

# 31 Wari' (Amazonian)

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## 1 Introduction

The purpose of this chapter is to provide an overview of inflectional and derivational morphology in Wari', a Chapacuran language spoken along the Brazil–Bolivia border, in the state of Rondônia, Brazil. This is only the second published study ever made of a Chapacuran language, the only other surviving languages of this family being (apparently) More (spoken in Bolivia) and 'Oro Win, spoken by a group of approximately forty individuals living among the Wari'.<sup>1</sup> Wari' is divided into eight close and mutually intelligible dialects, each spoken by a separate cultural subgroup (cf. Vilaça 1992 for details). The dialect described here is that of the '*Oro Nao*' (lit. 'The bats').<sup>2</sup>

The chapter is organized as follows. First, I offer a brief overview of Wari' syntax and phonology. I will next provide an overview of word classes in Wari'. Next, I discuss inflectional morphology. Finally, I describe the very interesting derivational morphology of Wari', arguing that some derivational processes in Wari' follow the syntax. Given the space limitations of this volume, I am only able to provide the briefest overview of Wari' morphology here. The reader is advised to consult Everett and Kern (1997, henceforth EK) for more details.

## 2 An overview of Wari' syntax and phonology

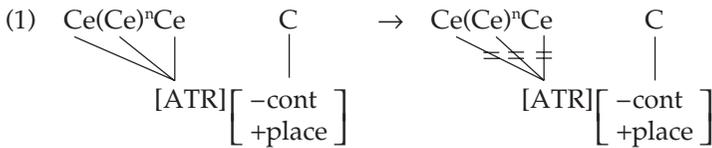
### 2.1 *Phonology*

In this section I discuss only those elements of Wari' phonology absolutely crucial to the understanding of Wari' morphology: the phonemic inventory and the rules of vowel harmony and stress placement. For a fuller discussion of Wari' phonology, the reader is referred to EK.

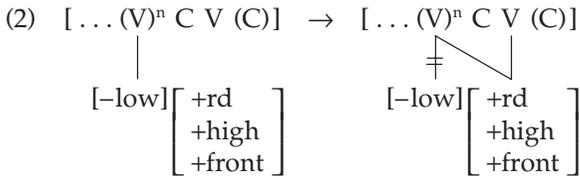
2.1.1 *Phonemic inventory* The phonemes of Wari' are as follows (with orthographic symbols given in quotes when these differ from the phonemic symbol): /p/, /t/, /k/ 'c' before /a/, /o/, and /ü/; 'qu' before /e/ and /i/; /k<sup>w</sup>/ 'cw' /ʔ/ 'ʔ', /tš/ 'x'; /h/, /h<sup>w</sup>/ 'hw'; /m/, /m<sup>2</sup>/ 'm'; /n/, /n<sup>2</sup>/ 'n'; /r/ 'r'; /w/, /y/ 'j'; /i/, /e/, /ö/, /a/, /o/, /ü/ 'u'; /e<sup>i</sup>/ 'ei'; /a<sup>i</sup>/ 'ai'; /o<sup>i</sup>/ 'oi'; /i<sup>o</sup>/ 'io'.<sup>3</sup>

2.1.2 *Vowel harmony* The types of vowel harmony most relevant to us here are the following (all of which are word-internal only).

All consecutive tense front mid-vowels are laxed when the final /e/ precedes a nonglottal plosive.



The next type of vowel harmony is seen in the fact that all nonlow vowels become [ü] when preceding a [ü] in the same word, and there is no intervening /a/:



The rules of vowel harmony are important, since they operate only internal to (grammatical) words. As mentioned below, they operate within verbs and nouns, but not between verbs and verbal inflectional clitics (VICs) or nouns and nominal inflectional clitics (NICs).

