

**Oro Win: A Descriptive and Comparative Look at an Endangered Language**

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## ABBREVIATIONS

1	first person
2	second person
3	third person
coll	collective
COMP	complementizer
dub	dubative
emph	emphatic
f	feminine
incl	inclusive
INFL	inflection
m	masculine
neg	negative
NP	noun phrase
OBJ	object
p	plural
prep	preposition
rf	realis future
rp/p	realis past/present
s	singular
SFP	sentence final particle
SUBJ	subject
V	verb
VIC	verbal inflectional clitic

## INTRODUCTION

### Purpose

This paper will examine several features of the 'Oro Win language. The purpose of this investigation is threefold. 1) This discussion is intended to provide a structural description of some of the features of the 'Oro Win language. Given the available data, elements of the phonology, morphology and syntax will be explored. 2) These features will be compared to Wari, a closely related language<sup>1</sup> that is said to be structurally similar to 'Oro Win.<sup>2</sup> A comprehensive grammar<sup>3</sup> of the Wari language already exists and this grammar and examples from it will be used in comparing 'Oro Win to Wari. 3) Many of the features described will be discussed in terms of the impending death of this language. There are only six native speakers remaining and they are all over fifty.

### People

The 'Oro Win are a small group of native South Americans who live in Western Rondonia, Brazil. Once a much larger group, they were taken by Brazilians to work on rubber tree plantations. Treated essentially as slaves, the majority of them died. Some managed to escape or avoid enslavement and these few remaining members of the tribe now live among the Wari, a tribe who lives along the tributaries of the Pacaas Novos river. There are very few members of the 'Oro Win tribe left and even fewer who speak the language. As of 1995 there were forty members of the 'Oro Win tribe remaining and only six who spoke the language. Those who speak 'Oro Win also speak Wari and Portuguese.

### Language

The 'Oro Win language is a member of the Chapakuran family. The only other remaining member of

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<sup>1</sup> It has not been determined whether Wari and 'Oro Win are different languages. The use of the term "language" here is a convenience and not meant to suggest that such a distinction has been proven.

<sup>2</sup> Everett and Kern state that these languages are similar in a comprehensive grammar of Wari (Everett and Kern, 1997).

<sup>3</sup> Everett and Kern, 1997.

the Chapakuran family is Wari.<sup>4</sup> Wari currently has roughly 1,800 speakers. Within the Wari tribe there are a number of different clans, each with its own dialect. A comprehensive grammar of the 'Oro Nao' dialect of Wari already exists (Everett and Kern, 1997). There has been no previous work done on the language of the 'Oro Win other than a rudimentary phonemic analysis (Angenot, 1998).

Given that there are only six living speakers of 'Oro Win, it is likely that the language is not spoken very frequently. The 'Oro Win live among the Wari where Wari and Portuguese are the dominant languages. It is unclear which language they are more conversant with. Based on the data they seem very comfortable with Portuguese because that is the language they conducted most of their conversations in when the data was elicited. Their knowledge of Wari is unknown although they did tend to make errors in translating and it was often the case that one of the consultants would correct another by telling them that the phrase they offered was not 'Oro Win but Wari. Their competence in 'Oro Win is also not known nor can it be evaluated. There are several examples that show what appear to be errors in agreement and morphological omissions. These are some of the types of errors expected in a dying language (Dorian, 1989). These errors indicate that the limited number of remaining speakers and probable lack of use of the language has led to a decline in speaker proficiency. No other data is available<sup>5</sup> from a time when there were more speakers so the consultants' ability to speak 'Oro Win cannot be assessed. Because Wari is a dominant language where the 'Oro Win live it can be assumed that there has been some amount of interference in 'Oro Win externally motivated by constant contact with Wari. This kind of interference is another characteristic of a dying language (Campbell and Muntzel, 1989). Unfortunately, this has consequences for any sort of analysis of 'Oro Win in that there is no way to be sure that the responses provided by the consultants are not, in fact, Wari, or some permutation of 'Oro Win influenced by Wari. The other dominant language, Portuguese, may also play a role in influencing 'Oro Win (see Adjectives).

#### Data and consultants

The data used for the analysis of 'Oro Win consists of roughly four hours of recorded elicitation done by Daniel Everett in July of 1995 and Ana Lucia Balbys and William Santoro Balbys done in December of

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<sup>4</sup> Moré is another Chapakuran language that may still have living speakers but their numbers are unknown.

<sup>5</sup> There is no other data that I am aware of.

1994 and 1995. The data were recorded on analog cassette recorders. The recording quality was generally satisfactory for fairly reliable transcription. All the data were elicited in Portuguese from three native speakers of 'Oro Win. All are elderly. Each consultant had a unique manner of speaking. Hoto, a man, was the most talkative. He spoke very quickly and tended not to articulate his consonants. His vowels were also somewhat reduced. Maria, a woman, spoke more carefully and slowly. Vovo (grandfather in Portuguese) was a very old sounding man who spoke the most distinctly. He enunciated each syllable and showed most clearly the non-distinctive tendency for plosives and nasals to be pre-glottalized in word-initial position. Speaker variation among the three consultants was generally helpful as all three consultants usually provided a response to the elicited items. This was useful in determining the most accurate transcription of the words and phrases and in observing variability.

The recorded information elicited from the consultants includes a data corpus of roughly 300 individual lexical items, 400 phrases and sentences, 2 texts and one song. Some of the data were elicited systematically. That is to say, some portions of the tapes include sequences of morphological or syntactic paradigms, some follow directly from examples in the Wari grammar and some are lists of related lexical items such as body parts, animals and color terms. Other portions of the recorded data are less organized and somewhat random. The reliability of the glosses of the 'Oro Win words and phrases varies greatly. The corpus yielded four different levels of usability. 1) There are roughly 300 words and phrases for which the response from the consultants is exactly or very close to what was elicited. For the purposes of analysis, many of these are relatively straightforward and unproblematic. There are, however, some which, while translated, were not able to be analyzed. There were several that contained lexical items or syntactic structures that were unique to a particular phrase. I was reluctant to attempt an analysis of these without satisfactory evidence or information from elsewhere in the corpus. 2) There are other responses that are not translations of the elicited words or phrases but for which the consultants followed with a generally useful translation. 3) Other responses, roughly 150, have what were basically unhelpful glosses. In these glosses the consultants tended to free-associate rather than translate. The responses are clearly not what was elicited but are contextually related. In most cases they have no useful translation. These include responses of the following nature:

- |        |                             |   |
|--------|-----------------------------|---|
| (1) a. | elicited phrase<br>response | ‘he has a small house’<br>tarara na<br>‘he’s lazy’                              |
| (1) b. | elicited phrase<br>response | ‘they came (by boat) very slowly’<br>om ka tBy ‘iri’<br>‘we don’t have a motor’ |

The translation to some of these phrases was eventually determined based on the context of the elicited phrase, other words, phrases and linguistic information used and glossed elsewhere in the ‘Oro Win data, and information from the Wari grammar. 4) The data corpus also includes roughly 200 words and phrases that have no gloss at all. These were occasionally helpful in the analysis of the phonology but for little else.

In general the data is insufficient for any thorough description of this language. The data collected by the Balbys’ consists mostly of individual lexical items and many of these are not glossed on the tapes but are merely numbered. The glosses were apparently recorded elsewhere and this information is no longer available. Their intention in collecting the data was to provide enough data for the phonological analysis done by Angenot. It was helpful in analyzing the phonology here. It was not, however, helpful in contributing to an analysis of the many poorly glossed items in the entire corpus because many of the items elicited by the Balbys’ were not standard lexical items but were species of animals, plants or insects and many different body parts. These types of words were not used elsewhere in the corpus. The phrases and sentences collected by the Balbys’, though few, were extremely useful in that they were done paradigmatically.

The data collected by Everett consists mostly of phrases and sentences. Everett’s intention in collecting the data was to compare ‘Oro Win to Wari. With this as his goal he elicited several of the phrases and sentences used as examples in the Wari grammar. Unfortunately the consultants were not as cooperative as he may have wanted. The translations to many of the elicited sentences were often single verb phrases. The more complex phrases provided by the consultants tended to be of their own device and the meaning, which was frequently a paraphrase and not a translation, was provided by the consultants themselves. Such are the trials of the field linguist but for the purposes of analysis, this was tricky. In very few instances did Everett elicit any paradigms and there was no systematic attempt at eliciting vocabulary.

## Analysis

The analysis of the 'Oro Win data involved, first, a detailed phonetic transcription of the data and a translation of the Portuguese into English. This yielded roughly 900 words and phrases that were entered in to a database along with their corresponding English translation. The data were not parsed when entered. Parsing the phrases into separate morphemes involved searching for the same or similar glosses in English and finding similar strings in the transcription. This made it possible to parse a number of the nouns and some of the verbs. Syntactic and morphological analysis was much less straightforward. Information from Wari was used in analyzing much of the 'Oro Win data because initial comparisons indicated that there were many similarities. The methodology used by Everett in collecting the data also made use of the Wari grammar important in the analysis.

The Wari grammar was used extensively in determining the glosses for many of the lexical items and syntactic processes of phrases. Determining glosses for nouns was straightforward but for many of the verbs and functional words it was more difficult to determine a specific gloss as the Portuguese translations were not literal. These three examples illustrate this. 1) The verb *pe* was translated in different instances as 'sit', 'sleep', 'at a particular location' and 'stay'. In Everett and Kern's grammar of Wari the same verb exists and is glossed as 'be at'. This gloss was used in this discussion of 'Oro Win for consistency. 2) The verb compound '*imi pin*' is translated as 'die'. The information in the Wari grammar indicates that this is two morphemes. One is the verb '*mi*' 'give' and the other is the modifier '*pin*' 'completely'. The two morphemes together form an idiomatic phrase meaning 'die'. While 'give' appears frequently elsewhere in the corpus, 'completely' does not. Without the use of the grammar it would have been difficult to parse or translate these two morphemes. 3) The word *wara* in 'Oro Win was glossed as the verb 'to be tired' and as the adjective 'old'. The Wari grammar indicated that this was underlyingly a preverbal modifier meaning 'already' which could be zero-derived as a noun or verb. Thus, it is so glossed here.

