1. Introduction

- Karajá presents systematic differences between female and male speech. Such peculiarity drew the attention of ethnographers and linguists early on, but remains largely misunderstood.
- Ehrenreich (1948[1894]), the first to describe this phenomenon, does it in the following terms:

  The most notable peculiarity [of the Karajá language] is the existence of a special language for the men and another one for the women, more or less like it happens among the Guaiakuru and Chikitano. However, only a few words are totally different; in the majority of them, only slight modification in the form is noticed. For example, in those cases where, in the male dialect, two vowels follow each other, a k is inserted between them in the female dialect. Thus,

  ‘rain’ ♂ biū, ♀ biku
  ‘corn’ ♂ mahī, ♀ maki

  At times the female word simply has one additional final syllable, etc. It is likely that the women have simply preserved an older form of the idiom. [Ehrenreich 1948:29, my translation; emphasis added]

- The differences between the female and male ‘dialects’ in Karajá have been further studied by Fortune and Fortune (1975) and, more extensively, by Borges (1994, 1997).
- Corroborating Ehrenreich’s intuitions, both Fortune and Fortune (1975) and Borges (1994) consider female speech as more conservative.
- Ribeiro (2012), on which this talk is based, provides a more thorough description of the phenomenon, taking into consideration for the first time data from the four different dialects and approaching facts that were not mentioned in previous studies.

2. Female versus male speech

2.1 k-dropping

- The main difference, as Ehrenreich points out, is the absence, in the male speech, of a velar stop occurring in the corresponding female speech form
This a productive process, applying even to loanwords:

(2) ♀ kawaru  δ awaru  ‘horse’ (from Portuguese cavalo)
♀ kubeda  δ obeda  ‘blanket’ (Portuguese coberta)
♀ bõka  δ bõa  ‘mango’ (Portuguese manga)

2.2 Vowel fusion

• The deletion of the velar stop can make possible the fusion between vowels, the result being that the male forms may have a smaller number of syllables a fact also noticed by Ehrenreich.
• If the k-dropping rule results in two identical contiguous vowels, they undergo a process of crasis:

(3) ♀ daka  δ da  ‘to take off’
♀ hâlokœ  δ hâloœ  ‘jaguar’
♀ kohokœ  δ ohôœ  ‘to cross’
♀ ruku  δ ru  ‘night’
♀ aka  δ a  ‘to run’
♀ rukudô  δ rudô  ‘to thrust’

• When the deletion of /k/ results in a sequence of /a/ plus the high back vowel /u/, both vowels are fused, resulting in the mid back vowel /o/. If the k-dropping rule results in a sequence of /a/ plus the mid back vowel /o/, the vowel /a/ is dropped:

(4) ♀ beraku  δ bero  ‘river’
♀ rakufi  δ rofi  ‘to eat’

(5) ♀ wakôre  δ wôre  ‘a type of bird’
♀ rahakôre  δ rahôre  ‘to turn over’

• If /k/ is deleted between the mid back vowel /o/ and the high back vowel /u/, the latter is dropped:
2.3 Schwa assimilation

- In cases in which the deletion of the velar stop results in a sequence of a schwa followed by another vowel, the schwa assimilates the features of the following vowel:

(7) \( \text{♀} \ dəka \quad \text{♀} \ dəa \) ‘to tie’
\( \text{♀} \ ṭu \quad \text{♂} \ ṭu \) ‘gourd’
\( \text{♀} \ ẗdəke \quad \text{♂} \ ẗdəee \) ‘to become hot’
\( \text{♀} \ ṭake \quad \text{♂} \ ṭee \) ‘dative postposition’
\( \text{♀} \ əko \quad \text{♂} \ əo \) ‘to be burnt’

2.4 Morphological consequences

- The rules of vowel fusion described above can apply across morpheme boundaries, a fact that can render the morphological segmentation less obvious in male speech:

(8) \( \text{♀} \ rakubədərəri \quad \text{♂} \ robədərəri \)
\( \emptyset \text{-r-a-kubədə}=\text{r-er} \quad \emptyset \text{-r-a-ubədə}=\text{r-er} \)
3-CTFG-INTR-spread=CTFG-PROGR 3-CTFG-INTR-spread=CTFG-PROGR
‘They are spreading.’ ‘They are spreading.’