## 2.2 Syntax

2.2.1 *Basic constituent order* Wari' is a VOS language: that is, the verb always precedes direct (and indirect) objects, which in turn precede the subject. However, there are two fundamentally different types of sentences in Wari', both of which maintain the VOS order, but in different contexts. These are verb-initial and COMP-initial sentences. These sentences differ primarily in the relative positions of the verb and the tense marker(s), as well as in agreement patterns and whether or not there is an overt element in COMP (i.e. a nonverbal element in sentence-initial position). Consider the examples below:

## 2.2.1.1 Verb-initial sentences

- (3) Quep na -in xirim te pane ta.  
*do 3sg.:rp/p-3n. house father:1sg. rem.:past emph.*  
 'My father made a house long ago.'
- (4) Quep xucucun hwijima' ma'.  
*do reflexive:3pl.m. children that:prox.:hearer*  
 'The children fought each other.'
- (5) To' xima -on womi -um ta.  
*hit 2sg.:irr. -3sg.m. cotton -2sg. emph.*  
 'You should wash (lit. hit) your clothes.'
- (6) Ten ta wao'.  
*weave pass.:3sg. type of basket*  
 'Baskets are woven.'

2.2.1.2 COMP-initial sentences These differ from simple V-initial sentences in three ways: (i) there is a COMP(lementizer) or 'operator' word in sentence-initial position; (ii) an INFL(ectional) morpheme usually follows the operator/COMP word. This morpheme combines tense and agreement, like postverbal vics, but its 'φ-features' (cf. Everett 1996) are governed by COMP, rather than the subject or object directly, as with vics; the INFL morpheme also precedes the verb; (iii) the inflectional morphemes following the verb (the vic) are tenseless, *unless* the COMP refers to a masculine or feminine *subject*.

- (7) Ma' co tomi na?  
*that:prox.:hearer INFL:m/frp/p speak 3sg.:rp/p*  
 VIC  
 'Who is speaking?'
- (8) Ma' co tomi' ca?  
 3sg.m.  
 VIC  
 'Of whom is he speaking?'

Notice the lack of tense on the vic in (8), (9), and (11), where a *nonsubject* is questioned.

- (9) Ma' ca para 'aca ca pije ma'?  
*that:prox.:hearer INFL:nrp/p why cry 3sg.m. child that:prox.:hearer*  
 'Why is the child crying?'

- (10) 'om ca mao ca.  
*not:exist INFL:nrp/p go(sg.) 3sg.m.*  
 'He did not go.'
- (11) Cain' xi xirao' ta'?  
*that:n.:distal INFL:irr. write 1sg.*  
 'How shall I write?'

We can account for several of the differences between C-initial and V-initial sentences if we assume that the C-word is in COMP, the INFL word agrees with COMP (presumably because it has been moved to the head of COMP, C<sup>0</sup> (cf. Everett 1996), and that tense must be located on the second X<sup>0</sup>-level constituent of the clause.<sup>4</sup>

**2.2.2 Agreement** There are four principal points at which agreement appears in Wari' constituent structure: following COMP, following the verb, following possessed nouns, and on the preposition. Agreement morphemes, along with their phonological/grammatical host, can all be the target of rules of the derivational morphology, so it is important to provide a careful introduction of these prior to taking up the morphology proper. I will review vics, NICS, *-xi* suffixes, and C<sup>0</sup>/INFL morphemes, in that order.

**2.2.2.1 vics Subject agreement:** The subject always triggers agreement on the postverbal, *verbal inflectional clitic*, vic. Objects may also trigger agreement on the vic, although the conditions under which object agreement occurs are more complex. Subject agreement is illustrated in (12):<sup>5</sup>

- (12) (a) Mao na 'orowao'.  
*go(sg.) 3sg.:rp/p masc. name*  
 'Orowao went.'
- (b) Mao na.  
 'He went.'
- (c) 'om ca mao ca.  
*not:exist INFL:nrp/p go(sg.) 3sg.m.*  
 'He did not go.'
- (d) Mao 'ina.  
*go(sg.) 1sg.:rp/p*  
 'I went.'