Based on this analysis of 'Oro Win it looks as if many of the features of 'Oro Win and Wari are the same. This is somewhat deceptive, however, in that the Wari grammar was used so much in performing the analysis. The data was not extensive enough nor taken systematically enough to do an

independent analysis of 'Oro Win. The Wari grammar was necessary to analyze all but the most simple phrases. Most of the phrases that were simple to analyze with no assistance from the Wari grammar were simple phrases that usually exhibited only a verb and a VIC and these were also glossed unambiguously. The more complicated phrases on the tapes tended to be discussed, paraphrased and have more than one translation. Occasionally the consultants heard an elicitation and started a stream of phrases in 'Oro Win and then provided a translation of a single gloss or a paraphrase like "I just told you the story of how my family was taken by the non-indians." Both texts were paraphrased in this nature and it is unfortunate because a great deal of information may have come from the texts as the speech was not single sentence responses but more conversational. Unfortunately, no direct translation was provided. There are many parts of the texts that have not been analyzed. Indeed there are parts that have not yet been parsed.

The examples contained in this discussion were able to be analyzed because they were similar to Wari. Where similar features were exhibited but deviations from Wari occurred I have noted. Roughly 35% of the data has not been completely analyzed. What was analyzed was done so because it could be given the information from Wari and independent evidence from the 'Oro Win data. So, what is represented in this discussion is more an overview of features in 'Oro Win that are similar to those in Wari. But the fact that roughly 35% of the data could not be analyzed with all of the Wari facts at hand may serve as evidence that there are many more features in 'Oro Win that Wari does not share.

### Orthography

The orthography used for 'Oro Win in this discussion corresponds to the International Phonetic Alphabet (IPA) with a few exceptions<sup>6</sup>. The least familiar symbol used here is ' ' for a glottal plosive [ʔ]. As each segment is discussed in Phonology, the orthographic representation is shown and marked in single quotes. Where a more detailed phonetic description is necessary the IPA transcription is shown along with the orthography used here. The examples from Wari that are used conform to the orthography used for 'Oro Win. The only noteworthy symbols for Wari are 'hw' and 'kw' which represent the labialized consonants [h<sup>w</sup>] and [k<sup>w</sup>] and not consonant clusters.

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<sup>6</sup> The reason for the exceptions has absolutely no theoretical significance. It is merely based on the limitation of symbols available in most fonts used in word processing. There are, for example, no symbols for a glottal plosive.

## Glosses

The glosses used here are translated directly from the Portuguese. In many cases there are several Portuguese glosses for one 'Oro Win phrase which is occasionally confusing. This is particularly true for the stative/progressive distinction. Present tense verbs were frequently translated as both or either. It is not clear whether 'Oro Win makes this distinction regularly, if the distinction has been lost or if the consultants were less than careful in their translations either into 'Oro Win or into Portuguese when they provided the 'Oro Win or the translations themselves. There are also some inconsistencies in adjectives like *mafomakam* which was translated as 'her fat', 'she's fat' and 'fat woman'. In 'Oro Win terms *mafoma-* is a noun meaning 'fatness' and *-kam* is a feminine possessive morpheme so the wordform means literally 'her fatness'. This does not appear to translate easily into Portuguese. Other inconsistencies in the glosses come from the consultants themselves. I was unwilling to modify the responses the consultants provided in an effort to regularize the translations.

The glosses for many of the functional words, like clitics, are, for the sake of comparison, consistent with the glosses used in the Wari grammar. In some cases this may be misleading. Many of the clitics are identified as singular even though they have no plural equivalent. Many of the clitics are also glossed as realis<sup>7</sup> even though there are no examples of irrealis clitics in the examples. This was done to make a comparison to Wari easier and it helps to point out where certain features, that may be expected, are actually absent in 'Oro Win.

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<sup>7</sup> Realis generally refers to events that have occurred, are occurring or will occur while irrealis is reserved for conditionals, or things that should or might occur.

## PHONOLOGY

### Segmental Inventory<sup>8</sup>

'Oro Win has thirteen consonant phonemes.

p	t	k	ʔ
m	n		
f	s		h
	r		
	j	w	

#### Plosives

(1) /p/ 'p'

[p] is a voiceless bilabial plosive which occurs in all positions in the word. Word-finally it is unreleased.

(2) a. pije [pi'je]  
'child'

(2) b. mapak [ma'pak']  
'corn'

(2) c. hap [hap']  
'fast'

This phoneme is occasionally realized as a voiced bilabial plosive [b].

(2) a. /t/ 't'

[t] is a voiceless apico-dental plosive which occurs in all positions in the word. Word-finally it is unreleased.

(3) a. to' na [t'oʔ na]  
"he hits"

<sup>8</sup> The character in the single quotes indicates the orthographic representation of the phoneme.

(3) b. wata [wa'ta]  
1s:emph

(3) c. sat [sat']  
'cotton / fabric'

b. [tʃ] 't'

[tʃ] is a voiceless post-alveolar affricate. This is an allophone of /t/ which occurs only before the high, front vowels [i] and [y]. There are no instances of it in word-final position. This segment is occasionally pronounced (by one of the consultants - Vovo) as a voiceless alveolar affricate [ts].

(4) a. tipran pana [tʃi'pran pana]  
'long stick'

(4) b. tyt 'ona [tʃyt' ?ona]  
'I walk'

(4) c. tati' 'ona [ta'tʃi? ?ona]  
'I learn'

(3) /tβ/ 'tB'

[tβ] is an unusual sound that occurs in both 'Oro Win and Wari.'<sup>9</sup> It is described as a voiceless apico-dental plosive and a voiceless bilabial trilled plosive which occur as a single sound word-initially and word-medially (Everett and Kern, 1997, p. 396). This sound appears in only three words in the 'Oro Win data corpus. It appears that two of these three words (b and c) are ideophones.

(5) a. tBym  
'boy'

(5) b. tBymtBym  
'helicopter'

(5) c. tBy  
'motor'

(4) /k/ 'k'

[k] is a voiceless velar plosive. It occurs in all positions in the word and is unreleased word-finally.

(6) a. kao 'ona [k'ao ?ona]  
'I eat.'

<sup>9</sup> For a fuller discussion of some of the phonetic properties of this sound see MacEachern, Kern and Ladefoged, 1997.

- (6) b. maki' na      [ma'ki? na]  
       'He comes.'
- (6) c. tok na        ['tok' na]  
       'He drinks.'

This sound is frequently realized as a voiced velar plosive [g].

(5) /ʔ/      ''

[ʔ] is a glottal plosive. It occurs in all positions in the word.

- (7) a. 'awi na        [ʔa'wi na]  
       'he's good / pretty'
- (7) b. ma'e         [ma'ʔe]  
       'okay'
- (7) c. mana' na      [ma'naʔ na]  
       'he is angry'

It appears to be both phonemic and non-phonemic. These minimal pairs illustrate it occurring phonemically.

- (8) a. 'ara ti        [ʔa'ra tʃi]  
       neg:p dub  
       'because'
- (8) b. 'ara' na      [ʔa'raʔ na]  
       'he makes or does'
- (8) c. ka            [ka]  
       infl:nrp/p
- (8) d. ka'          [kaʔ]  
       'this'

The glottal plosive is also phonemic intervocalically within words.

- (9) se'e        [se'ʔe]  
       'girl'

The extent to which [ʔ] is used non-phonemically seems to vary depending on the individual speaker. Vovo had a tendency to glottalize everything while Hoto used the sound infrequently. Consonants at the beginning of words are often pre-glottalized [ʔC] (especially by Vovo). In the corpus there are instances of [ʔ] occurring before every word-initial consonant except a glottal fricative [h]. The alternation between [C] and [ʔC] at the beginning of words does not seem to depend on the quality of the

surrounding segments so I would consider word-initial [C] and [ʔC] free variants. The glottal plosive seems to be obligatory before words beginning with vowels and semi-vowels.

There are a number of words in which the pre-glottalization at the beginning of words sometimes occurs with an epenthetic vowel between the glottal plosive and the following consonant. While apparently this is not true of the 'Oro Nao dialect of Wari described by Everett and Kern, it does happen in other dialects of Wari (Everett and Kern, 1997). The vowel in these other dialects is [a]. In 'Oro 'Win the vowel is generally [ɪ]. The Wari words [ʔkom] 'water', [ʔpan] 'fall', [ʔte] 'father', [ʔjin] 'to be afraid' are [ʔɪ<sup>h</sup>kom], [ʔɪ<sup>h</sup>pan], [ʔɪ<sup>h</sup>te], and [ʔɪ<sup>h</sup>jin] in 'Oro Win. [a] also occurs but much less frequently. The Wari word [ʔtʃaʔ] 'younger brother' is [ʔa<sup>h</sup>saʔ] in 'Oro Win. Neither the pre-glottalization nor the epenthetic vowel appear regularly. For example, the word 'water' appears as [ʔikom], [ʔkom] and [kom].

#### Fricatives

(1) /f/ 'f'

[f] is a voiceless labio-dental fricative. It occurs word-initially and word-medially.

