WAIMIRI ATROARI VERBAL MORPHOLOGY

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ABSTRACT: This article discloses a descriptive analysis of the Waimiri Atroari verbal morphology. Of all lexical classes, the verb is the richest in morphological possibilities. It can take a large set of different grammatical markers indicating person, tense-aspect-mood, negation, causativization, and clitics, as for example, the interrogative clitic. The present work is organized as follows, the first section provides a description of verbal morphology and the second section analyzes the behavior of the interrogative clitic that is attached to the tense/aspect suffix slot. In addition, this paper provides two texts to demonstrate more examples of the verbal morphology of this language.

KEYWORDS: Waimiri Atroari Language, Verbal Morphology; Interrogative Clitic.

RESUMO: Este artigo constitui-se numa análise descritiva da morfologia verbal da língua Waimiri Atroari. De todas as classes lexicais, é o verbo que recebe diferentes afixos que indicam pessoa, tempo/aspecto/modo, negação, causativização e clíticos como por exemplo, o clítico interrogativo. O presente artigo está organizado da seguinte forma, a primeira seção fornece uma descrição da morfologia verbal e a segunda apresenta e analisa o clítico interrogativo que ocorre no espaço dos afixos de tempo/aspecto. Ao final do artigo são anexados dois textos para fornecer mais exemplos da morfologia verbal desta língua.

PALAVRAS-CHAVE: Língua Waimiri Atroari; Morfologia Verbal; Clítico Interrogativo.

1 INTRODUCTION

Verbs are words which signify actions, events, or temporary states in relation to beings and things in the world. They are the core,

the binding element in most sentences in any language. Verbs can serve as head of verb phrase, predicates of clauses, and they code events in text. In this article, I discuss primarily the word-structure (morphology) of verbs. I show the various grammatical affixes (prefixes and suffixes) that can be attached to the verbal word. The inflectional morphology of Waimiri Atroari verbs is typical of the Cariban family (GILDEA 1998; MEIRA 1999).

      The structure of the verb in Waimiri Atroari is basically prefix-stem-suffix. Of all lexical classes, the verb is the richest in morphological possibilities. It can take a large set of different grammatical markers indicating person, tense-aspect-mood, negation, causativization, clitics, as for example, the interrogative clitic. The prefixes usually mark person and the suffixes mark tense/aspect/mood, and valence change (causativization). Verb stems in this language can have different shapes, including V, VV, VC, VCV, CV, CVV, CVC, and CVCVCCV. In the examples below, you can verify some of the grammatical affixes that the verbs can take.[1]

a)   woky   i-eky   kra   **h-ee-ia**
       banana   REL-juice   1PRO   1A-drink-T/A
       'I drink the banana juice.'

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[1] **Abbreviations:** A – 'subject of transitive verb'; ABL – 'ablative'; AGT.PART – 'agentivity particle'; ADJ – 'adjective'; ADV – 'adverb; AL – 'allative'; CAUS – 'causative'; COP – 'copula'; DAT – 'dative'; DES – 'desiderative; DEV – 'devaluative'; DISJ – 'disjunctive particle'; EMPH – 'emphatic'; EVID – 'evidential'; IMM.F – 'imminent future'; IM.P – 'immediate past'; IMP – 'imperative'; INT – 'interrogative'; INSTR – 'instrumental'; INSTR.N – 'instrumental nominalizer'; LOC – 'locative'; NEG – 'negation'; NOMLZ – 'nominalizer'; 2PART – 'second-position particle'; O – 'object'; POS – 'possession'; PRO – 'pronoun'; REC.P – 'recent past'; REM.P – 'remote past'; REDUP – 'reduplication'; REFLX – 'reflexive'; REL – 'relational prefix'; REM.F – 'future remote'; REM.P – 'remote past'; S – 'subject of intransitive verb'; T/A – 'tense/aspect; VAL – 'valuative'; VERBL – 'verbalizer'; 1 – 'first person singular; 2 – 'second person sing. or pl.'; 3 – 'third person sing.or pl.'; 1+2 – 'first person plural inclusive'; 1+3 – 'first person plural exclusive'.

b)   amyra   ram   aa=inaka   xiba   **m-yry-pia**
       2PRO   2PART   1-DAT   fish   2A-give-IM.P
       'You gave fish to me.'

c)   impa   ianana   **ny-bia-pa**   ty-mydy   taka
       then   Ianana   3S-come-REM.P   3REFLX-house   AL
       'Then Ianana came to his own house.'

d)   wykyr-eme   **ny-damem-pa.**
       man-DEV   3S-die-REM.P
       'The man died.'

e)   amyra   mykyka   **m-ary-py-pia**   mykyka   **ini-se.**
       2PRO   3PRO   2A-order-CAUS-IM.P   3PRO   see-in order to
       'You ordered him to see him.'

f)   amyra   ka   aa=k-ini-pia.
       2PRO   EVID   10=2A-see-IM.P
       'You saw me.'

g)   **M-yty-pi=e'**
       2s-understand-IM.P-INT
       'Did you understand?'