The only case I am aware of in which subject agreement may be omitted is when the subject is third person and the object is first person, although even in this case, subject agreement is not prohibited from occurring:

- (13) (a) Tapa' na -pa' wina-Ø.  
*burst 3sg.:rp/p -1sg. head-1sg.*  
 'My head is hurting me' (lit. 'Bursting to me').
- (b) Tapa' pa' wina-Ø.  
 'My head is hurting.'
- (14) (a) 'om na -parut.  
*not:exist 3sg.:rp/p -1pl. excl.*  
 'We do not have any.' (Lit. 'It does not exist to us.')
- (b) 'om parut.  
 'We do not have any.' (Lit. 'It does not exist to us.')

*Object agreement:* This is partially determined by semantic role, definiteness, and Wh-movement, in addition to grammatical function. As with the subject, third-person direct object may be referenced by a pronoun and *vic*, or NP and *vic*, or just one member of either of these two pairs:

- (15) (a) To' na -on 'Orowao'.  
*hit 3sg.:rp/p -3sg.m. masc. name*  
 'He hit Orowao.'
- (b) To' na -on co ma'.  
*masc. that:prox.:hearer*  
 'He hit him.' (Lit. 'That masculine one near you.')
- (c) To' na-on.  
 'He hit him.'
- (d) To' na 'Orowao'.  
 'He hit Orowao.'
- (e) To' na.  
 'He is hitting.'

However, unlike subject agreement, object agreement can indicate the definiteness of the object:

- (16) (a) Pa' ma hwam?  
*kill 2sg.:rp/p fish*  
 'Did you kill a/the fish?'
- (b) Pa' ma-on hwam?  
*-3sg.m.*  
 'Did you kill the/a fish?'

In (16), the articles are listed in order of preference, so that (16b) has a preferred definite reading, and (16a) has a preferred indefinite reading.

The vic agrees with the direct object, which is the NP (overt or covert) to the immediate right of a transitive verb (in most cases). As EK describes it, the direct object and subject are the only NPs that may be moved, either via NP or Wh-movement. However, the NP which manifests the grammatical function of direct object is determined according to the semantic/thematic hierarchy in (17) (cf. EK for details):

(17) Goal > Circumstance > Theme/Patient > Instrument > Location > Time

I will illustrate here only the fact that Circumstance takes precedence over Theme/Patient for mapping to the direct object position, since that is the only really surprising part of the hierarchy in (17).

- (18) (a) Mam to' 'ina -in ca xain ne  
*instr. hit 1sg.:rp/p-3n. INFL:nrp/p hot poss.:1sg.*  
 con womi-u.  
*prep.:3sg.m. cotton-1sg.*  
 'I washed my clothes with a fever.'
- (b) \*Mam to' 'ina -on womi -u pain  
*instr. hit 1sg.:rp/p-3sg.m. cotton-1sg. prep.:3n.*  
 ca xain ne.  
*INFL:nrp/p hot poss.:1sg.*  
 'I washed my clothes with a fever.'

In addition, an NP outside the subcategorization frame of the verb, not introduced by a preposition, may be referenced on the object position of the vic as an "ethical dative" (as is common in Romance languages, for example; cf. Everett 1996). Any additional (nonsubject) arguments can only be expressed as PPs:

- (19) Noc nana -pa' con panxi-ta'.  
*dislike 3pl.:rp/p-1sg. prep.:3sg.m. son -1sg.*  
 'They dislike my son.' (Lit. 'They dislike to me my son.')

In this example, we would have expected agreement with the theme, *panxita'* 'my son', but instead, agreement is with '1p' 'me'. Another example of this "ethical dative" is found in (20):

- (20) To' cat ne xe.  
*hit break 2sg.:1sg.:rf fire/firewood*  
 'Cut me some firewood.'