(10) a. fri' onon [ʔfriʔ ʔonun]  
'I killed him'

(10) b. mafomakam [mafo<sup>h</sup>makam]  
'fat woman'

The voiceless labio-dental fricative fluctuates with a voiceless glottal fricative [h]. The glottal fricative is slightly labialized.

(11) a. fy ta se [ʔfɻ ta se] or [ʔh<sup>w</sup>ɻ ta se]  
'I'm going to smoke.'

(11) b. fot na [ʔfo<sup>t</sup> nain] or [ʔh<sup>w</sup>o<sup>t</sup> nain]  
'He withdrew it.'

Occasionally it fluctuates with a non-labialized glottal fricative but this is much less common.

(12) fet ta [ʔfet<sup>h</sup> ta] or [ʔhet<sup>h</sup> ta]  
'I will approach.'

The distinction between [h] and [f] in 'Oro Win is unproblematic because there is at least one minimal pair to indicate that they are not variants of the same phoneme. It appears that the problem is in determining the status of [h<sup>w</sup>] and [f] in 'Oro Win. This confusion seems to stem from Wari. The

voiceless labio-dental fricative [f] is not a sound that occurs in Wari but the labialized glottal fricative [h<sup>w</sup>] is a phoneme. The non-labialized glottal fricative [h] is a phoneme in both languages. Wari and 'Oro Win share a number of cognates that use these sounds but the correspondences are messy.

	<u>Wari</u>	<u>'Oro Win</u>	
1.	[h <sup>w</sup> am]	[ʔifam]	'fish'
2.	[h <sup>w</sup> ijama]	[fijama]	'children'
3.	[hʏ]	[h <sup>w</sup> ʏ] or [fʏ]	'blow'
4.	[hot']	[h <sup>w</sup> ot'] or [fot']	'withdraw'
5.	[mahomakon]	[mahomakon] or [mafomakon]	'fat woman'
6.	[het']	[het'] or [fet']	'approach'
7.	[h <sup>w</sup> ap]	[hap]	'fast'

This shows that between Wari and 'Oro Win

[h<sup>w</sup>] ~ [h] and [f] (examples 1, 2, 7)

[h] ~ [h] and [h<sup>w</sup>] and [f] (examples 3, 4, 5, 6)

This raises the question as to which of the two, [f] or [h<sup>w</sup>], is the phoneme in 'Oro Win. The occurrence of the voiceless labio-dental fricative [f] along with its variant [h<sup>w</sup>] could have two explanations, both of which involve interference from the dominant languages used where these speakers live<sup>10</sup>. 1) The voiceless labio-dental fricative [f] is indeed a phoneme in 'Oro Win and [h<sup>w</sup>] appears because of the speakers exposure to Wari. The sound [f] does not occur in Wari. 2) The labialized glottal fricative [h<sup>w</sup>] is a phoneme of 'Oro Win and the [f] occurs because of exposure to Portuguese. The sound [f] does occur in Portuguese. In either case the messiness of the cognates may be due to overgeneralization of rules which is common in dying languages (Campbell and Muntzel, 1989). It is possible that if [f] was introduced into the segment inventory of 'Oro Win from Portuguese where [h<sup>w</sup>] occurred in 'Oro Win, this change may have eventually spread to any voiceless glottal fricative. It is also possible that if [h<sup>w</sup>] was introduced into the segment inventory of 'Oro Win from Wari where [f] occurred and, since 'Oro Win does not distinguish between a labialized glottal fricative and a non-labialized one, either glottal fricative eventually became possible variants of [f]. In either case, given the cognates, there is little doubt that [f] and [h<sup>w</sup>] were very likely the same phoneme at some point in time.

There are two pieces of evidence to support the conclusion that [f] is now a phoneme in 'Oro Win.

1) While words containing [h<sup>w</sup>] are almost always pronounced by at least one of the consultants using [f],

<sup>10</sup> These sorts of occurrences are identified as "acts of reception" where a change in a dying language is externally motivated (Campbell and Muntzel, 1989, p.190).

there are several words that occur with [f] that never materialize with [h<sup>w</sup>]. 2) There are several words in 'Oro Win containing [f] that have no cognates in Wari and do not occur with a glottal fricative at all.

(2) /s/ 's'

[s] is a voiceless alveolar fricative. It occasionally is pronounced as a post-alveolar fricative [ʃ]. It occurs word-initially and word-medially.

(13) a. sat [sat']  
'cotton/fabric'

(13) b. mesem [me'sem]  
'dark'

(13) c. sowi [ʃo'wi]  
'rain'

(3) /h/ 'h'

[h] is a voiceless glottal fricative. It occurs word-initially and word medially.

(14) a. Hoto [ho'to]  
man's name

(14) b<sup>11</sup>. hihi na [hi'hi na]  
no gloss

#### Nasals

(1) /m/ 'm'

[m] is a voiced bilabial nasal. It occurs in all positions in the word. The sequence [mb] or simply [b] are variants of [m].

(15) a. mapak [ma'pak']  
'corn'

(15) b. fijama [fi'ja'ma]  
'children'

(15) c. kinam [ki'nām]  
'jaguar'

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<sup>11</sup> There was no gloss available for this word although given the structure, it is probably a verb as it is followed by a VIC. It could be an example of reduplication but it still shows a word-medial /h/.

(15) d. pirama [pira<sup>1</sup>m<sup>ba</sup>]  
'woman'

(2) /n/ 'n'

[n] is a voiced apico-dental nasal. It occurs in all positions in the word.

(16) a. krik nain te' [krik na<sup>1</sup>n te? ]  
'My father knew (it).'

(16) b. kanoan [kano<sup>1</sup>an]  
'non-indian'

### Liquid

(1) /r/ 'r'

[r] is a voiced apico-alveolar tap. It occurs word-initially and word-medially.

(17) a. mo paka rain se' [moo pə<sup>1</sup>ka ra<sup>1</sup>n se?]  
'Get away from the fire!'

(17) b. wari' [wa<sup>1</sup>ri?]  
'person'

(17) c. krik 'ona [krik ?ona]  
'I know'

### Semivowels

(1) /w/ 'w'

[w] is a close back rounded semivowel that occurs word-initially and word-medially. When occurring word-initially it is always preceded by a glottal plosive [ʔ].

(18) a. wamo [ʔwa<sup>1</sup>mo]  
'monkey'

(18) b. pawin [pa<sup>1</sup>win]  
'height'

(2) /j/ 'j'

[j] is a voiced close front unrounded semivowel. It occurs word-initially and word-medially. When

occurring word-initially it is always preceded by a glottal plosive [ʔ].

(19) a. jawe [ʔja'we]  
'monkey species'

(19) b. pije [pi'je]  
'child'

## Vowels

'Oro Win has six vowel phonemes.

(1) /i/ 'i'

[i] is a high close front unrounded vowel. It occurs in all positions in the word. It frequently occurs as [i] in unstressed syllables, particularly when the vowel in the following syllable is [i].

(20) a. iri'ije [ʔiriʔi'jeʔ]  
'pig'

(20) b. mija [mi'ja]  
'much'

(20) c. 'itopi' [ʔito'pi]  
'basket'

(2) /e/ 'e'

[e] is a mid open front unrounded vowel. It occurs in closed syllables before all nasals and plosives except for glottal plosives.

(21) a. mesem [me'sem]  
'dark'

(21) b. fet ne [ʔfɛt'ne]  
'come!'

[e] is a mid close front unrounded vowel. It occurs in all other positions in the word. It is occasionally reduced to [ə] in unstressed open syllables.

(22) a. pije [pi'je]  
'child'

(22) b. fekereme [fekəre'me]  
'man'

(22) c. terere'      [terə'reʔ]  
      'buttefly'

(3)    /a/    'a'

[a] is a low open front unrounded vowel. It occurs in all positions in the word.

(23) a. kat nain      [ʔr'kat' naɪn]  
      'He breaks it.'

(23) b. Waraja      [ʔwara'ja]  
      'man's name'

(23) c. awi' na      [ʔa'wiʔ na]  
      'He's good.'

(4)    /o/    'o'

[o] is a mid close back rounded vowel. It occurs in all positions in the word. In unstressed syllables it is sometimes pronounced as [ʊ].

(24) a. to' non      [t'oʔ nun]  
      'He hit him.'

(24) b. kom      [kom]  
      'water'

(24) c. mo na      [mo na]  
      'He runs.'

(24) d. krik 'ona      [krik ʔona]  
      'I know.'

(5)    /ɣ/    'y'

[ɣ] is a high open front rounded vowel. It occurs in all positions in the word.

(25) a. tyt 'ona      [t'ɣt' ʔona]  
      'I walk'

(25) b. 'ytresi      [ʔɣtre'si]  
      'urine'

(25) c. fy na      [fɣ na]  
      'he blows'

(6) /ø/ 'ø'

[ø] is a mid close front rounded vowel. This appears to be an infrequently used phoneme. There are instances of it in the corpus in word-final position only but I would not assume that it is limited to that position.

(26) a. werajø na [wera'jø na]  
'he plays'

(26) b. timø [tʃr'mø]  
'heart beat'

The segment inventory of 'Oro Win is slightly different from that of Wari. Many of the consonants are the same but Wari has two labialized consonants, /h<sup>w</sup>/ and /k<sup>w</sup>/, that do not appear as phonemes in 'Oro Win. It is possible that the /h<sup>w</sup>/ in Wari is realized as [f] in 'Oro Win. There is no [f] in Wari (see [f]). There is a similar difference with the alveolar plosive [t], the post-alveolar affricate [tʃ] and the alveolar fricative [s]. In 'Oro Win [t] and [tʃ] are allophones of /t/ and /s/ is a phoneme. In Wari, /t/ and /tʃ/ are phonemes. The /s/ in 'Oro Win roughly corresponds to the /tʃ/ in Wari. The only other difference is the existence of the glottalized nasal phonemes /mʔ/ and /nʔ/ in Wari. These do not seem to occur in 'Oro Win. There is a great deal of glottalization of nasals but this is common in all consonants and it is pre-glottalization. There are also no examples of minimal pairs of glottalized versus non-glottalized nasals either pre- or post-. The vowels in 'Oro Win are identical to those of Wari.