      The structure of Waimiri Atroari verbs is summarized in table 01 below:

Table 01 — Structure of Waimiri Atroari verbs

Case marking		ROOT	Verbalizer Nominalizer	Causative Negation Imperative Desiderative tense aspect-mood suffixes	TAM	
Clitic	Prefix				Interrogative clitic	
shout	aa= 1o	-kytah- shout			-py -CAU	-pia IM.P	
	hy- 1A	-kytah- shout			-py -CAUS	-pia IM.P	

						-pi IM.P	-e' INT
		my- 2A	-kyta- see				
vomit	aa= 1o		-wen- vomit	-ta VERBL	-py CAUS	-pia IM.P	
	hu- 1A		-wen- vomit	-ta VERBL	-py CAUS	-pia IM.P	

2 WAIMIRI ATROARI VERBAL MORPHOLOGY

There are three subclasses of verbs in Waimiri Atroari: transitive, intransitive, and copular. Based on morphosyntatic properties, it is observd a division between transitive and intransitive verbs. The transitive verbs are traditionally defined as the group of verbs which subcategorize for a direct object. Transitive verb stems can take both A and O prefixes. The intransitive verbs are often referred to as the group of verbs which do not subcategorize for a direct object. Here, I use the term more narrowly, to mean verbs that have only a subject, not an object. Intransitive verbs can only take one set of person markers. Intransitive verbs change valence when taking causative suffixes; as a result, they become transitive verbs taking direct objects. Transitive verb stems make implicit reference to two participants, A and O, while intransitive verbs denote only one participant, S.

A, O and S refer to the various participants of the event described by the verb on which they occur (COMRIE, 1981). In the present work, roles and grammatical relations are used as descriptive tools.

a)   aa   ram   **wy-synehka-tape**
      1PRO   2PART   1S-disappear-REM.F
      'I will disappear.'

b)   iry   ka   **aa=kaka-ky**
      3PRO   EVID   1O-scratch-PAST
      'He scratched me.'

c)   Aa   ram   ka   **h-ini-pia.**
      1PRO   2PART   3PRO   1A-see-IM.P
      'I saw him.'

d)   Amyra   ram   ka   **mu-wen-tah-py-piya**
      2PRO   2PART   3PRO   2A-threw up-VERBL-CAUS-IM.P
      'You made him throw up.'

Semantically, five different person marking prefixes can be distinguished – a first person, a second person, a third person, a first person dual inclusive, and a first person exclusive. The person markers have different allomorphs, depending on the the form of the stem to which they attach[2] Table 02 below summarizes its distribution:

Table 02—Person-marking clitics and prefixes

	Subjects		Objects	Possessives
	Intransitive	Transitive		
1st sing.	w-/wy-/wu-	h-/hy-/hu-	aa=	aa=
2nd	m-/my-/mu-	m-/my-/mu-	a=,k-/ky-/ku-	a=
3rd	n-/ny-/nu-	n-/ny-/nu-		kyy=/ty=(reflx)
1+2 (incl.)	h-/hy-/hu-	h-/hy-/hu-	k-/ky-/ku	k-/ky-
1+3 (excl)	n-/ny-/nu-	n-/ny-/nu-	a'=	a'=

Paradigms of transitive and intransitive verb forms *with the prefixes marking person follow* (more paradigms are provided in the appendix).

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[2] *wy-, my-, ny-,* and *hy-___*C initial stem
w-, m-, n-, and *h-___*V initial stem
*wu-,mu-, nu-, hu-___*bilabials

Transitive

		Intransitive	
hy-myryky-piany	'I fished'	wy-rymy-tape	'I will die'
my-myryky-piany	'you fished'	my-rymy-tape	'you will die'
ny-myryky-piany	'she/he fished'	ny-rymy-tape	'she/he will die'
hy-myryky-piany	'we fished'	hy-rymy-tape	'we will die'
ny-myryky-piany	'we fished'	ny-rymy-tape	'we will die'

h-ee-ia	'I drink'	w-yma-pa	'I fell'
m-ee-ia	'you drink'	m-yma-pa	'you fell'
n-ee-ia	'she/he drinks'	n-yma-pa	'she/he fell'
h-ee-ia	'we drink'	h-yma-pa	'we fell'
n-ee-a	'we drink'	n-yma-pa	'we fell'

h-ape'-pia	'I embraced'	w-ineh-tape	'I will dream'
m-ape'-pia	'you embraced'	m-ineh-tape	'you will dream'
n-ape'-pia	'she/he embraced'	n-ineh-tape	'she/he will dream'
h-ape'-pia	'we embraced'	h-ineh-tape	'we will dream'
n-ape'-pia	'we embraced'	n-ineh-tape	'we will die'

There are two sets of first person singular subject prefixes: *w-/wy-/wu-* and *h-/hy-/hu-*(Observe the examples above and below). The first set is used with strictly intransitive verbs such as *rymy* 'die', *y* 'go', *tahkwa* 'jump', and *mynta* 'bleed'. The second set is used with transitive verbs with personal objects such as *ini* 'see' and *aape'* 'push' (see the appendix section), and transitive verbs with impersonal objects such as *py* 'know', *ee* 'drink', and *wenta* 'vomit'. (The classification of certain verbs such as *mynta* 'bleed' (intransitive) and *wenta* 'vomit' (transitive) is not explained.) This distinction is not made for any other person and number combination.