Also in (20), we would have expected agreement with *xe* 'firewood' as the theme of *to' cat* 'hit/break' (= 'cut'). It might be that ethical dative agreement

could be subsumed under what we have already said about CIRCUMSTANCE, if the ethical dative is considered a circumstance of the action. In any case, these examples are sufficient to show that object agreement is not as simple as subject agreement.

*Anti-agreement effects:* Wh-moved objects, unlike subjects, may never trigger agreement on the VIC. This, coupled with the fact that only NPs potentially referenceable (in a given clause) on the VIC may be moved, results in an anti-agreement effect in which verbs of clauses with Wh-moved objects may only agree with their subjects:

- (21) (a) Querec ma        -on        wijam.  
           *see        2sg.:rp/p-3sg.m. enemy*  
           ‘You saw the enemy (= non-Wari).’
- (b) Ma’                    wijam co                    querec ma?  
           *that:prox.:hearer enemy INFL:m/frp/p see        2sg.*  
           ‘Which enemy (= non-Wari) did you see?’
- (c) \*Ma’                    wijam co                    querec ma-on?  
           *that:prox.:hearer enemy INFL:m/frp/p see        2sg.-3sg.m.*  
           ‘Which enemy (= non-Wari) did you see?’

This completes our brief overview of Wari’ syntax and phonology. We are now ready to turn to the morphology proper.

### 3 Wari’ Morphology Proper

#### 3.1 Word classes

In EK the following word classes are identified: nouns (subdivided into *-xi’* and non-*-xi’* nouns), pronouns (subdivided into emphatic and demonstrative pronouns), verbs (subdivided into modificational and nonmodificational verbs), a preposition (only one in the language), inflectional clitics (subdivided into nominal (NICS) vs verbal inflectional clitics (VICs)), particles, INFL morphemes, COMP words, and ideophones.

**3.1.1 Nouns** Nouns are distinguishable from other word classes by the following criteria: (i) they may bear possessive suffixes or have NICS cliticized to them; (ii) they may be followed by any of the spatial/temporal demonstratives; (iii) they may appear as subject or object of a verb (in particular, only nouns may govern agreement on the VIC); (iv) they may appear as complement of (the) preposition; (v) they may occur in sequence with another noun in a possessive NP.

**Table 31.1** Demonstrative pronouns

	<i>prox. to speaker</i>	<i>prox. to hearer</i>	<i>distal</i>
masc. sg.	co cwa'	co ma'	co cwain
fem. sg.	cam cwa'	cam ma'	cam cwain
neuter	'i ca'	'i ma'	'i cain
plural	caram cwa'	caram ma'	caram cwain
	<i>seen/not heard</i>	<i>recently absent</i>	<i>long absent</i>
masc. sg.	co paca'	co pacara ne	co pacara pane
fem. sg.	cam paca'	cam pacara ne	cam pacara pane
neuter	('i paca')	'i cara ne	'i cara pane
plural	caram paca'	caram pacara ne	caram pacara pane

**3.1.2 Pronouns** There are two classes of pronouns: demonstrative and emphatic (there are no personal pronouns). The demonstrative pronoun is in fact a subclass of nouns, satisfying three of the syntactic distributional criteria for nouns: (i) it may appear as subject or object of the verb; (ii) it may be the complement of a preposition; (iii) it may be the possessor of an NP. However, *unlike other nouns*, a pronoun cannot be suffixed by a possessive morpheme or be followed directly by an NIC, nor can it be followed by a demonstrative. Both types of pronouns are illustrated in the tables and examples which follow:

**3.1.2.1 Demonstrative pronouns** Demonstrative pronouns occur only in the third person. They are listed in table 31.1. Note especially the separate dimensions of spatial and temporal proximity in the demonstrative pronoun paradigm.

Demonstratives may also be used as personal pronouns. They may appear in apposition to emphatic pronouns (22), or in subject (23), or verbal object position (24). They may *not* appear as object of a preposition, as in (25).