One other brief study of 'Oro Win was done by Angenot in a reconstruction of Proto-Chapakuran. In this reconstruction he provides a segment inventory slightly different from the one shown in this study but his work on 'Oro Win was limited to only the phonology and he had fewer data available. The consonants he suggests are /p/, /t/, /k/, /ʔ/, /m/, /n/, /r/, /s/, /j/, and /w/. The difference here is the analysis of /f/ and /tB/ as phonemes. Angenot suggests that [f] is a variant of /p/. In this data there is the minimal pair *pri'* which is a verbal modifier<sup>12</sup> and *fri'* which means 'kill'. Angenot also does not include /tB/ as a phoneme but identifies it as a variant of /t/. The data here indicate that /tB/ is a phoneme although its occurrence is rare. It does not occur in an environment that is unique and its

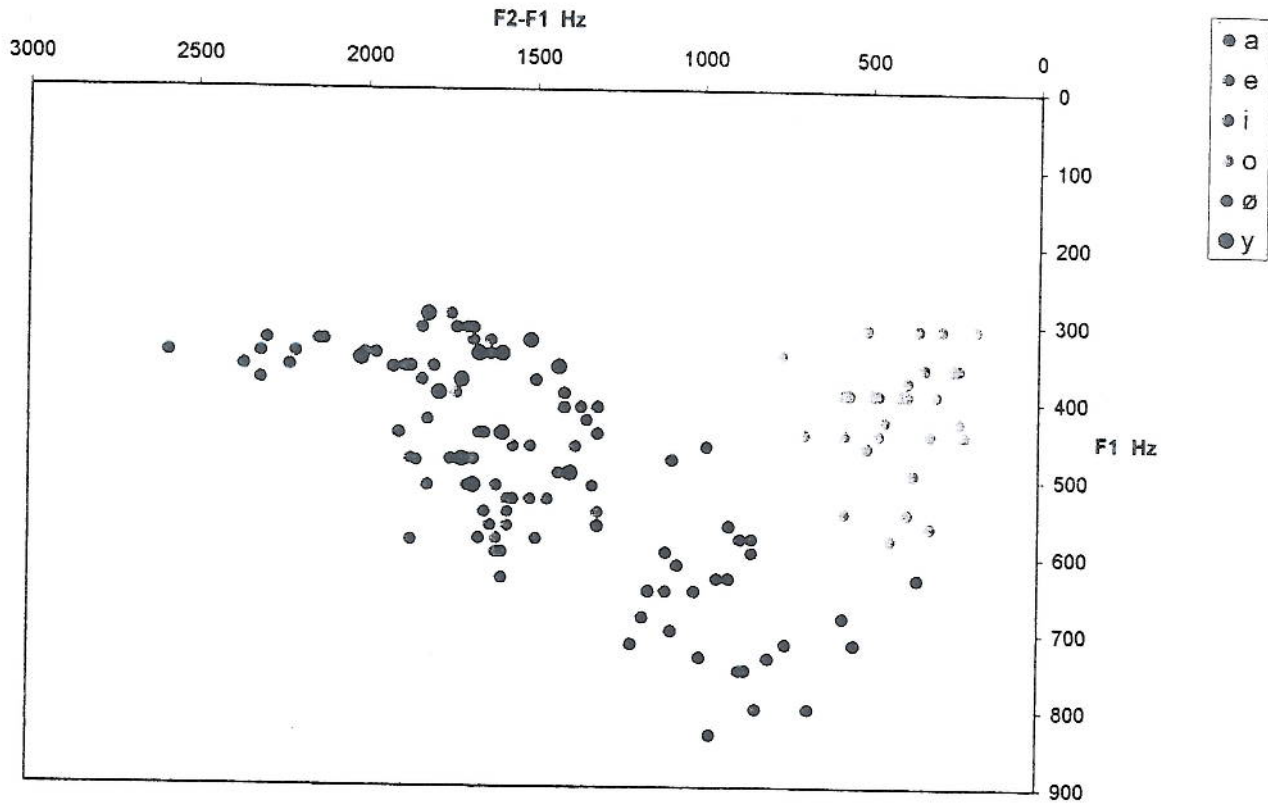
<sup>12</sup> Its exact gloss has not been determined. It means something like 'out' and occurs in the phrase *pri' puka rain kom* which means 'get out of the water'.

pronunciation is invariant when it does occur. The words it occurs in never surface with a [t] instead.

The vowel inventory Angenot suggests is similar to the one here but is missing the mid close front rounded vowel /ø/. In his discussion he collapses both front rounded vowels /ɥ/ and /ø/ into one phoneme [ɥ]. The following vowel chart will show a distribution that suggests that there is a distinction in quality. No minimal pairs exist here but, again, the distribution of /ø/ seems limited and there are few examples here. There is evidence in that there are cognates with Wari that indicate a phonemic distinction.

The vowel chart was created by measuring the formant values of stressed vowels in as many different environments as possible. The first formant (F1) and second formant (F2) values were measured. The y-axis shows the F2 - F1 value. The x-axis shows the F1 value.

# Oro Win Vowels



F1 – formant 1  
F2 – F1 – formant 2 – formant 1  
All measurements are in Hertz (Hz).

The above chart shows the distribution of vowels in 'Oro Win.



## Phonotactics

### Distribution of consonants

The consonants that occur word finally in 'Oro Win are /p/, /t/, /k/, /ʔ/, /m/, and /n/.

All consonants occur word initially. The consonant /r/ is one possible exception. It occurs word initially only in the verbal inflectional clitic *ra*. It might be safer to say that it does not occur utterance-initially as clitics are always preceded by another lexical item.

### Consonant clusters

The only consonant clusters observed all involve the alveolar tap /r/. These occur both word-initially and word-medially. The following are words that invariably occur with a Cr cluster.

(27) a. tipran  
'long'

(27) b. fri  
'kill'

The following examples occur consistently in 'Oro Win with Cr cluster but have cognates in Wari that have a vowel that breaks up the cluster.

	<u>'Oro Win</u>	<u>Wari</u>
(28) a.	tofro 'cockroach'	tohoro 'bug'
(28) b.	krik 'see'	kerek 'see'
(28) c.	kamra 'fall:p'	kamara 'fall:p'

The following examples occur with both a vowel and without in 'Oro Win'.

(29) a. tamara or tamra  
'song'

(29) b. pirama or prama  
'woman'

The word for 'house', when elicited alone, was *'atrim* but on a number of occasions it was said more like it appears in Wari *sirim*. Many of these times *sirim* was said, one of the consultants would correct the other, saying "no no, that's Wari" and then give the word as *'atrim*. Whether the *t* and *s* were the

issue or the cluster or both is unclear.

### Distribution of vowels

All vowels occur word-finally but none appear word-initially. They are always preceded by a glottal plosive [ʔ] in word-initial position.

### Vowels as syllables

There are two examples of syllables consisting solely of vowels.

(30) a. tai pana        [ta'i pana]  
      'leaf'

(30) b. kio            [ki'o]  
      'arrow'

The word *kio* in 'Oro Win has a cognate in Wari, *kiwo* which places a glide between the two vowels and it may be that in listening to this word the glide was not apparent. The word *tai* may then be *taji*. If the glides are there they are not the least bit obvious.

### Syllabification

The syllable types that occur in 'Oro Win are CV and CVC with the one exception of the CrV(C) syllable and the V syllables mentioned above. A consonant following a vowel in a word containing more than one syllable is assigned to the following syllable.

### Stress

Primary word stress always falls on the final syllable. There was, however, one exception but this is clearly in a word borrowed from Portuguese, *cabeça* 'head'. It is unusual that the rules of stress in 'Oro Win do not seem to apply to this loan word.

(31) kapesak        [ka'pesak']  
      'head'

Primary sentence stress is always placed on the final syllable of the verb. When the verb is a compound the primary stress is placed on the final syllable of the compound.

It appears that vowel length is the primary correlate of stress. Vowels are longer in stressed positions.

This was not measured but it is audibly noticeable.

### Morphophonology

#### Assimilation

Both progressive and regressive assimilation occur in 'Oro Win. They occur both across morpheme boundaries and within words. In the following example it appears that both are occurring.

- (32)    om        ka  
         not:exist infl:nrp/p

This pair of morphemes sometimes occurs with a voiced consonant between the voiced bilabial nasal and the vowel.

- (33)    [ʔom ga]

It also appears with a velarized nasal which would necessarily result from the assimilation of /k/ to /g/.

- (34)    [oŋga]

In words that have the Cr cluster where /m/ is the consonant preceding the /r/ there is always a /b/ between the two consonants.

- (35) a. kamara        [kam<sup>h</sup>bra]  
         fall:p

- (35) b. tamara        [tam<sup>h</sup>bra]  
         'song'

#### Epenthesis

There is one example of an epenthetic vowel being inserted between two consonants. The possessive is marked by an affix attached to the right of a noun. When the word *sat* 'cloth' (in this case 'hammock') is possessed by third person masculine *-kon* the result is *satakon*. The *a* is apparently inserted to break up the *tk* consonant cluster.