Go '-y-'		Bleed[3] '-myn-ta'	
w-y-sa	'I go'	wu-myn-ta-pa	'I bled'
m-y-sa	'you go'	mu-myn-ta-pa	'you bled'
n-y-sa	'she/he goes'	nu-myn-ta-pa	'she/he bled'

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[3] The word for blood is *myny*; in order to get the verb 'bleed,' we add the verbalizer *-ta*.

h-y-sa	'we go (1+2)'
n-y-sa	'we go (1+3)'

Shout '-kyta-'

aa=kyta-ky	'I shouted'
my-kyta-ky	'you shouted'
ny-kyta-ky	'she/he shouted'
hy-kyta-ky	'we shouted' (1+2)
ny-kyta-ky	'we shouted' (1+3)

Jump '-tahkwa-'

wy-tahkwa-ky	'I jumped'
my-thakwa-ky	'you jumped.'
ny-tahkwa-ky	'she/he jumped'
hy-tahkwa-ky	'we jumped (1+2)'
ny-tahkwa-ky	'we jumped (1+3)'

hu-myn-ta-pa	'we bled (1+2)'
nu-myn-ta-pa	'we bled (1+3)'

Know '-py-'

hy-py-sa	'I know'
my-py-sa	'you know'
ny-py-sa	'she/he knows'
hy-py-sa	'we know' (1+2)
ny-py-sa	'we know (1+3)'

Dream '-inin-'

w-ininy-pa	'I dreamed'
m-ininy-pa	'you dreamed'
n-ininy-pa	'she/he dreamed'
h-ininy-pa	'we dreamed' (1+2)
n-ininy-pa	'we dreamed' (1+3)

2.1 TENSE/ASPECT SUFFIXES

The most important and indispensable elements attached to the verbal stem are the tense-aspect suffixes. They always appear finally in the verb construction. They serve to indicate a wide range of functions and meanings around the time value of the action/event/state described by the sentence. Table 3 below offers an overview of the distribution of the tense/aspect suffixes.

Table 03 - Illustration of Tense-Aspect Suffixes

Past		Non-Past	Future
REM.P	-pa	-i -e, -sa	IMM.F -te ~ -txe
REC.P	-piany	-pysa 'interative'	REM.F -tape ~ -txape
IM.P	-pia	-sapa	
Non-specified	-ky		

In general, 'present time' is considered immediate, while an event long ago is considered remote. However, in Waimiri Atroari, it is possible to make events in the past seem more immediate or recent; therefore, in this language there are suffixes that indicate remote past -*pa*, recent past —*piany* (events that could be occurred in the same day,but also in the day before), immediate past —*pia* (an event that just happened), and a non-specified past -*ky*. The suffix -*pa* is most commonly used in narratives and in stories about remote events in the past, things that are finished and done with.

Formally, the future means talking about an event/ action/state that has not yet begun, but is said to begin sometime in the future. The Waimiri Atroari language divides the future into imminent —*te*/-*txe* and remote —*tape*/-*txape*. In this grammatical sketch, the suffixes -*e, -ia, -sa, -sapa, -pysa* (this last suffix indicates iterative) are classified as tense/aspect markers that denote a non-past notion. The difference among them is not clear. It requires futher research. Waimiri Atroari has other suffixes that denote aspects, but they will be not discussed in this grammatical sketch. Paradigms of intransitive and transitive verb forms with the tense/ aspect markers follow:

(1) remote past -*pa*

a) wy-synehka-**pa**   b) m-ini-**pa**
    1S-disappear-REM.P   2A-see-REM.P
    'I disappeared.'   'You saw it.'

c) impa   tahkome   ianana   myryky   maryba   kapry   i-te-**pa**
    then   elder   ianana   son   song   sing   REL-hear-REM.P
    'Then the elders heard Ianana's son sing.'

(2) recent past -*piany*

a) wy-synehky-**piany**   b) m-ini-**piany**
    1S-disappear-REC.P   2A-see-REC.P
    'I disappeared.'   'You saw it.'

(3) immediate past -**pia**

a) wy-synehky-**pia**   b) m-ini-**pia**
    1S-disappear-IM.P   2A-see-IM.P
    'I disappeared.'   'You saw it.'

(4) non-past (-*e, -ia, -sa*)

(a)   aa   ram   wy-mynt-e   apieme   iaky   aa=wokyty-**pia**
    1PRO   2PART   1s-bleed-T/A   because   1O-cut-IM.P
    'I am bleeding because I cut myself.'

(b)   aa   w-y-**sa**   kaapa   taka   awaxi   kyty-se
    1PRO   1S-go-T/A   garden   AL   sugar cane   cut-in order to
    'I am going to the garden plantation to cut sugar cane.'

(c)   arawata   ram   ie'ry   i-ee-**ia**
    Sp. of monkey   2PART   fruit   REL-drink-T/A
    'The guariba monkey is drinking the fruit.'

