *-me* 'in order to' clauses.

8.3.2.3.1, *ke* 'because' clauses. The postposition *ke* marks underived nouns as intruments and sources, an example of the instrumental use is given in (219). With verbal nominalizations, the meaning of source (or reason) is the one used, and glossed here as 'because'. The main clause can be both a transitive and an intransitive verb or a copula.

- 219) Ewaa ke ipimikë. Ø-ewa-li ke i-pimi-kë 3-rope-Pss Instr Them-tie.O-ProxImp 'Tie with its rope.'
- 220) Tokn kanë ke hek, tokn ka-në ke hek shoot.snd do-GenEvntNmlzInstr only

mëkjaa emna pëk itëtpiïtom

mëkjalë emna pëkë i-të-Ø-tpïlï-Ø-tomo

DemAnmMedColl 1+3ExclPro about 3-go-SpcEvntNmlz-Dvl-Pss-Coll

tïpanakmai emna ja. tï-panakma-he emna ja T-hear.O-He 1+3ExclPro Erg

'Because of the shooting, we heard those who had gone after us.' (Pëne 127, 128, 129)

- 221) İkiliitom ekalëë ke, umxk.

 i-kilili-Ø-tomo ekalë-Ø-li ke w-umxky-Ø

 l-thing-Pss-Coll give.O-SpcEvntNmlz-Pss Instr 1SA-come-RecPst

 'I came because they were giving away my things.'
- 222) Jamoo jetumhak j-amo-li jetu-mhakë 1-hand-Pss hurt-ModAdvlz

tokolomkatopke.tokolomka-topokepaddling.snddo-CircmstNmlzSource

"My hand (was) hurt from the paddling." (Alawaka 061, 062)

223) Tikai, mëlë enee ke. ti-ka-he mëlë ene-**Ø**-li ke

T-say-He DemInanMed see.O-SpcEvntNmlz-Pss Instr 'She said because of her seeing that.' (Jolokod 606, 607)

All the examples above involve a lexical verb. Copular 'because' clauses present some particular properties. First, the form *aptau* occurring in such clauses does not present a transparent allomorph of the copula 'be', second though *aptau* may be inflected by *SAP* prefixes (226), it cannot take third person person prefixes.

224) Moloinë tëhanukhe inëlëë.
molojnë të-w-ëh-anuku-he inëlëlë
then T-SA-Det-put.up.above-He 3AnphPro

 Imnelum
 mïhen
 eulumna
 esike.

 i-mïnelumï-Ø
 mïhen
 Ø-ewu-lï-mna
 ehiike

 3-husband-Pss
 poor
 3-eye-Pss-without
 because

'Then, he went up, because her husband was blind. (Tamopoale 005, 006)

- 225) Molo tuna pepta esike, nïtëm inëlëë ka apëlëtse. Molo tuna pepta ehiike n-ïtëmï-Ø inëlëlë ka apëlëtï-he SpcMedLoc water big because 3SA-go-RecPst 3AnphPro fish get.fish-PurpMot 'Because big water exists there, he went to fish.'
- 226) Umëkëmë he mëwihnë umëkï-ëmë-Ø he mëwitnë come-Resumpt-SpcEvntNmlz Des really:

ïmumkuuheïwesikelëkenï-mumuku-lïheï-w-ehi-Ø-lï-kelëken1-womans.son-PssDes1-SA-be-SpcEvntNmlz-Pss-Instronly

8.3.2.3.2. *htau* 'when; if' clauses. This postposition follows objects that are composed of parts, a group of people, a basket of fruits, a group of stones, or a group of cotton balls (227) (cf. 6.2.1.1). It follows a nominalized verb form to indicate simultaneity of events. The semantics of the postposition, 'among', 'in the middle of' seems to indicate that events are conceptualized as complex and made of parts, thus being compatible with this postposition. The main clause can be either an intransitive or a transitive verb.

227) Maulu htau. mawulu tta-wë cotton among-in

^{&#}x27;I really wanted to come back because I just wanted my son." (Alvina 050, 051)

'In the middle of the cotton (balls).'

- 228) Ïmëkili htau uwa meha.

 i'-mëki'-Ø-li tta-wë uwa m-eha-Ø
 l-come-SpcEvntNmlz-Pss among-in Neg 2SA-be-RecPst

 'When I came you were not (here).'
- 229) Ta mike pa ta mi-ka-ja pa what 2SA-do-NPst Quest

Ewot elepïlï htau?

ew-otï-Ø elepï-Ø-lï tta-wë

2-meat-Pss make.O.afraid-SpcEvntNmlz-Pss among-in

'What do you do when scaring of your meet away?' (iguana 028, 029)

(Lit. what do you do in the middle of (lit. among) your making your meat afraid.?)

230) Malonme, tëwelamai, malonme të-w-e-lama-he then T-SA-Det-turn.O-He

tih kanë htau, imnenot.
tih ka-në tta-wë i-minenoti-Ø
alone do-GenEvntNmlz among-in 3-mother.in.law-Pss
'Then (he) came back when his mother-in-law was alone.' (Sulalapana 037, 038)
(Lit.: in the middle of (lit. among) doing tih=being alone, his mother in law)

231) Kan womii witipkei sisi mëkili htau.
kanu womili-Ø w-i-tipka-he hihi mëki-Ø-li tta-wë
God word-Pss 1A3O-Them-read.O-SapAff sun come-SpcEvntNmlz-Pss among-in
'I read the word of God whe the sun comes.'
(Lit. I read the word of God in the middle of (lit. among) the coming of the sun.')