(22) Wirico    **co cwa'**    co                    pa' na    -in mijac pane.  
*emph:3sg.m. m. this:m/f INFL:mfrp/p kill 3sg.:rp/p-3n. pig rem.:past*  
 'He himself, this masculine one, was the one who killed the pig.'

(23) Maqui' na                    **co ma'**.  
*come 3sg.:rp/p m that:prox.:hearer*  
 'He came.' (Lit. 'That masculine one near you came.')

(24) Querec na    -m    **cam ma'**                    Xijam.  
*see 3s:rp/p-3sg.f. f.sing. that:prox.:hearer masc.:name*  
 'Xijam saw her.' (Lit. 'Xijam saw that feminine one.')

- (25) \*Mi na -m con hwam cam cwa'.  
*give 3sg.:rp/p-3sg.f. prep:3sg.m. fish(masc.) f. this:m/f*  
 'The man gave her the fish.'

3.1.2.2 Emphatic pronouns Emphatic pronouns may occur in any person or number, except that neuter gender in emphatic pronouns, like neuter gender throughout the language, does not inflect for number.<sup>6</sup> Emphatic pronouns may not occur in a verbal argument position. However, third-person emphatic pronouns may occur in apposition to a subject NP. Third-person emphatic pronouns can appear only in apposition to a verbal object NP in coordinate structures, and in this case must follow the first conjunct. First- and second-person emphatic pronouns can only appear in lists of names which clarify participants (26), or in isolation, as answers to questions (27). Emphatic pronouns, in rare cases in discourse, may be verbalized (28).

- (26) Ji'am xi' jowin pain ca' ma' 'urut Jimain  
*hunt 1pl. incl.:rf monkey:species prep:3n. this:n. that:prox.:hearer*  
 'urut Jimain Hwara' Waji, Wem Xao, wata'.  
*1pl. excl.:rp/p m.:name m.:name emph.:1sg.*  
 '“We will (go) hunting for *jowin* monkey,” we (said), Jimain Hwara'  
 Waji, We Xao, and I.'

- (27) (a) Ma' wari' ma' quem?  
*that:prox.:hearer person that:prox.:hearer ref.*  
 'Who is it?'

- (b) Wata'.  
*emph.:1sg.*  
 '(It is) I.'

- (28) Ma' **wirico** na Pinom ma'.  
*exist emph.:3sg.m. 3sg.:rp/p m.:name that:prox.:hearer*  
 'There was Pinom.'

Emphatic pronouns are as follows:

1sg.	wata'
2sg.	wum
3sg.m.	wirico
3sg.f.	wiricam
3sg.n.	je
1pl. incl.	wari'
1pl. excl.	warut
2pl.	wahu'
3pl.m.	wiricoco
3pl.f.	wiricacam

**3.1.3 Verbs** Verbs are distinguished by (i) their potential to be compounded with another verb or verbal modifier and (ii) their ability to be followed directly by *vics*.<sup>7</sup> There are two subclasses in addition to the main verbs discussed in EK. These are pre- and postverbal modifiers, which can appear only when compounded with another verb. Some modifiers may appear in either pre- or postverbal positions, although there are usually (slight to significant) meaning changes associated with the different positions. As discussed below, there is a highly productive set of derivational processes for forming verbs from other lexical classes.

**3.1.4 Preposition** There is a single preposition in the language, inflected (often suppletively) for person, number, and, in the case of the third person, gender (cf. (18), (19), and (26) above).

1sg.	pata'
2sg.	pum
3sg.m.	con
3sg.f.	cam
3n.	pain
1pl. incl.	pari'
1pl. excl.	parut
2pl.	pahu'
3pl.m.	cocon
3pl.f.	cacam

**3.1.5 Inflectional clitics (*vics* and *nics*)** Another morphological class is formed by the inflectional clitics: what EK refer to as *vics* (*verbal inflectional clitics*) and *nics* (*nominal inflectional clitics*). *vics* must follow the verb, and *nics* must follow non-*xi* possessor nouns. *nics* form a separate prosodic unit for purposes of stress and vowel harmony from the noun. The set of *nics* is given below.