       Apparently, there are no distinction among them, examples (a), (b), and (c) above shows that an action is happening.

(5) future (-*te~-txe*/-*tape~-txape*)

(a)   aa   ram   wy-synehka-**tape**
    1PRO   2PART   1S-disappear-REM.F
    'I will disappear.'

(b)   k-eme   ram   ny-ryma-**tape**   txamyry-pesa
    3PRO-DEV   2PART   3s-die-REM.F   elder-in time
    'He will die in old age.

(c)   aa   h-eni-**te**
    1PRO   1A-see-IMM.F
    'I will see it.'

2.2 MOOD

Speech aspects in human languages may be used for many purposes, but the three main ones seem to be: to give information (declarative sentences), to ask for information (interrogative sentences), and to command action (imperative sentences). In this section, I discuss the imperative suffix and the negative suffix.

2.2.1 Imperatives

The purpose of the imperative sentence/clause form is for the speaker to get the hearer to act. This can be done in several ways, such as subtle and indirect, and direct. Here, I discuss just the direct form. There are three types of imperative suffixes in Waimiri Atroari: -ky, -hne, -kwapy. The suffixes -hne and -kwapy have a more restricted distribution; they occur principally with the verbs speak, hear, and look. However, they are found with other verbs, as in (7) below.

(6)   ni-ky   ni-kwapy
      See-IMP   see-IMP
      'Look!'   'Look!'

(7)   wen-ta-hne
      Vomit-VERBL-IMP
      'vomit!'

(8)   ka-ky   ka-kwapy   ka-hne
      speak-IMP   speak-IMP   speak-IMP
      'Speak!'   'speak!'   'Speak!'

(9)   kyta-ky
      yell-IMP
      'Yell!'

(10)   ee-ky
      drink-IMP
      'Drink!'

(11)   kyrywy   ni-ky
      snake   see-IMP
      'Look at the snake!'

(12)   Suwa ram   ky-pia matuwe ia   ana   kar-eme ika-ky
      Suwa 2PART talk-IM.P Matuwe AGT.P Ana   kar-DEV bite-IMP
      'Suwa ordered Matuwe to bite Ana Kare'me.'

(13)   taha   iakaha   ehry-ky
      big   drawing   paint-IMP
      'Paint the big drawing!'

In the negative imperative form, the form used to command people not to do something, which involves the negative suffix, the verb remains in its bare form, but now the imperative is marked by the particle kwe'ky.

(14)   ni-huwa   kwe'ky
      see-NEG   IMP
      'Do not look!'

(15)   wen-ta-ha   kwe'ky
      vomit-VERBL-NEG   IMP
      'Do not vomit!'

(16)   kyta-ha   kwe'ky
      yell-NEG   IMP
      'Do not yell!'

2.2.2 The Negation Suffix

In Waimiri Atroari, two negation suffixes occur with the verb form: -huwa, and -ha (V-stem/_). They are always positioned after the verb root.

(17)   awy   we-piany   dauna   se   kaka-ha
      1PRO   1COP-REC.P   Dauna   leg   scratch-NEG
      'I did not scratch Dauna's leg.'

(18)   warypa   kynka-**ha**   kwe'ky
       bow   break-NEG   IMP
       'Don't break the bow!'

(19)   aa   ram   karyka   iny-**huwa**   we'xi   w-ia
       1PRO   2PART   chicken   eat-NEG   DESID   1-COP
       'I do not want to eat chicken.'

(20)   aa   ram   wy-tyrym-piany   tymeri   aa-iape-**huwa**
       1PRO   2PART   1S-scape-REC.P   jaguar   1O-take-NEG
       'I escaped so the jaguar wouldn't get me.'

3 THE INTERROGATIVE CLITIC

As shown in table 01 in the template for verbs, the interrogative clitic is attached to the tense/aspect suffix slot. Therefore, I decided to discuss it in this article.

Questions are a request for information, when the speaker misses some information, and thinks that the hearer knows it. There are two general types of information questions: (a) yes/no questions in which the speaker wants the hearer to say whether it is true (yes) or false (no); and (b) Wh- questions in which the speaker knows most of the information, but is missing one element—as a result, the speaker asks the hearer to identify that missing element, for example the subject, direct or indirect object, time, place, or reason.

3.1 INTERROGATIVE FORMS

Interrogative forms are used when asking questions regarding who, what, whose, how, where. In Waimiri Atroari these are two forms:

(1)   **bypa**   **ha**   b=e' Dauna=e'
       who   this-INT   Dauna-INT
       'Who is Dauna?'

(2)   **bypa**   ieka   by   naminj=**e'**
      whose   pet   this   dog-INT
      'Whose is this dog?'

(3)   **apia ha**   iria   ka   typohinj=**e'**
      what   make   3PRO   like/delicious-INT
      'What does she like to make?'

(4)   **apia ha**   m-ipipix=**e'**
      what   2A-look for-INT
      'What are you looking for?'

(5)   **Ira'**   a=iakyna   n=**e'**
      how   2POS-brother   COP-INT
      'How is your brother?'