#### Alteration in vowels

A common kind of affixation exhibited here is object clitics attaching to subject clitics. When this occurs and two vowels come together they either form a diphthong or the resulting clitic occurs with only one vowel. It seems that in general the first vowel drops but occasionally the vowel changes altogether.

- (36) a. na + -in = nain      [nain]  
 (36) b. na + -on = non      [non]  
 (36) c. ta + em = tim      [tʃɪm]

### Reduplication

Some form of reduplication occurs on verbs used to indicate a plural subject. The rule for reduplication, if there is one, is not clear. In (37) b. the initial CV of the word is reduplicated.

- (37) a. tyt na  
           'walk:s'  
 (37) b. tytyt na  
           'walk:p'

In (38) b. the final vowel of the diphthong is lost.

- (38) a. mao na  
           'go:s'  
 (38) b. mama' na  
           'go:p'

In (39) b. the CV is repeated.

- (39) a. tok na  
           'drink'  
 (39) b. tototok na  
           'drink:p'

In (40) b. a consonant is changed. /ʔ/ becomes /k/.

- (40) a. 'an na  
           'cry:s'  
 (40) b. 'akan na  
           'cry:p'

It may be that the rule has to do with the reduplication of an initial CV sequence but there seems to be a great deal of variability here. Example (39) b. doubles the CV sequence but this may be an example of overgeneralization of a rule, as is frequently the case in a dying language (Campbell and Muntzel, 1989). In (38) b. the final [o] of the diphthong is lost and replaced by a glottal plosive. In (40) b. the initial glottal plosive is replaced by [k]. Additional data may reveal a more specific rule.

Wari and 'Oro Win share many phonological features. One that occurs in Wari but does not show up in the 'Oro Win data corpus is vowel harmony. Vowel harmony occurs within words in Wari. The only place it applies is on the few suffixes that exist. It frequently shows up in multi-syllabic subject clitics that are affixed with an object clitic and it works regressively. There is no way to determine if this occurs in 'Oro Win in that there are no examples of multi-syllabic subject clitics in the corpus that are affixed. This is worth investigating.

The phonology of 'Oro Win seems fairly simple but questions still remain. Aside from vowel harmony it is also worth looking into the Cr cluster, reduplication and the syllables consisting of only one vowel. The phoneme [f] should be examined more carefully as should the alveolar affricate and alveolar fricative.

## MORPHOLOGY

'Oro Win morphology has a few noteworthy features. There is very little in the way of inflectional morphology which is unusual for an Amazonian language. Derivational morphology seems much more productive. This is also the case in Wari where inflectional morphology is very limited and derivational morphology is abundant. 'Oro Win uses gender distinctions which is equally unusual. The major word classes in 'Oro Win are Verb and Noun. Some minor word classes include inflectional clitics, emphatic pronouns and a single preposition. 'Oro Win morphology seems remarkably simple.

### Nouns

Nouns occur in argument and adjunct positions in the clause and trigger agreement on a preceding verbal inflectional clitic or preposition. In different instances and to varying degrees, nouns trigger agreement for person, number and gender. Gender distinctions are feminine, masculine and neuter. Feminine gender is used only for human females. Masculine gender is comprised of human males and some animal species. Neuter gender is generally used for inanimate objects, location, plants and most animals. Gender is only expressed in the third person.

Nouns, it seems, are not frequently overtly expressed. This is a feature of Wari and presumably one of 'Oro Win as well. In normal discourse they are generally used only for clarification or emphasis. Agreement on the VIC or preposition is more often the way to determine the roles of the arguments in a sentence. In the elicitations it was generally the case that an elicited phrase or sentence contained only a verb and verbal inflectional clitic which referenced the noun in question. Specific nouns were not usually offered unless specifically requested. Nouns are not marked for case, number, person or gender. These features are determined based on the information contained on an inflectional clitic or a preposition.

There appear to be two classes of nouns. The distinction is between those which are inalienably

possessed and those which are not. Inalienably possessed nouns (in this corpus) consist primarily of body parts or things related to the body. When a list of roughly forty body parts was elicited the form usually given was always followed by *-si'* which is the first person plural inclusive clitic.

(41) a. *trajisi'*  
'ear'

(41) b. *toprisi'*  
'skin'

(41) c. *'ytresi'*  
'urine'

Some nouns whose citation form does not end in *-si'* can, however, be inalienably possessed by adding the *-si'* clitic.

(42) *'asiri-si'*  
house-1pincl

This form is translated as 'ma loca' or 'my place' as opposed to 'my house'.

#### Noun inflection

There is very little noun inflection in 'Oro Win. Other than the *-xi'* affix the only evident inflectional affixes are suffixes that signal possession. These include the following.

-0	1s
-si'	1pincl
-kon	3sm
-kam	3sf
-in	3sn

The possessive morphemes are attached directly to the free form of the noun to be possessed.

(43) a. *'ara'* na            *'asirikon* te  
                                      *'asiri-kon* te-0  
do 3s:rp/p    house-3sm    father:1s  
'My father built his house.'

(43) b. *pe*    *na*            *satakon*  
                                      *sata-kon*  
be:at 3s:rp/p    hammock-3sm  
'He's in his hammock.'

(43) c. *topakon*  
*topa-kon*  
mouth-3sm  
'his mouth'

(43) d. 'ijitikam  
'ijiti-kam  
tooth-3sf  
'her tooth'

(43) e. mafomakam  
mafoma-kam  
fat-3sf  
'her fat'

Wari uses a similar method of marking possession. The following Wari example is similar to (43) a.

(44)<sup>13</sup> tfirikon  
tfiri-kon  
house-3sm  
'his house'

Wari also has a series of unbound clitics used to show possession. The following example from Wari shows the use of one of these clitics in a phrase like (43) a. and (44).

(45) tfirim nykyn  
house poss:3sm  
'his house'

These clitics did not seem to occur in the 'Oro Win data. In Wari the possessive morphemes are used on nouns which can be inalienably possessed while the clitics are used elsewhere. The absence of the clitics in 'Oro Win could be that they have been lost from the language but almost all examples of possession in the corpus were inalienably possessed nouns; generally body parts.

These possessive morphemes are the only examples of nominal inflection. Other semantic and syntactic information is represented on verbal inflectional clitics or the preposition. Gender of a noun is marked on the VIC. Number of a noun does not appear to be marked on the VIC in most cases (see Verbal inflectional clitics). There are two ways (in the corpus) that number of a noun is represented. One way is by using the collective modifier 'oro. The other way seems to be using a plural form of the verb (see Plural verbs).

Nouns can be zero-derived to form verbs and are zero-derived from verbs (see Derivation).

### Pronouns

There is a remarkable dearth of pronominals in the 'Oro Win data corpus. The only pronominal

<sup>13</sup> Everett and Kern, 1997, p. 237, example (409) a.





## Aspect

The only morphological indication of aspect is reduplication on the verb. There is some question as to whether the reduplicated verb forms act aspectually or if they indicate a plural subject (which in 'Oro Win does not appear to be marked on the VIC as it is in Wari) or both (see Reduplication).

Aspectually, the reduplication appears to indicate the progressive.

- (51) wirikam mama' na  
3f:emph come:p 3s:rp/p  
'She's coming.'

There is a temporal particle 'ira, that seems to indicate past progressive aspect.

- (52) tyt 'ona 'ira  
walk 1s:rp/p past:prog  
'I was walking.'

Repetition of the verb occurs which seems to indicate the progressive aspect.

- (53) mam to' to' nam pain pana  
na-m  
instr hit hit 3s:rp/p-3sf prep:3n wood  
'He's hitting her with the stick.'

## Mood

Mood is expressed in different ways. The indicative mood is expressed with a realis past/present VIC.

- (54) ten nain 'itopi pirama  
na-in  
weave 3s:rp/p-3n basket woman  
'The woman made a basket.'

Imperatives are expressed by using the second person realis future verbal inflectional clitics.

- (55) pri paka rain kom  
ra-in  
immediately leave 2s:rf-3n water  
'Get out of the water now!'

## Plural verbs

There are several examples of verbs that have more than one form. The following is a list of verbs that have two different realizations.

mao	mama'	'go'
'ipan	kamra	'fall'
tyt	tytyt	'walk'
tok	tototok	'drink'

'an	'akan	'cry'
to'	toto'	'hit'
'ja'	jaja	'splash'

It is generally the case that a second form of a verb shows some kind of reduplication but some of the forms are suppletive, like *kamara* 'fall' (see Reduplication). It appears that the second form the verb indicates a plural subject. This is very possible in that it does not appear that number is marked on most VICs (see Verbal Inflectional Clitics). But there is some evidence that the second form indicates a continuous action. The following examples show the singular / plural distinction.

(56) 'an na tBym  
cry:s 3s:rp/p boy  
'The boy cried.'

(57) 'aka na 'ina 'ite 'asa 'we  
cry:p 3s:rp/p mother:1s father:1s younger:brother:or:sister:1s older:sister:1s  
'They cried.'<sup>14</sup>

These examples show a number distinction that is manifested on the verb and not on the VIC. In these examples the verb was translated as a completed action. The following example also shows a clear plural subject because of the use of 'oro' collective, and the number manifested on the verb.

(58) tytyt ki nain sirim 'oro pirama  
na-in  
walk:p coming:this:way 3s:rp/p-3n house coll woman  
'The women are walking by the house.'

The following example, however, shows a plural verb with a singular subject and the translation as a progressive action.

(59) a. mama' na  
come:p 3s:rp/p  
'He's coming.'

(59) b. jaja' na  
splash 3s:rp/p  
'He's bathing.'

In example (60) there is the same progressive translation but it is not clear whether the verb is actually reduplicated, forming a single word, or if it is repeated, forming a compound.