1sg.	ne
2sg.	nem
3sg.m.	nucun
3sg.f.	nequem
3sg.n.	nein
1pl. incl.	nexi'
1pl. excl.	nuxut
2pl.	nuhu'
3pl.m.	nucucun
3pl.f.	nequequem

As shown in the examples below, *nics* may occur with or without a possessive NP:

- (29) nanacam' nucun.  
*fish:species poss.:3sg.m.*  
 'his *nanacam*' fish.'
- (30) xirim nucun      Mirin.  
*house poss.:3sg.m. m.:name*  
 'Mirin's house.'

vics must follow the verb. Like nics, vics form a separate prosodic unit. In the case of vics this prosodic independence is perhaps more interesting due to the fact that vics are composed of *both* object and subject agreement. That is, the vic forms a prosodic word, although it is morphosyntactically composed exclusively of affixes, without a *root*.<sup>8</sup> Cf. section 2.2.2.1 above for examples.

**3.1.6 Particles** There is a very small class of clitics/particles which occur in or near sentence-final position, used to mark pragmatic information, such as gender of audience, emphasis, doubt on the part of the speaker, and temporal information (usually taking the entire sentence into its scope). (Cf. EK 2.1.8.1.6 for more details.)

These clitic forms behave like separate prosodic words, although their status as distinct grammatical words is difficult to determine. I have assumed here that they are words both morphologically and prosodically, although this assumption may need to be modified or abandoned after further study.

**3.1.7 INFL morphemes** EK label five second-position clitics as INFL(ection) morphemes. These five express tense and, in two cases, gender. They are *co* 'masculine/feminine realis past/present', *ca* 'neuter realis past/present', *iri* 'realis past/present', *ta* 'realis future', and *xi* 'irrealis'. An INFL morpheme's gender features are governed by the gender of the COMP word (i.e. a sentence-initial word indicating mood or subordination). An INFL morpheme co-occurs with a tense VIC if and only if the COMP morpheme references a masculine/feminine subject:

- (31) Ma'                      co                      tomi' na?  
*that:prox.:hearer INFL:m/frp/p speak 3sg.:rp/p*  
 'Who is speaking?'
- (32) Ma'                      ca                      querec ca?  
*that:prox.:hearer INFL:nrp/p see 3sg.m.*  
 'What did he see?'
- (33) Ma'                      xi'                      'awin na      -in cwa'?  
*that:prox.:hearer INFL:irr take 3sg.rp/p-3n. this:m/f*  
 'Who shall take it?'

**Table 31.2** COMP words

<i>Declarative only</i>		<i>Interrogative only</i>	
mo	'conditional'	ma'	'general inter.'
'ac	'resemblance'	mon	'masculine inter.'
'ane	'contraexpectation'	mam	'feminine inter.'
		main	'neuter inter.'
		cain	'distal inter.'
<i>Both</i> <sup>9</sup>			
'om	'negation'		
je	'affirmation/interrogation'		
'pain	subordination/distant past'		

(34) Ma'                    co                    tomi' ca?  
*that:prox.:hearer INFL:m/frp/p speak 3sg.m.*  
 'Of whom is he speaking?'

(35) Ma'                    wari' co                    mao na?  
*that:prox.:hearer person INFL:m/frp/p go (sg.) 3sg.rp/p*  
 'What person went?'

3.1.8 *COMP words* EK points out that Wari' makes a fundamental distinction between COMP-initial and non-COMP-initial sentences, a distinction which applies to both matrix and embedded clauses. The COMP words select for specific INFL morphemes and are always sentence-initial. Some COMP words can appear only in declarative sentences, others only in interrogatives, and still others in either (see table 31.2). Examples are found in (36) and (37):

(36) Ma                    -in ca                    mao ca?  
*that:prox.:hearer -n. INFL:nrp/p go(sg.) 3sg.m.*  
 'Where did he go?'