(6)   **epe**   ky   marym-eme   my-myryky-pia=**e'**
      Where   this   piranha-DEV   2A-fish-IM.P-INT
      'Where did you fish piranha?'

(7)   **apie'me iake**   saken-pa   m-i=**e'**
      why   angry-EMPH   2-COP-INT
      'Why are you angry?'

In Waimiri Atroari, even with a Wh- word occurring in the first position, we have the interrogative clitic =e' in the last word of the sentence. However, sometimes the interrogative clitic does not appear. In the examples below, I illustrate where the interrogative clitic occurs and what it attaches to.

a) Cases Where the Interrogative Clitic Does Not Appear

(8)   m-ii-pia'   kyry-heme
      2A-kill-IMP   cobra-DEV
      'Did you kill the snake?'

(9)   kyrywy   tahsa   iry
       cobra   big   3PRO
       'Was the snake big?'

(10)   wahpa a-iwapo-txany
       much 2S-dance-T/A
       'Did you dance a lot?'

(11)   waha ka ipy marymah na
       many ? there piranha COP
       'Are there many piranha?'

The cases where the interrogative clitic sometimes does not appear seem to be related to questions of the Yes/No type. However, that optionality does not occur with Wh- questions.

b) Interrogative clitics attach to verbs

(12)   Temeh-eme   m-itxiky-pian=e'
       Jaguar-DEV   2A-shoot-REC.P-INT
       'Did you shoot the jaguar with an arrow?'

(13)   Epe   ka   my-pyny-p=e'
       where   3PRO   2A-take-REM.P-INT
       'Where did you take it?'

(14)   Epe   ky   marym-eme   my-myryky-pian=e'
       where   ?   pirana-DEV   2A-fish-REC.P-INT
       'Where did you fish pirana?'

(15)   Apie'me iake'   ipyna xiba myryka m-y-sa-p=e'
       why   there fish fish 2A-go-REM.P-INT
       'Why did you go there to fish?'

(16)   Ira kak=e'
       what talk-INT
       'What is he saying?'

(17)   Apia iakypa   myda taka   m-aryma-tap=e'
       when   house AL   2s-come back-REM.F-INT
       'When will you come back home?'

(18)   Apiapy   ka   kwat-eme   wu-pian=e'
       where   3PRO   monkey-DEV   kill-REC.P-INT
       'Where did he kill the black spider monkey?'

(19)   Ira iake   kyry-heme   my-ry-pi=e'
       what   snake-DEV   2A-do-IM.P-INT
       'What did you do with the snake?'

(20)   Apia ha   m-ipipix=e'
       what   2A-look for-INT
       'What are you looking for?'

(21)   Epe iake   my-taky-pi=e'
       where   2A-lose-IM.P-INT
       'Where did you lose it?'

(22)   Apie'me iake   k-eme   i-myy-py   ny-mynyt=e'
       why   3PRO-DEV   REL-hand-?   3s-bleed-INT
       'Why is his hand bleeding?'

To assure that this is a clitic, not just a verb suffix, I demonstrate that it can occurs with all the word classes in this language. In verbs, the last vowel of the suffix that marks tense/aspect is replaced by the interrogative clitic: for example, -piany (recent past) becomes -pian=e', -pa (remote past) becomes -p=e', -pia (immediate past) becomes -pi=e', and -e (t/a) becomes =e' (glottalized).

c) Interrogative clitic with nouns and pronouns

(23)   Bypa ieka by karyka=e'
       whose pet this chicken-INT
       'Whose is this chicken?'

In the example (23) above, you can note that when the interrogative suffix is added to the word *karyka* 'chicken,' the last vowel of the word is not deleted.

(24)   Bypa ieka by naminj=e'
        whose pet this dog-INT
        'Whose is this dog?'

(25)   Apia iaky   iake katy   iky-piany   naminja=e'
        when   pet ?   bite-REC.P   dog-INT
        'When did the dog bite the child?'

On the other hand, examples (24) and (25) show the two possibilities. In (24), the last vowel of the word *naminja* 'dog' is deleted, but in (25), the interrogative suffix is attached to the word.

(26)   Bypa   ieka   by   waiama=e'
        whose   pet   this   tortoise-INT
        'Whose is this tortoise?'

(27)   Bypa ha   b=e'
        who   this-INT
        'Who is this?'

(28)   Bypa ha   k=e'
        who   3PRO-INT
        'Who is he?'

d) Interrogative clitic with adverbs

(29)   Bypa ha   itxa   ta   m-inipe-txane   pana=e'
        what   jungle   LOC   2A-ver-T/A   yesterday-INT
        'What did you see in the jungle yesterday?'

e) Interrogative clitic with adjectives

(30)   Bypa   mydy-hy   tahs=e'
        whose   house-?   big-INT
        'Whose big house is this?'