Clauses bearing the specific event nominalizer —Ø present an interesting asymmetry: a lexical predicate, as all the ones presented above, are characterized by the occurrences of the postposition *hta*, but clauses with a copular predicate are characterized by the occurrences of *esiike*, a zero nominalized form of *esi* 'be' plus the postposition *ke*. Like with *aptau* clauses, discussed above, the form *esike* takes *SAP* prefixes (234), bur not third person one.

232) Kalipono mëjela aptau, kalipono mëje-la apta-wë non.Wayâna NspcDistLoc-Neg when-in

ëpi,muhuletëëtuputse.ëpimuhuletë-w -ët -uputï-hemedicinealluring.amuletT-SA-Det-fill.O-He

- 'When the non-Wayâna were not far, the medicine, the alluring amulet, would start filling up.' (Jolokob 307, 308)
- 233) Elamhak aptau numëkëmë.
 ela-mhak apta-wë n-umëkï-ëmë-Ø
 fear- when-in 3SA-come-Resumpt-RecPst
 'When (he) was scared, he came back.' synt140
- 234) Muleme ëwaptau, kaikui uwëne.
 mule-me **ëw-apta-**wë kaikuhi w-uwë-ne
 child-Attrb2-when-in jaguar 1A3O-kill.O-DistPst
 'When you were a child, I killed a jaguar.'

8.3.2.3.3 Posterity *—tihwë* **clauses.** Posteriority clauses indicate that another event will follow. Formally, the posteriority clauses are postpositions derived from verb stems with the postpostionalizing suffix *—tühwë* 'Posterity' (cf. section 6.3.), but they refer semantically to specific events. The marking of participants on these forms is parallel to that in other postpostional clauses, with absolutive prefixes (235synt131 and 236synt132) and, as normally the case, with a full nominal alternating with a third person prefix (synt132 vs. synt133). The agent of the *—tühwë* form is obliquely marked as in the case of nominalizations by the postposition *ja* 'AgtObl' (235synt131).

- 235) Ëwenetihwë ëje ja, tawake nma wëtiijai.

 ëw-ene-tihwë ë-je-Ø ja tawake nma w-ëtili-ja-he
 2-see.O-Posterity 2-mother-Pss OblAgt happy Instens 1Sa-become-NPst-SapAff
 'After you mother sees you, I will be so happy.'
- 236) Itëtihwë wepijai.
 i-të-tihwë w-epi-ja-he
 3-go-Posterity 1A3O-eat.soft.food-NPst-SapAff
 'I will eat after he comes.'
- 237) Mëklëë umpoi, mëklëë itëtihwë lëken, mëklëlë umpoje mëklëlë itë-tihwëlë lëken DemAnmMed cause DemAnmMed go-Posterity only

moloinë, tumkai eja hemele.
molojnë t-umï-ka-he e-ja hemele
then T-root-PrivVrblz-He 3-Erg now
'Because of that one, only after that one went, then, (she) unearthed (it) now.'
(\$Sulalapana 130, 131)

8.3.2.3.4. —*me* 'in order to' clauses. Nominalized verb forms taking the adverbializing suffix —*me* 'Attributive' occur with the sense of goal or finality. As with postpostional clauses, the meaning of this adverbial clause is a direct result of the meaning of the adverbilizing suffix. The sense of purpose can be observed for —*me* already with underived nouns, as in examples (238)

The nominalized verb is possessed accordingly with the properties of the nominalizing morphology, e.g. forms with the circumstantial nominalizer -top(o) take prefixes encoding the S and the O, forms with the agent nominalizer -ne take prefixes encoding the A, and so on (see section 4.2.2.1. for the properties of all de-verbal nominalizing suffixes). All other de-verbal adverbializers ($-t\ddot{e}$ 'Generic Modifier', -tse 'Specific Modifier', -tse, $i--pophak(\ddot{e})$ 'Effective', etc.) are attributive in nature and have never been attested in reference to an event (cf. 7.2.1.2.)

- 238) Masike, 'Këkïme hapëita!'
 mahike k-ëkï-Ø-me h-apëhi-ta
 With.that 1+2-pet-Pss-Attrb 1+2A3O-get.O-HortAblat
 'With that, 'Lets go get it to be our pet!' (Eagle 014)
 (Lit: '... as our pet.') synt138
- 239) Mëklëë pëk epiin tiihe ejahe mëklëlë pëkë Ø-epij-nu t-ili-he e-ja-he DemAnmMed about 3-stair-Pss T-make-He 3-Erg-PColl

apëitohme.

Ø-apëhi-topo-Ø-me

3-grab.O-CircmstNmlz-Pss-Attrb

'Because of that one, they made a ladder in order to grab it.' (Eagle 020, 021)

240) Moloinë sisi hjak tiïhe molojnë hihi hja-kë t-ïlï-he Then sun in.sun-into T-make-He

ilasilamtohme.

i-lahilamï-topo-Ø-me

3-dry.O-CircmstNmlz-Pss-Attrb

'Then, (they) placed (it) into the sun, in order for it to dry.' (Jolokoa 081, 082)

241) Masike mëi nila nipanakmaame mahike mëhi nila n-i-panakma-lï-me

With.that DemAnmProx Nila ObjNmlz-Them-listen.to.O-Pss-Attrb

```
wikei.
wi-ka-ja-he
1SA-say-NPst-SapAff
'Then, in order to serve as what Nila listens to, I am speaking.' (Fishing 015, 016)
```

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242) Mamak he wai, jeneimëneme.

mamako he wahe j-ene-jmë-ne-Ø-me
mother Des 1be 1-see.O-Resumpt-AgtNmlz-Pss-Attrb
'I want mother (in order) to see me' (tamopoale 075, 076)
(Lit.: 'as the one who sees me again.')
```

Finally, negative clauses are construed on adverbial verbal forms constituting complex predicates. Thus, they are described in section 8.3.1.5 on complex predicates.

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