A study of nasality in the Kuikuro language (Carib, Upper Xingu)

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1. Introduction

This research is on the phenomena of nasality and nasalization in Kuikuro, a language belonging to one of the two Southern branches of the Carib family, known as Upper Xingu Carib Language (Meira & Franchetto 2005). It is spoken by 700 people in the south-east of the Xingu Indigenous Land, north of the state of Mato Grosso, Brazil. There are few studies on the subject for the indigenous languages still spoken in Brazil.

The phonological system of Kuikuro:

I. Consonants

	Bilabial	Alveolar	Palatal	Velar	Glottal
Plosive	p	t	ʄ	k	
Fricative		s			h
Flap				ɾ	
Affricate		ʦ			
Lateral		l			
Nasal	m	n	ɲ	ŋ	
Approximant	w				

Note: [ɾ]represents, temporarily, the uvular flap.

Vowels

	Front	Central	Back
High	i	ɨ	u
Mid	e		o
Low		a	

The Data

ito huẽgü 'big fire'
eke huẽgü 'big snake'
ãũ 'louse'
ũãũgü 'my louse'
uagi 'jatoba tree'
uãgi 'worker'
timuho 'ten'

aŋuN u - aŋuN - tagi uaŋuⁿdagi
'dance' → 1 dance CONT → 'I'm dancing'

2. Nasality in Kuikuro (Perception)

Hypothesis: Nasalization of contiguous vowels to [h]: no systematically. Exception: Morpheme few like the locative suffix **-hõ**

a) Not always, but with high frequency, nasal vowel sound followed by stop and nasal passage homorganic: [ãᵐbisa] 'a star' [ãⁿdɛ] 'today'

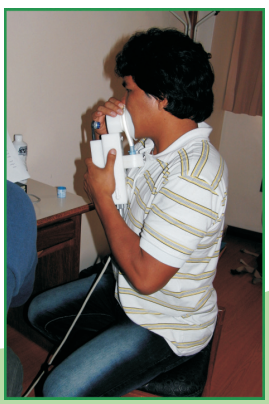
b) Underspecified nasal floating boundary between morphemes, pre-nasalization and voicing of the consonant in the attack of the following syllable: N+b →ᵐb N+t →ⁿd N+ts →ⁿdz N+k → ᵑkg

c) Fall of intervocalic velar nasal resulting in accentuated vowel nasalization (diachronic process): tuŋa → tuã 'water'

d) Very nasalized diphthongs e triphthongs;

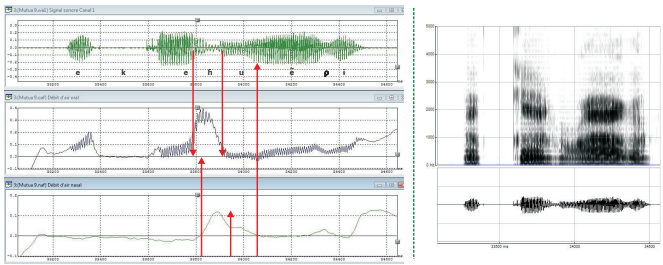
3. Material & Methodology

Experimental measurements with the use of the equipment called EVA (Evaluation Vocale Assistée), an aerodynamic device that helps the researcher to obtain quantified data to analyze various aspects and parameters involved in the production of speech and the develop explanations based on experimental data. The corpus was recorded with two speakers Kuikuro in Rio de Janeiro, December 2009.



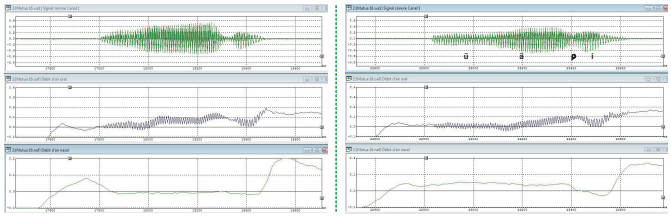
4. Results

4.1 - Glottal fricative [ɦ]



[eke ɦuẽɾɨ]
'*big snake*'

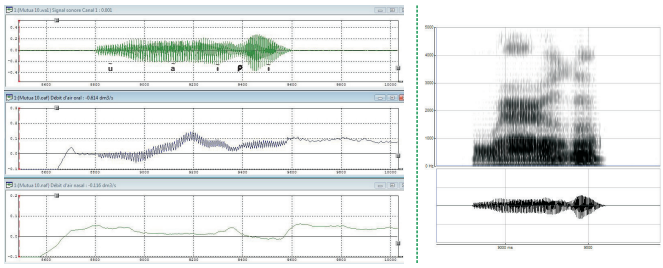
4.2 - Nasal diphthong



[uaɾi]
'*jatoba tree*'

[ũãɾi]
'*worker*'

4.2 - Nasal triphthong



[ũãɨ̃ɾɨ̃]
'*my louse*'

5. Discussion

Kuikuro laryngeal fricatives data show that oral and nasal airflows are not synchronized. This suggests that the oral constriction and velum gestures are in sequence. The closing gestures also show a different pattern.

The modulating of nasal airflow in nasal diphthongs and triphthongs are likely the consequence of a change in the size of the end constriction, rather than a change in the velum aperture.

6. Bibliography

FRANCHETTO, B. (1995). "Processos Fonológicos em Kuikúro: uma Visão Auto- Segmental". In: Estudos Fonológicos das Línguas Indígenas Brasileiras. Leo Wetzels (org). Rio de Janeiro: Editora UFRJ. p. 53-84.

Meira, S. and Franchetto, B. (2005). The Southern Cariban Languages and the Cariban Family. International Journal of American Linguistics, vol 71, n. 2. 127-190.

7. Acknowledgements

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