(60) mi' mi' pin na  
give give completely 3s:rp/p  
'He's dying.'

<sup>14</sup> The consultant said 'aka na and then listed the family members but only glossed it as 'they cried'. This list of people serves as evidence that it is indeed a plural subject.



subject and primary object (based on the hierarchy of semantic roles indicated in Indirect Objects). The subject portion of the VIC is always the first part of the clitic and can stand alone. It could be considered the head of the VIC. It is inflected with suffixes that mark object agreement. The observed VICs are as follows.

	<u>Subject</u>		<u>Object</u>	
	<u>Tense</u>		<u>Tenseless</u>	
	realis past/present	realis future		
first singular	'ona	ta		-pa
second singular	ma	ra		-em
third singular	na		ka (masculine)	-on
			kam (feminine)	-m
			ne (neuter)	-in
first plural		ti'	'iri	

There is also one suppletive form used. The VIC *ne* is second singular - first singular realis future.

- (63) fet ne pain  
 approach 2s:1s:rf prep-3n  
 'Come sit by me!'

Tense VICs are generally used when the verb is clause initial.<sup>16</sup> When the verb is not clause initial, as in COMP sentences, the tense is marked on inflectional morphemes. These are *ko* 'masculine/feminine realis past/present', *ka* 'neuter realis past/present' and *ta* 'realis future'. When one of these morphemes is present the tenseless VICs are usually used.

Person is always marked on the VIC. Gender is marked only for third person arguments. Number is curious. First person is the only person that exhibits a number distinction on these clitics. Even when the arguments are specifically identified as plural the second and third person clitics show the use of only one form which does not distinguish number. This is most apparent in noun phrases that use the collective morpheme *'oro* or when a plural emphatic pronoun is used.

- (64) tytyt ki nain sirim 'oro pirama  
 na-in  
 walk:p coming:this:way 3s:rp/p-3n house coll woman  
 'The women walked by the house.'

<sup>16</sup> The VIC is tense in a non-clause initial VP in interrogatives when the subject is questioned, see Interrogatives.



inflection). If the modification is predicative then the modifier appears as a verb in Wari.

- (66)<sup>18</sup> hwijamain na tfirim  
hwijima-in  
smallness-3n 3s:rp/p house  
'The house is small.'

If the modification is attributive then the modifier appears as a noun in Wari.

- (67) a.<sup>19</sup> hwijamain tfirim  
hwijima-in  
smallness-3n house  
'small house' (lit. 'the house's smallness')

- (67) b.<sup>20</sup> tfokorikon wom  
tfocori-kon  
newness-3sm cotton  
'new dress'

In 'Oro Win, in some cases, a possessed noun is used as a modifier as well.

- (68) wijamain 'atrim  
small house  
'small house'

This seems to indicate that nominal modification in 'Oro Win is, or at least was, similar to Wari but there are many instances where this is not the case. There are no examples of predicative modification in the 'Oro Win corpus but there are several examples of attributive modification and in most cases the possessive morpheme is absent.<sup>21</sup> If 'Oro Win follows Wari then the morpheme *-kon* would be expected on these modifiers. Examples (67) b. and (69) c. show this clearly.

- (69) a. tipran pana  
long wood  
'long stick'

- (69) b. kjen tai pana  
big leaf wood  
'big leaf'

- (69) c. sokori sat  
new cotton  
'new shirt'

It seems that these words are being treated as adjectives. Additional evidence that this is the case is also apparent in the way the consultants responded to some adjective phrases that were elicited.

<sup>18</sup> Everett and Kern, 1997, p.343, example 643 a.

<sup>19</sup> Everett and Kern, 1997, p. 152, example 250 a.

<sup>20</sup> Everett and Kern, 1997, p.343, example 644 b.

<sup>21</sup> In Wari, the possessive morpheme is absent when the modifier is a derived noun but in these examples there is no evidence that these modifiers are underlyingly verbs.



Example (71) c. again shows a lack of agreement. The preposition should not be neuter.

The following are the forms of the preposition represented in the 'Oro Win data. There is a greater variety of forms for agreement purposes in Wari.

<i>pain</i>	third neuter
<i>kon</i>	third singular masculine

There are examples where it appears that Portuguese prepositions are used. In example (72) the preposition *na* 'on' is used. The NP in the PP is third person neuter so it should be *pain*.

(72) wata pe 'ona na makan  
1s:emph be:at 1s:rp/p prep dirt  
'I sit on the ground.'

In (70) the preposition *para* 'towards' is used instead of *pain*.

(73) mao na para 'atrim  
go:s 3s:rp/p prep house  
'He went to the house.'

### Numbers

There are no numbers in 'Oro Win. Wari uses Portuguese number terms. It appears that 'Oro Win does not. When phrases with numbers were elicited the only thing that changed was the number agreement manifested on the verb. In example (75) the elicited phrase was 'three sticks fall'. The word 'fall' has a completely suppletive plural form.

(74) 'ipan na pana  
fall:s 3s:rp/p wood  
'A stick falls.'

(75) kamara' na pana  
fall:s 3s:rp/p wood  
'The sticks fall.'

### Derivation

There are two kinds of derivation that occur in 'Oro Win. One is zero-derivation and the other is compounding. Zero-derivational processes involve one wordform with no affixation or marking of any kind that appears in more than one word class. In these examples it is difficult to ascertain what the underlying form of the words are; that is, if they are underlyingly nouns or verbs. This kind of derivation is common in Wari.

Here *sat* is used as a noun and a verb.

- (76) a. sat  
'cloth' (also used for the word 'hammock' among other things)
- (76) b. wata sat ta  
1s:emph cloth 1s:rf  
'I'm going to lie down in the hammock.' (lit. 'I'm going to hammock.')

Here *mesem* is used as a noun and a modifier.

- (77) a. mesem  
'night'
- (77) b. mesem na  
'It is dark.'
- (77) c. mesem koktraho  
'black chicken'

*Tota* is both a noun and a verb.

- (78) a. tota  
'garden'
- (78) b. tota ti  
make:garden 1p:rf  
'We will make a field.'

*Wara* is a verbal modifier in Wari meaning 'already.'

- (79) a. wara kio  
'old arrow'
- (79) b. 'wata wara 'ona  
1s:emph already 1s:rp/p  
'I am tired.'

Compounding is when two or more words are used together to form what appears to be a single lexical item. This was evident only in verbs. Verbs are combined with other verbs or verbal modifiers. When they occur together they occupy the position of the verb in a sentence and behave phonologically as one lexical item with stress falling on the last syllable of the compound. The compound in the following examples is italicized. The examples in (80) show compounds of verbs. The examples in (81) show compounds of verbs and verbal modifiers.

- (80) a. 'wiriko *fy tom* na  
3m:emph blow burn 3s:rp/p  
'He sets (something) on fire.'





that, like in Wari, in 'Oro Win derivation is more common than inflection.

## SYNTAX

### Sentence types

The basic constituent order of 'Oro Win is VOS, verb-object-subject. This is an uncommon constituent order. There are two basic configurations in which the VOS order may appear. The first is classified as simple sentences. These include declarative and imperative sentences. The shape of simple sentences is as follows:

V VIC (NP-OBJ) (PP/NP-OBJ) (NP-SUBJ)

The verb (V) is followed by a tensed inflectional clitic (VIC). The only items that ever appear before the verb in simple sentences are emphatic pronouns. These occur in left dislocation and are generally referenced on the VIC.

The other VOS configuration is COMP clauses. These include interrogatives and negation. The shape of COMP sentences appears as follows:

COMP INFL V VIC (NP-OBJ) (PP/NP-OBJ) (NP-SUBJ)

The complementizer (COMP) is obligatorily followed by an inflectional morpheme (INFL) which expresses tense and realis/irrealis mood. The VICs in COMP clauses are generally not marked for tense or mood. Tense, then is always the second constituent of a sentence in 'Oro Win.

The VOS word order is not an absolute in the language. When nouns are overtly expressed they may appear as SO but this is not common. Nouns are not obligatorily expressed and it seems that they are not frequently expressed except for clarification or emphasis. When they are they are not marked for case. Determination of the semantic function of nouns is determined by agreement on a verbal inflectional clitic or the preposition.

## Simple sentences

Simple sentences differ from COMP sentences in three ways.

- 1) they do not have an operator word in COMP
- 2) they begin with a verb or verb compound
- 3) the verb is followed by a tensed VIC.

The two types of simple sentences discussed here are declaratives and imperatives.

### Declaratives

Declaratives are simple sentences that appear in the form indicated above. Generally, the verb is sentence-initial followed by a tensed VIC. There are occasions when a noun is topicalized or an emphatic pronoun is used clause-initially but they are in left-dislocation and are not part of the clause, as in (83) d and (83) e. Arguments are optional and not necessarily overtly expressed.

- (83) a. kom na Maria  
sing 3s:rp/p name:f  
'Maria is singing.'
- (83) b. pe 'ona pira  
be:at 1s:rp/p at:a:distance  
'I stayed/ was far away.'
- (83) c. fot nain kio 'wamo  
na-in  
take:out 3s:rp/p-3 n arrow monkey  
'The monkey took out the arrow.'
- (83) d. 'wiriko fri' non kinam  
na-on  
3m:emph kill 3s:rp/p-3sm jaguar  
'He killed a jaguar.'
- (83) e. 'wata fy ta se'  
1s:emph blow 1s:rf fire  
'I'm going to smoke a cigarette.'

Simple sentences in Wari are the same. A verb is the first element in the clause followed by a VIC.

- (84)<sup>24</sup> kep 'inain temem  
'ina-in  
make 1s:rp/p-3n bow  
'I made a bow.'