(31)   Apia   wiwe   bahinj=e'
        what   wood stick   small-INT
        'What is the small wood stick?'

d) Interrogative clitic with locatives

(32)   Bypa ha   mymo'o   tahsa   samka   tyhn=e'
        who   that   big   hammock   LOC-INT
        'Who is in that big hammock?'

e) Interrogative clitic with the copula

(33)   Epe   ky   wer-e'me   n=e'
        where   ?   woman-VAL   cop-INT
        'Where are the women?'

(34)   Epe   ky   wykyre-he'me   n=e'
        where   ?   man-VAL   COP-INT
        'Where are the men?'

(35)   Sakenpa   m-ia
        Angry   2-COP
        'Are you angry?'

(36)   Sakenpa   m-i=e'
        angry   2-COP-INT
        'Are you angry?'

(37)   Wasypa   m-i=e'
        hungry   2-COP-INT
        'Are you hungry?'

(38)   Wasypa   m-ia
        Hungry   2-COP
        'Are you hungry?'

Examples (35) to (38) show the flexibility of the interrogative suffix with Yes/No questions. As you can see above in examples (12) to (22), the clitic occurs in the verb. However, it can occur in the last word of the sentence, such as nouns and pronouns (examples 23-28), adverbs (example 29), adjectives (30 and 31), locatives (example 32), and copulas (examples 33-37). Phonologically, sometimes the last vowel of the verb or noun is replaced by the clitic =e' (examples 12-22); on the other hand, note that sometimes there is no replacement of the last vowel. In that case, the clitic =e' is added at the end of word (examples 25-26) and 29. The second case does not occur with verbs.

Previously, I had considered the interrogative clitic to be a suffix. However, two factors, distribution (it can occur in different parts of speech) and location (specific place/rightmost word in the sentence) made me change the classification. Utilizing Anderson's view (1992), the interrogative clitic in Waimiri Atroari seems to behave as a 'special clitic', which is located with a phrase that constitutes its scope, and it may appear at least initially, finally, or post-finally. In the case of the Waimiri Atroari language, the interrogative clitic occurs in the final position. Anderson says that clitics appear to be somewhat freer than affixes. They are much less sensitive to the properties of words (Anderson 1992).

4 FINAL REMARKS

There are few linguistic studies of the Waimiri Atroari language and all are relatively recent: Hill and Hill (1985), Lacerda (1991), Bruno (2003, 2004, 2005, 2006, 2008, and 2009). In this descriptive paper, I presented some of different grammatical markers that occur in Waimiri Atroari verbal morphology. Although the interrogative clitic appears in many of the lexical classes, it occurs in the verb morphology as well. Therefore, I chose to describe it in this paper.

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APPENDIX

Verb 'to push'

1A3O	Aa ram k-eme h-aape'-pia 1PRO 2PART 3PRO-DEV 1A-push-IM.P 'I pushed him'
2A3O	Amyra ram k-eme m-aape'-pia 2PRO 2PART 3PRO-DEV 2A-push-IM.P 'You pushed him'
3A3O	Ka ram k-eme i-aape'-pia 3PRO 2PART 3PRO-DEV REL-push-IM.P 'She/he pushed him'
1+2A3O	Kyka ram k-eme h-aape'-pia 1+2PRO 2PART 3PRO-DEV 1+2A-push-IM.P 'We pushed him'
1+3A3O	A'a ram k-eme a'=i-aape'-pia 1+3PRO 2PART 3PRO-DEV 1+3A-push-IM.P 'We pushed him'
3A1+2O	Ka ram k-aape'-pia 3PRO 2PART 2O-push-IM.P 'He pushed you'
1+3A2O	A'a ram a=i-aape'-pia 1+3PRO 2PART 2O-push-IM.P 'We pushed you.'

Verb 'to rest'

1A3O	Aa ram ka h-irima-py-piany. 1PRO 2PART 3PRO 1A-rest-CAUS-REC.P 'I made him/her rest.'
2A3O	Amyra ram ka m-irima-py-piany. 2PRO 2PART 3PRO 2A-rest-CAUS-REC.P 'You made him/her rest.'

3A3O	Ka ram ka Ø-irima-py-piany. 3PRO 2PART 3PRO Ø-rest-caus-REC.P 'She/he made him rest.'
3A2O	Ka ram a-irima-py-piany. 3PRO 2PART 2O-rest-CAUS-REC.P 'She/he made you rest.'
1A2O	Aa ram k-irima-py-piany.' 1PRO 2PART 2O-rest-CAUS-REC.P 'I made you rest.

Verb to vomit/ threw up

1sg	Aa hu-wen-ta-pa 1PRO 1S-vomit-VERBL-REM.P 'I threw up.'
2sg	amyry mu-wen-ta-pa 2PRO 2S-vomit-VERBL-REM.P 'You threw up.'
3sg/pl	mykyky nu-wen-ta-pa 3PRO 3S-vomit-VERBL-REM.P 'He/she/they threw up.'
1+2 incl	kyky hu-wen-ta 1+2PRO 1+2S-vomit-VERBL-REM.P 'We threw up.'