(37) Mo                    xi                    pi'am cacama.  
*conditional INFL:irr sleep 3pl.f.*  
 'If they slept'

The analysis of EK proposes that many of the COMP word distinctions listed above result from SPEC-head agreement within the COMP phrase.

3.1.9 *Ideophones* Wari' has a relatively large number of ideophones, discussed in detail in EK. These, according to the traditional definition, are

onomatopoeically based, but may be inflected like any other word of the same major class.

### 3.2 *Inflectional morphology*

Possessive marking is handled by NICs (cf. 3.1.5 above) or via a set of suffixes indicating inalienable possession (what EK calls *-xi* suffixes). The latter are illustrated in (38):

- (38) (a) 'ara-con  
bone-3sg.m.  
'his bone/leg'
- (b) wina-hu  
head-2pl.  
'your head'
- (c) \*at nucun  
bone poss.:3sg.m.  
'his bone/leg'

Example (38c) is ungrammatical because an inalienably possessed noun can only take one of the *-xi* suffixes, not a NIC.

Other distinctions among NPs are made by word order, prepositional marking, and agreement with the VIC. Objects precede the subject NP; oblique NPs (those which are neither subjects nor direct or indirect objects) follow the subject. The direct object and subject NPs trigger VIC agreement, although this is obligatory only for subjects (see below). The indirect object is preceded by the appropriately inflected form of the preposition (cf. second part of section 2.2.2.1 above for semantic criteria in determining which NP will be the direct vs indirect object).

Definiteness is indicated (loosely) by verbal agreement (39), or with demonstrative pronouns (40). A VIC need not agree with the object, unless the object is definite, in which case it must:

- (39) (a) Cao' ina hwam.  
eat 1sg.:rp/p fish  
'I ate fish.'
- (b) Cao' ina -on hwam.  
eat 1sg.:rp/p-3sg.m. fish  
'I ate (the) fish.' ((the) is required if *hwam* is to be interpreted as definite)

Demonstratives usually only follow the last noun in the clause or a noun in isolation, indicating that they prefer utterance-final position.



- (43)        *capija* -Ø    *na*        *panxi-ca*    'Orowao.  
*mouth -1sg. 3sg.:rp/p child-3sg.m. m.:name*  
 'Orowao's son talks (i.e. is talkative).'
- (44)        *wijima-xi*  
 'our smallness'
- (45) (a)    *Ma'*                *co*                *wijima* -Ø    *na*        -em?  
*that:prox.:hearer INFL:m/frp/p smallness-1sg. 3sg.:rp/p-2sg.*  
 'Who gave birth to you?'
- (b)    *Cut*    *wijima* -in    'ina    -in.  
*take (pl.) smallness-3n. 1sg.:rp/p-3n.*  
 'I took a little bit.'

In these examples, especially the last pair, we see that the form of the input noun can drastically affect the semantics of the output verb.

Nouns can be formed by various types of constituents. For example, consider (46):

- (46)    *Hohot na*        *ca*                *mixein ne.*  
*okay 3sg.:nrp/p INFL:nrp/p lie poss.:1sg.*  
 'My lying is OK.'

In this example, the noun 'lying' is formed from the verb, *mixein* 'lie', plus the INFL morpheme *ca* 'neuter realis past/present'. Such examples are interesting, of course, since they both provide insight into Wari' constituent structure, and are important clues to the structure of the clause in Universal Grammar. This is so since they indicate that INFL and the verb form a constituent (cf. EK for detailed argumentation that the INFL morpheme really does correspond to INFL in GB-theoretic terms).