<sup>24</sup> Everett and Kern, 1997, p. 240, example (418)



## COMP Sentences

### Interrogatives

Interrogatives can take the form of COMP sentences with the question word occurring sentence-initially as the operator word in COMP. The operator word *ma'* acts as a question word and signals interrogation. It is followed by INFL.

There were very few examples of interrogatives in the corpus<sup>28</sup>. Those that occurred are all represented here and show that different constituents of a sentence can be questioned including arguments and adjuncts. In (88) the subject is being questioned. When the subject is questioned the VIC is tensed. Here, the INFL is masculine/ feminine. This agrees with the material in COMP because it assumes a masculine/ feminine or human subject.

- (88) *ma'*                      *ko*                      *'orafet na*  
that:prox:hearer    infl:m/ frp/ p    speak    3s:rp/ p  
'Who is talking?'

In (89) a location is being questioned. The INFL morpheme is neuter because a neuter response or place is assumed. When a non-subject is questioned the VIC is tenseless.

- (89) *ma'*                      *ka*                      *pe*                      *ne*                      *'asirim*  
that:prox:hearer    infl:nrp/ p    be:at:s    3n                      house  
'Where is the house?'

Both (88) and (89) have almost identical structures to similar types of sentences in Wari. The following examples show types of structures that have parallels in Wari. (90) corresponds to (88) and (91) corresponds to (89).

- (90)<sup>29</sup> *ma'*                      *ko*                      *pan*                      *mao na*  
that:prox:hearer    infl:nrp/ p    fall:s    go:s    3s:rp/ p  
'Who was born?'
- (91)<sup>30</sup> *main*                      *ka*                      *pa' to*                      *kaka hwam*    *mon tarama*  
*ma-in*  
that:prox:hearer-n    infl:nrp/ p    kill    be:at:p    3pm    fish                      man  
'Where did the men kill fish?'

The only major difference in the way the question is structured is in (89) where a neuter agreement

<sup>28</sup> Eliciting questions most often yielded responses to the questions rather than translations of the questions themselves.

<sup>29</sup> Everett and Kern, 1997, p. 31 example (36) c.

<sup>30</sup> Everett and Kern, 1997, p. 20 example (15) e.





- (98)<sup>34</sup> mija na ka 'in ne matatʃyt  
 much 3s:rp/p infl:nrp/p return 3n sleepiness-1pexcl  
 'We are very sleepy.' (lit. 'It is much *that our sleepiness is returning.*')'

#### Cause clauses

In this cause clause the modifier 'ara 'negative' interacts with the *ti*' which expresses indefinite or hypothetical time. In this example 'ara *ti*' occurs in a fully independent clause which is preceded by a matrix clause to which it appears to be semantically subordinate. This gives it a reading of 'because'.<sup>35</sup>

- (99) tota ti 'ara ti' om na ka kao 'iri  
 make:garden 1pincl:rf neg:p dub notexist 3s:rp/p infl:nrp/p eat 1p  
 'We are making a field because we don't have anything to eat.'

#### Result clauses

Result, in this example, is indicated by a COMP sentence in which the third person neuter emphatic pronoun *je*' appears in COMP followed by an INFL morpheme. Like the cause clause, the result clause is an independent clause preceded by a matrix clause. The cause clause is semantically subordinate to the matrix clause.

- (100) na' napa je ta maki taka  
 na-pa ta-ka  
 call 3s:rp/p-1s 3n:emph infl:rf come 1s-3sm  
 'He called me so I will come.'

Wari also uses *je* to indicate a result clause.

- (101)<sup>36</sup> pan' tamana na tʃowi' je ka 'om mao ta ca  
 fall:s much 3s:rp/p rain emph:3n infl:nrp/p not:exist go:s 1s this:n  
 'It rained a lot so I didn't go.'

#### Sentence structure

Most sentences in 'Oro Win contain a verb and a VIC. There may or may not be overtly expressed arguments. It seems that it is more common not to express the arguments. In the elicitations, there were generally specific arguments elicited but the response usually contained only a verb and the relevant VIC. Overt arguments were given in the examples when they were pressed for.

<sup>34</sup> Everett and Kern, 1997, p. 78, example (114) a.

<sup>35</sup> This analysis is taken directly from the Wari grammar (Everett and Kern, 1997, p. 99). I have no independent evidence for this analysis as it is the only example of its kind in the corpus but the analysis works for this example both in the structure of the sentence and in the fact that it is glossed as a cause clause following a matrix clause.

<sup>36</sup> Everett and Kern, 1997, p. 110, example (153) a.

The basic constituents of a sentence are noun phrases, verb phrases and prepositional phrases.

### Noun phrase

The noun phrase serves as the subject, object or indirect object of a clause or the argument of a prepositional phrase. Its head is a noun. It may consist of a single word, a modified word or a subordinate clause.

### Subject

Third person subjects may be overtly expressed or they may be marked only by a third person VIC. The examples in (102) show expressed subjects while in (103) the subjects are not overt.

(102) a.       pe    na       pirama  
          be:at 3s:rp/p woman  
          'The woman sits.'

(102) b. takipa' na       fekereme  
          stand 3s:rp/p man  
          'The man is standing.'

(103) a. tim na  
          lie 3s:rp/p  
          'He is lying down.'

(103) b. kao na  
          eat 3s:rp/p  
          'He eats.'

(103) c. nok    napa  
                  na-pa  
          pierce 3s:rp/p-1s  
          '(The bug) stung me.'

There are some examples where the subject is not marked on the VIC in the expected way. In this example the first person emphatic pronoun indicates a first person subject but the subject marked on the VIC is third person while the object is first person.

(104) 'wata       jyk    napa       se  
                                  na-pa  
          1s:emph    push 3s:rp/p-1s fire  
          'I am smoking a cigarette.'

In this example the subject is, again, first person which is indicated by the first person emphatic

pronoun but the VIC indicates a second person subject and a first person object.

- (105) 'wata krik mapa  
                                  ma-pa  
1s:emph see 2s:rp/p-1s  
'I see you.'

One explanation is that an emphatic pronoun has the potential to topicalize any person in a clause. Since it is not part of the clause it could just be emphasis for whoever needs it. An alternative explanation is that these are errors in agreement (see Emphatic pronouns for a fuller discussion).

First and second person subjects are marked only on the VIC. There are no personal pronouns.

- (106) a. tok 'ona  
          drink 1s:rp/p  
          'I am drinking.'
- (106) b. kao ti  
          eat 1pincl:rf  
          'We are going to eat.'
- (106) c. mao ma  
          go:s 2s:rp/p  
          'You went.'

#### Direct object

As with subjects, third person direct objects may be overtly expressed or marked only on the VIC. In

(107) the direct object is overtly expressed. In (108) direct object is marked only on the VIC.

- (107) a. 'wata fri 'onon kinam  
                                  'ona-on  
1s:emph kill 1s:rp/p-3sm jaguar  
'I killed a jaguar'
- (107) b. fot' nain kio 'wamo  
                  na-in  
take:out 3s:rp/p-3n arrow monkey  
'The monkey withdrew the arrow.'
- (107) c. to' non pije  
          na-on  
hit 3s:rp/p-3sm child  
'He hit the child.'

(108) a. 'ijin        nam  
                   na-m  
               be:afraid 3s:rp/p-3n  
               'She's afraid of her.'

(108) b. wata        mana        'onon  
   'ona-on  
               1s:emph    be:angry    1s:rp/p-3sm  
               'I'm fighting with him.'

Like subjects, first and second person direct objects are marked only on the VIC.

(109) a. nok        napa  
                   na-pa  
               pierce 3s:rp/p-1s  
               'It stung me.'                    (referring to a bug)

(109) b. mana        'onim  
   'ona-em  
               be:angry 1s:rp/p-2s  
               'I'm mad at her.'

Wari is very similar to 'Oro Win. The following shows a Wari sentence that mirrors (107) a.

(110)<sup>37</sup> pa' 'inain        mijak ta.  
   'ina-in  
               kill 1s:rp/p-3n pig    emph  
               'I killed a pig.'

This sentence is structurally similar. The differences are primarily lexical. The use of the emphatic pronoun is optional in both 'Oro Win and Wari.

#### Indirect object

When there is more than one object argument in the sentence, the object referenced on the VIC varies. Only one object per clause is marked on the VIC. There appears to be a hierarchy which determines which object gets marked. The indirect object (goal or circumstance) is highest on this hierarchy with the direct object (theme or patient) next. Oblique objects are last.

In this example the indirect object or goal is referenced on the VIC rather than the direct object or patient.

<sup>37</sup> Everett and Kern, 1997, p. 182 example (312) b.

- (111) mi' 'onon pain tai pana  
       'ona-on  
 give 1s:rp/p-3sm prep:3n leaf wood  
 'I gave the man a leaf.'

Here, the direct object or patient is referenced on the VIC rather than the oblique object, the instrument.

- (112) mam to' nam pain pana  
       na-m  
 instr hit 3s:rp/p-3sf prep:3n wood  
 'The man hits the woman with the stick.'

### Verb phrase

The verb is the head of the verb phrase. The verb may appear as a verb compound made up of more than one verb or a verb and a verbal modifier. It is followed by a verbal inflectional clitic.

This a simple verb.

- (113) kao na kaota  
 eat 3s:rp/p animal  
 'He eats meat.'

This is an example of a verb compound. Two simple verbs act as a single verb.

- (114) 'an pe 'onain pain pana  
       'ona-in  
 take be:at 1s:rp/p-3n prep:3n wood  
 'I put the stick on the table.'

This is an example of a modified verb. A simple verb is followed by a modifier. This is also a form of compounding.