Illustration of verbal morphology

Vomit	See
1. —wen-ta vomit-VERBL	1. -ini- see
2. hu-wen-ta-pa 1S-vomit-VERBL-REM.P 'I vomited'	2. h-ini-pia 1A-see-IM.P 'I saw'

3. wen-ta-ha vomit-Verbl-Neg 'not vomit'	3. ni-huwa see-Neg 'not see'
4. wen-ta-ky vomit-Verbl-Imp 'Vomit!'	4. ni-ky see-Imp 'Look!'
5. hu-wen-tah-py-pia 1A-vomit-Verbl-Caus- im.p 'I made him vomit.'	5. h-ini-py-pia 1A-see-Caus-im.p 'I made him see.'
6. aa=wen-tah-py-pia 1O-vomit-Verbl-Caus- im.p 'He made me vomit.'	6. aa=ini-py-pia 1O-see-Caus-im.p 'He made me see.'

Kaapy tahkome karykapa
'The sky fell over the elders'

1. **Pinapa tete tahkome pyna mepri n-ytyta-pa**
close ? elders place tapir 3S-come-rem.p

pakia many
pig and/with
'The tapirs and wild pig came close to the place (village) of the elders.'

2. **wahpaky tete tahkome pyna nykwa n-yhtxa-pa**
many ? elders place animals 3S-come-rem.p

kaapy ia tybekia-paiky.
heaven to tell-after
'Many animals came close to the elder's place,(somebody telling to other that this happened before.'

3. **Impa tahkome kabaha iee ini-apa pakia iee**
Then elders armadillo tooth see-t/a pig tooth

waryparyky
as
'Then the elders saw the armadillo's teeth as the wild pig's teeth.'

Note: The elders perceived it because the armadillo's teeth are small, and they were big as the wild pig's teeth.

4. **impa ty-perimipy mydy ini-pysapa**
Then 3REFLX-brother-in-law house see-t/a
'Then He saw the house of his own brother-in-law.'

5. **impa tahkome ke-pa**
then elder say-rem.p
'Then the elders say:'

6. **- moo kytapy mykyme mydypy ka-pysapa tahkome**
-there ? that house say-t/a elder

ty-perimipy mydy pia.
Reflx-brother-in-law house ?
"-There, is the house of that people" said the elders to his brother-in-law.'

Note: The villages were very distant from each other, but a big fire had made a big clearing in the jungle that made it possible to see from a village to another.'

7. **ipaikypa kate' tahkome bekie-pa kaapy**
after that ? elders fall-rem.p heaven
'After that, the sky fell on the elders.'

8. **he'pia! he'pia! ka-pysapa tahkome irany xia**
poor us poor us say-t/a elder what ?

ka-pysapa tahkome kaapy ia tywu-paiky.
say-t/a elder heaven to kill-after that

"Poor us, poor us" said the elders. "What is happening!" said the
elders. After that the sky fell on the village and killed them.'

9.   piria   wukapry   tete   n-opyna-pa.
      type of wood   support   ?   3S-save-REM.P
      'Only a man and a woman (siblings) that protected themselves in
      the central pool of the house were saved.'

10.   ie'ximpa   ampa   mydy   tanypy   wu-iapa
      all   other   house   ABL   die-T/A
      'All the other people from the other houses died.'

11.   impa   yry   itxiri   tyhnaka   n-apyke-pa   tykaty
      then   this   land   above   3S-pass-REM.P   say

      aa-pap-eme
      1POS-father-DEV
      'Then (those people that were saved) passed by the house's
      support to the new land said my father.'

Note: The house's central pole made a hole in the sky. Through this hole
the people who were saved exited, went above the old sky and built a
new land. Today the Waimiri Atroari people live on the top of sky.

12.   takrehen   myky   kaapy   n-ybixkwa-pa   n-esa-pa
      take time   3PRO   heaven   3S-hurt-REM.P   3S-recovery-REM.P

      tykaty   tete   tahkome   etypa   myry   kaapy   tykaty
      say   ?   elder   hot   this   heaven   say

      tahkome
      elder
      'They took time to recover from all the injuries caused by the sky's
      falling said the elders...the elders said that the sky was very hot.'

13.   piria   wukrapy   tete n-iemkwa-pa araky kwetypyme
      type of wood   support ? 3S-reproduce-REM.P today   ?
      'That brother and sister who survived, they reproduced. It is
      because of their children that we are here today.'

14.   impa   takrehen   myry   ty-samka   i-pyia-pa.
      then   take time   this   3REFLX-hammock REL-find-REM.P
      'Then they took time to find their own hammock.'

15. impa takrehen ny-patyme-pa ty-kaapa i-akytxia-pa
      then take time 1+3S-find-REM.P 3REFLX-garden REL-make/cut-REM.P
      'Then they took time to find a place to make their own garden
plantation.'

16.   impa   ty-mydy   i-amyia-pa   tahkome takrehen
      then   3REFLX-house   REL-build-REM.P elder   take time

      ty-pyty-pe'me   many   pahky ty-kaapa   i-akytyia-pa
      3REFLX-wife-DEV   and/with ?   3REFLX-garden REL-make/
      cut-REM.P
      'Then the elders (the brother and sister that survived) took a long
      time to build their own house and make their garden plantation
      too, his wife also helped him to make the garden plantation.'

