

## SOCIOLINGUISTIC EFFECTS IN CONSONANT PREVOCALIZATION IN MAXAKALÍ

**Painel Temático:** 4b) Estudos fonéticos – Fonética e Sociolinguística

Maxakalí is a Macro-Jê stock language, from the Maxakalí family, spoken by about 2000 people in Mucuri River Valley, northeastern Minas Gerais, Brazil. Composed by ten vowels (five orals and five nasals), two laryngeals and eight consonants (four unvoiced stops and four nasal-voiced stops), it has a rich phonological system, with phenomena involving, for example, nasal spreading, alternation between nasal and voiced consonants and consonantal prevocalization. Although the latter is common in world's languages (Operstein, 2010), Maxakalí is exceptional as all of its consonants may become prevocalized in coda position. Consonantal prevocalization is typologically common in liquids, but as Maxakalí does not have neither rhotics nor laterals in its inventory, this fact becomes interesting enough to deserve a closer look.

One fact about prevocalization in Maxakalí is that one same speaker may vary between a complete consonantal realization up to a complete vocalic allophone of coda, passing by a vowel + consonantal realization in a *continuum*. This variation occurs in the speech of both men and women and by people of all ages.

### Aims

At first, this variation seemed to be random, as apparently no one was categorical on their choices. Our main objective in this study, then, is to observe if there are any sociolinguistic factors interacting with consonantal prevocalization in Maxakalí. More specifically, we aim to analyze the interaction of sex and age with the multiples possibilities of coda vocalization. As this society is, at least nowadays, not divided into clans, we have not considered this as a plausible interfering factor, as well as, economic factors, because most of Maxakalí find their subsistence in hunting, agricultural activities and government assistance, making this society to be very homogeneous (at least economically).

### Methodology

We recorded 18 individuals, separated by sex and three age strata (youngsters, adults and elders), corresponding roughly to each generation gap in that society. The recordings took place in the Aldeia Verde, a recently created village with less than 10 years of existence and inhabited by 338 Maxakalí. Each individual had to do two tasks: on the first one, one had to look at a picture of an animal, plant or body part and had to say what he/she saw. The second task had the researchers asking the subjects to correct their pronunciation as they were “learning” Maxakalí and wanted to have a proper pronunciation. Thus, the researcher said a sentence and the individual had to repeat it. The tasks were designed this way to enable the verification of which is the prestige form

within this variation, with the first task being more spontaneous and informal, while the second one was formal and required the individuals to reflect about their own language as they were “teaching” the researchers.

After the data collection, we proceeded to an acoustic analysis to verify in the spectrogram which were the realizations of each token. We run statistical tests such as chi-square and a logistic regression with a mixed effects model, to see if these two extralinguistic factors (and some linguistic ones) were, in fact, involved in the consonant prevocalization.

## **Results**

What we found is that both sex and age are relevant to prevocalization in Maxakalí, with older speakers being more conservative, in the sense of preserving consonantal realizations. In this group, males tended to be more conservative than women. In other age groups, sex seemed not to be a strong factor. Younger people were more prone to prevocalize more than adults, but these two groups were much closer between themselves if compared with elders. It was clearly an apparent time variation. In order to see if this phenomenon is a change in progress, we recurred to the Uniformitarianism Principle (Labov, 1972), which says that principles that were active in the past are still present in the linguistic structure of a language. Using the data collected by us, regarding the prevocalization and consonantal place of articulation, and the data found in 19<sup>th</sup> century wordlists collected by travelers, we found the same patterns of prevocalization, indicating that this is probably a sound change in progress.