**3.3.2 Compounding** Compounding is easily the most productive process for deriving subtypes of verbs. EK analyzes the leftmost member of the compound as the semantic "core" and head of the compound. Other members are added in a rather iconic fashion, meaning that their relative ordering reflects the relative ordering of the individual events in the real world. Up to five verb roots have been found in a compound verb structure:

- (47)    *Pan' corom mama' pin 'awi nana.*  
*fall enter go(pl.) completely completely 3pl.:rp/p*  
 'They all fell into the water.'

**3.3.3 Reduplication** Wari' has a number of different reduplication strategies, from reduplication of the entire word to partial reduplication. INFL morphemes

are almost in complementary distribution with reduplication in the sense that INFL morphemes are usually omitted in the context of a(n immediately governing) reduplicated verb. Cf. EK (317ff) for more details. Only a few examples are given here.

- (48) (a) *wac* 'cut' (sg.)  
 (b) *wawac* 'cut' (pl.)
- (49) (a) *cao*' 'eat' (sg.)  
 (b) *cacacao*' 'eat' (pl.)
- (50) (a) *cat* 'break' (sg.)  
 (b) *caracat* 'break' (pl.)
- (51) (a) *hwet* 'appear' (sg.)  
 (b) *hwerehwet* 'appear' (pl.)
- (52) (a) *capija*-Ø  
*mouth* -1sg.  
 'my mouth'
- (b) *capija capija* 'talkative person'

## NOTES

- 1 This language was previously known only to New Tribes missionaries working among the Wari'; I discovered its existence only in March 1994.
- 2 The other subgroups are the '*Oro 'Eo* 'The burpers', the '*Oro 'At* 'The bones', the '*Oro Jowin* 'The jowin monkeys', the '*Oro Waram* 'The waram monkeys', the '*Oro Waram Xijein* 'The other waram monkeys', the '*Oro Cao 'Orowaji* 'The eaters of green things', and the '*Oro Mon* 'The feces' (these are all names accepted by the members of the relevant subgroups and are not understood as derogatory). The Wari' have practiced endo-cannibalism (eating their own dead) and exo-cannibalism (eating their enemies) for their
- known history. Aparecida Vilaça (anthropologist, *Museu Nacional*, Rio de Janeiro) believes that this no longer takes place, although Barbara Kern, who has lived with the Wari' for thirty-two years, believes that in the absence of foreigners, endo-cannibalism is still practiced on people whose cause of death is poorly understood. (This, of course, has nothing whatsoever to do with Wari' morphology, but is fascinating enough culturally to warrant mention here, given that the people and language have never been discussed before in the linguistic literature.)
- 3 In EK, the diphthongs are incorrectly given as underlyingly nasalized. This unnecessary complication of the

- phonemic inventory can be avoided if we simply posit a rule nasalizing both members of a diphthong.
- 4 The alternative would be to say simply that tense must be suffixed onto the first grammatical word. However, this would require us to analyze *vics* as suffixes and INFL as a suffix on COMP. At this point in my analysis, I do not like either of these consequences, so I will stick to the analysis in the text.
  - 5 EK points out that vowel harmony does not cross from the verb to the *vic*, although it does operate within *vics* and verbs independently.
  - 6 Note that the 1pl. incl. form of the demonstrative is used as the name of the entire culture-language group by the people themselves.
  - 7 Superficially, this diagnostic does not seem to work when following a *verbalized sentence*, since, as we will see below, a *vic* may in fact appear after any word type which can occur at the end of a sentence. However, the criterion in the text refers to abstract syntactic boundaries, not merely the phonologically adjacent word, as in [<sub>v</sub> [<sub>s</sub> . . . NP . . . ]<sub>s</sub>]<sub>v</sub> *vic*. In this example, the *vic* directly follows V, not S or NP.
  - 8 The reader is referred to EK, 269ff for a more complete listing and discussion of *vics*.
  - 9 Cf. EK 29ff for more details.