17.   wury   kapy   kypahky ty-kaapa   i-akytyia-pa
      axe   NEG   made of 3REFLX-garden REL-make-REM.P

      topy   kypahkyn pakia   iee   kypahkyn waryna
      stone made of wild pig tooth made of Sp.of rodent

      iee   kypahky ty-kaapa   i-akytyia-pa
      tooth made of 3REFLX-garden REL-make/cut-REM.P

      tahkome   piemekyry-pahky
      elder   slowly-?

'The elders cut the garden plantation with the axe that was not made of steel, but made of stone, wild pig teeth, and paca teeth... they cut the garden very slowly.'

18. **impa   iry   iapykahp-e'me   ny-kwahsa-pa**
then   3PRO   survivor-VAL   3S-have sex-REM.P

ny-kwahsa-pa   ny-kwahsa-pa   iry   iapykahp-e'me
3S-have sex-REM.P   3S-HAVE SEX-REM.P   3PRO   SURVIVOR-VAL

n-iemkwa-pa
3S-reproduce-REM.P
'Then they, the survivors, had sex, had sex, had sex and produced many children'

19. **impa   niriky   n-yme-pa   e'nypeme   ampa   n-yme-pa**
then   son   3s-born-REM.P   help   other   3s-born-REM.P

ampa   n-yme-pa.
other   3s-born-REM.P
'Then many sons were born to help them.'

20. **impa   tahkome   n-iemkwe-pa   piemkyry-pahky   kaapy**
then   elder   3S-reproduce-rem.p   slowly-?   Heaven

wumaha   ikaa   pykyry   many
falling   story   tell   and/with/too
'Then the elders reproduced very slowly, and for each child who was born, they told the story of the sky's falling.

21. **ipaikypa   iry   i-aaia-pa   Mawa   tykatyka**
After that   3PRO   3REL-take-REM.P   Mawa   say

aa-pap-eme   myry   pykyry-maty
1POS-father-DEV   3PRO   TELL-?
'After that Mawa took that couple who survived said my father.'

22. **tykaty   aa-pap-eme   a'a   i-nepiaka-ty   tymatry-ky**
say   1POS-father-DEV   1+3PRO   REL-?   fall-T/A

tete   wapy   kaapy   tymatry-ky   tete   wapy   typohinji
?   many   heaven   fall-T/A   ?   many   like
'The sky fell a lot, it liked to fall...said my father to make us afraid.'

23. **iawura iawura iawura ky   tete   tahkome   baka-ty   wapy**
always always always   ?   ?   elder   kill-?   many

kaapy
heaven
'The sky always, always, always falls...killing many elders.'

Note: The elders said that the sky had fallen three times already. The last time was when this pair of siblings survived.

24. **iry   patahkan-pa   kanji   wumaha   n-oky-sa   tykaty**
3PRO   substitute-REM.P   this   falling   3S-stay-T/A   say

kara   aa-pap-eme
?   1POS-father-DEV
'That fallen sky was substituted by this sky that we have today... said my father.'

Note: This heaven that we have today will fall as well said the kinja

Meie Ikaa

'The story of manioc bread'

1. **kokyne   a'a   n-itxi-pia   minja   i-kwa-se**
early   1+3PRO   1+3S-go-IM.P   manioc   REL-take-in order to

kaapa   taka
garden   AL
'Early in the morning, we went to the garden to collect manioc tubers'

2. **impa   n-arem-pia   mydy   taka   minja**
    then1+3S-come back-IM.P   house   AL   manioc

    i-ne-pia   wyiepe   ta
    REL-?-IM.P   jamaxi(kind of basketery)   LOC
    'Then we came back to the house with the jamaxi full of manioc.'

3. **iakypa   a'a   minja   pitxi-pia   maia   ke**
    after   1+3PRO   manioc   peel-IM.P   knife   INSTR
    'After that we peeled the manioc with a knife.'

4. **iakypa   a'a   n-ikin-pia   syna   ke   paxa taka**
    after   1+3PRO   1+3-wash-IM.P   water   INSTR   bowl AL
    'After that we washed the manioc with water in the bowl.'

5. **iakypa   a'a   ny-dexkie-piany   tapinja   ta**
    after   1+3PRO   1+3S-squeez-REC.P   sieve   LOC
    'After that we squeezed the manioc in the sieve.'

6. **iakypa   a'a   ny-ria-pia   wiwi   taka**
    after   1+3PRO   1+3s-put-REM.P   wood   AL
    'After that we put the manioc in the press.'

7. **impa   wiwi   tapary   n-emine-pa   minja   behe**
    then   wood   LOC   3S-dry-REM.P   manioc   dough
    'Then we dried the dough.'

8. **impa   a'a   n-ike'ia-pa   meie   impa-ry**
    then   1+3PRO   1+3S-toast-rem.p   bread   then

    axinjaty   tyhnaka
    stone griddle   on
    'Then we toasted it into flat bread on the gridle.'

9. **impa   ny-tyky-pia.**
    then   1+3S-finish-IM.P
    'Then we finished.'