- (115) 'imi' pin na pirama  
 give completely 3s:rp/p woman  
 'The woman died.'

### Prepositional phrase

The prepositional phrase acts as an object-like argument to the verb. The head of the prepositional phrase is an inflected preposition. This is optionally followed by a noun phrase. The argument of the preposition is referenced on the preposition.

- (116) a. to' nain sat Mari pain kom  
       na-in  
 hit 3s:rp/p-3n cloth name:f prep:3n water  
 'Maria is washing clothes in the river.'

(116) b. pe     na           tofro'     pain   pana  
           be:ats 3s:rp/p     cockroach   prep   wood  
           'A cockroach is on the table.'

(117) ma' 'ona     kon  
        go     1s:rp/p   prep:3sm  
        'I went with him.'

The 'Oro Win structures represented here are very similar and in many cases identical to those of Wari. Several types of structures as not represented in the corpus either because they were not elicited or because, when they were elicited, they were not offered by the consultants. Many kinds of questions including yes-no questions are absent. There are no examples of reciprocals or reflexives. There are also no examples of passives relative clauses or different types of subordination all of which exist in Wari. Many of the sentences were simple and did not yield a very large variety of different types of syntactic structures.

A particular structure that is conspicuously absent from the data corpus is what Everett and Kern call "verbalized sentences". Their absence is noted for two reasons. 1) They are ubiquitous in Wari. In normal discourse they are a very common, if not standard, structure. 2) They contain unique structures that are rare and theoretically interesting. Verbalized sentences are a unique form of zero-derivation in which an entire verbal clause is treated morphosyntactically and phonologically as a single lexical item. This is theoretically interesting because it is generally assumed in many theories that syntax does not productively generate words. The Minimalist Program uses features of words contained in the lexicon to generate the structure of a sentence by movement driven by strong features (Chomsky, 1996). These phrases that are treated as words would have to be in the lexicon in order to be moved to the right position as the head of the VP but because they are productively generated phrases it is not possible that they are contained in the lexicon. Part of the theory of Lexical Functional Grammar is the Lexical Integrity Principle which says that words are not formed post-syntactically (Bresnan and Mchombo, 1995). But in Wari, it appears that an entire verb phrase, with all the possible and necessary constituents, forms a word post-syntactically.

The sentences in which these derived verbs occur in Wari are considered a form of direct speech but are

not necessarily glossed as such. While this construction is common in Wari, there are no examples of this type of construction in the 'Oro Win data corpus. The following examples show the difference between Wari and 'Oro Win. These are three sentences in Wari. The derived verb is in italics.

- (118) a. <sup>38</sup> *pa' ta' karawa* na Minian  
 kill 1s:rf animal 3s:rp/p m:name  
 'Minian will go hunting.' (lit. ' "I will kill an animal", Minian (says).')
- (118) b. <sup>39</sup> *kep ta' tfirim* 'ina  
 do 1s:rf house 1s:rp/p  
 'I will build (do) a house. (lit. ' I will build a house", I (say).')
- (118) c. <sup>40</sup> *mi' pin na nonon Jimon*  
 nana-on  
 give completely 3s:rp/p 3p:rp/p-3sm m:name  
 'They say (that) Jimon died.' (lit. ' "He died", they (say) of Jimon.')

The 'Oro Win sentences that roughly correspond to these Wari sentences are, respectively, the following.

- (119) a. *fri ti kaota*  
 kill 1p:rf animal  
 'We will kill an animal.'
- (119) b. *'ara' ta 'asiri*  
 do 1s:rf house  
 'I will build a house.'
- (119) c. *'imi pin na fekereme*  
 give completely 3s:rp/p man  
 'The man died.'

These sentences that occur in Wari as direct speech are simple declaratives in 'Oro Win. There are a number of other sentences in 'Oro Win that are structurally similar to sentences in Wari that do not show this use of direct speech while the Wari sentences do. Example (118) c. indicates that a direct speech interpretation may be intended overtly but there are no available examples, like this, in the 'Oro Win corpus . There were several occasions in the 'Oro Win elicitation where a direct speech form was elicited but none was given in response. The phrase elicited in the following example was ' "The woman said to the children, "get away from the fire!" '. The response was as follows.

- (120) *mo paka rain se'*  
 ra-in  
 run leave 2s:rf-3n fire  
 'Get away from the fire!'

<sup>38</sup> Everett and Kern, 1997, p. 11, example (3)

<sup>39</sup> Everett and Kern, 1997, p. 327, example (612)

<sup>40</sup> Everett and Kern, 1997, p. 11, example (1)

This raises the question as to whether or not the idea exists in 'Oro Win. If it does, it may be that direct speech is a construction used in normal discourse and elicitation would not necessarily generate that form. In many cases in Wari the verbalized sentence is the preferred structure but not an obligatory one. It may be that verbalized sentences do not exist in 'Oro Win or that they once did and are no longer used. It has been noted that "the decrease in the frequency of complex sentences in favor of simple sentences might be one aspect of a more general process of simplification taking place in a dying language." (Hill, 1989). Just as some element of the morphology of 'Oro Win have been reduced, so might elements of the syntax be simplified. There is no way of telling, given the available data, if verbalized sentences and indirect speech were ever used by the 'Oro Win. They are not in this corpus. It is, however, worth investigating further.

## CONCLUSION

There is little doubt that the 'Oro Win language is a dying languages. Several examples show the kinds of errors consistent with the errors seen in dying languages. These include agreement errors, morphological reduction, simplification and interference. Agreement errors were seen in person, gender and number. Errors in person agreement were shown where emphatic pronouns did not agree with the VIC. There were examples where INFL and the preposition did not agree in gender with the relevant constituent. The number distinction has been almost completely lost from VICs. Morphological reduction was exhibited in possessives where the possessive morpheme did not occur on many possessed nouns and in adjectives. Simplification in syntax may be the reason that verbalized sentences did not occur in any of the data. Interference from Portuguese was seen in adjectives and possibly in the occurrence of the voiceless interdental fricative [f]. These facts all show that 'Oro Win is in a state of decline. One issue that is still unresolved is how much Wari has affected 'Oro Win. Interference from Wari is more difficult to identify and a much more complicated matter.

No determination has ever been made concerning the relationship between Wari and 'Oro Win and how similar they may have been when 'Oro Win was still a viable language. The data in this analysis suggests that they are remarkably structurally similar but, as noted above, much of the analysis of the 'Oro Win data was done using facts from Wari. There are some differences. Differences in the lexicon is evidence that these languages are distinct in some way. Many words in 'Oro Win and Wari are similar if not identical.

<u>'Oro Win</u>	<u>Wari</u>	<u>English</u>
'arasi	aratji	bone
trajisi'	tarajitji'	ear
topak	topak	mouth
mapak	mapak	corn
tota	tota	garden
sowi'	tjowi	rain
mesem	mitsem	black, to be
tom	tom	burn, to

mi' pin	mi' pin	die, to
tok	tok	drink
kao	kao	eat, to
se	tfe	fire

There is no way to determine if these words have been borrowed or if 'Oro Win and Wari do, in fact, share them. In 'Oro Win, borrowing does occur and this was exhibited in the data when a consultant would say an 'Oro Win phrase but use a Wari word. One of the other consultants would point this out and then provide the correct word. This occurred in sentences like (121) where the Wari word *narima* was used for 'woman' instead of the 'Oro Win word *pirama*.

- (121) ten nain 'itopi narima  
na-in  
weave 3s:rp/p-3n basket woman  
'The woman made a basket.'

There are, however, other words in 'Oro Win that are substantially different from Wari.

<u>'Oro Win</u>	<u>Wari</u>	<u>English</u>
'ykresi	kweretji	flesh
kaota	karawa	animal
kjen	hwara	big, to be
sat	wom	cotton, cloth
fekereme	tarama	man
pirama	narima	woman
tipran	matam	long, to be
mem	paka'	red, to be
maram	tjowry	rotten, to be
jawin	pijo'	star

These lexical differences indicate the 'Oro Win and Wari may not be as similar as much of the data here indicates.

The extent to which Wari has affected 'Oro Win is an interesting problem. The 'Oro Win live among the Wari where Wari is a dominant language. It can thus be assumed that this contact situation, where Wari is spoken constantly while 'Oro Win is known by only six people<sup>41</sup>, has had some affect on the 'Oro Win language. This may be why so many of the 'Oro Win examples are so similar to Wari. But if this is the case, and 'Oro Win is being influenced by Wari, why are the types of errors illustrated here showing up? There is no evidence that these types of errors occur in Wari. If the 'Oro Win are being influenced by Wari, why are they making what are considered errors in Wari? This may occur for two reasons. 1) It may be that 'Oro Win and Wari were once much more dissimilar and the errors indicate

<sup>41</sup> Whether or not they actually speak it anymore is unknown.

that the consultants have failed to learn Wari completely. 2) It may also be that 'Oro Win is very similar to Wari but when the 'Oro Win speakers joined the Wari community they began using primarily Portuguese. There is no doubt that the 'Oro Win consultants are conversant with Wari but they may use Portuguese more<sup>42</sup>. If this is the case then the kinds of errors that have shown up in the 'Oro Win data can be expected to show up in Wari when that language begins to decline. This would be interesting to investigate.

It is clear that more work needs to be done on this language. The facts shown here should be checked with native speakers and further data are needed. Unfortunately there is not a lot of time left. The six remaining speakers are elderly and the language is not being passed on to anyone. This language will likely be extinguished in a matter of years. Hopefully it can be studied more extensively before the remaining speakers are gone.

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<sup>42</sup> I do not know which language, Portuguese or Wari, is spoken more frequently among the Wari.

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