(9) \( \text{♀} \ rakədəkərəri \quad \text{♂} \ rəduərəri \)
\( \emptyset \text{-r-a-kədəkə}=\text{r-er} \quad \emptyset \text{-r-a-ədəkə}=\text{r-er} \)
3-CTFG-INTR-go.up=CTFG-PROGR 3-CTFG-INTR-go.up=CTFG-PROGR
‘S/he is going up.’ ‘S/he is going up.’

2.5 On the conservative nature of female speech

- The postulation of the female speech as the more conservative one seems to be easily arguable. The main consideration is predictability: that is, whereas it is generally possible to predict the male form vis-à-vis the female form, the inverse does not occur.
- There are several examples in which sequences of vowels occur both in the female and the male speech, such as ♀♂ riu ‘hunt’ and ♀♂ uahit ‘medicine’, which makes an alternative rule of k-insertion unlikely.
- Considerations of predictability are even more evident in cases where there is vowel fusion: in comparing ♀ beraku ‘river’ with ♂ bero, it is rather clear that the latter can be derived from the former, but not vice-versa.

2.6. Lexical differences: interjections

- In some cases, the forms occurring in the male and female speech may be totally different words. That is the case of the vocative interjections (♀ wu, ♂ ki) and of the interjections expressing surprise or admiration (♀ bi, ♂ bebe).

2.7 Exceptions, obligatoriness, and variation

- There are differences concerning the degree of obligatoriness with which the differentiation takes place—a fact that was not mentioned by previous authors.
- According to this criterion, words presenting a velar stop may be classed into three different categories: (a) absolute exceptions, that is, words for which the deletion of /k/ does not occur at all; (b) words for which the k-dropping rule is optional; (c) words for which the k-dropping rule is obligatory. Tables 3, 4, and 5 below show examples of members of each class:

**Table 1. Class a: absolute exceptions to the rule of k-dropping**

<table>
<thead>
<tr>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>kai</td>
<td>kai</td>
</tr>
<tr>
<td>ke</td>
<td>ke</td>
</tr>
<tr>
<td>ki</td>
<td>ki</td>
</tr>
<tr>
<td>kore</td>
<td>kore</td>
</tr>
<tr>
<td><em>raki</em></td>
<td><em>raki</em></td>
</tr>
</tbody>
</table>

**Table 2. Class b: words for which the rule of k-dropping is optional**

<table>
<thead>
<tr>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>dɔka</td>
<td>dɔka, daa</td>
</tr>
<tr>
<td>dɔki</td>
<td>dɔki, dit</td>
</tr>
<tr>
<td>kɔdɔde</td>
<td>kɔdɔde, ødɔde</td>
</tr>
<tr>
<td>kɔ hoje</td>
<td>kɔ hoje, ø hoje</td>
</tr>
<tr>
<td>dɔki</td>
<td>dɔki, dit</td>
</tr>
<tr>
<td>kɔʁ</td>
<td>kɔʁ, øʁ</td>
</tr>
<tr>
<td>kɔʁbi</td>
<td>kɔʁbi, øʁbi</td>
</tr>
<tr>
<td>dɔke</td>
<td>dɔke, dee</td>
</tr>
<tr>
<td>kɔ-</td>
<td>kɔ-, ø-</td>
</tr>
</tbody>
</table>

**Table 3. Class c: words for which the rule of k-dropping is obligatory**

<table>
<thead>
<tr>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>dikarɔ</td>
<td>diarɔ</td>
</tr>
</tbody>
</table>

‘I’
2.8 Use of female speech by men, and vice-versa

- As in Koasati (Haas 1964) and Yana (Sapir 1949), female and male speakers can use each other’s speech forms when ‘impersonating’ a character of the opposite sex, such as when narrating a story or baby-sitting.
- The use of female speech by a male speaker is illustrated by the sentence below, heard from a father addressing his baby daughter in baby-talk. Notice that ♀ $d¿ikarš$ ‘I’, ♀ $ka-$ ‘first person prefix (irrealis)’, and ♀ $raku$ ‘to eat’ are exclusively female forms.

(10) $wáha$, $d¿ikarš$ $karrakufikem̃rerı!$
    waha, $d¿ikarš$ ka-r-i-raku[i]=ke=bɔ=r-i
    my.father-VOC I 1-CTFG-TRANS-eat=POT=CONV=CTFG-PROGR
    ‘Daddy, I want to eat!’

2.9 Hypercorrection

- When imitating or quoting someone of the opposite sex, men tend to exaggerate features of the female speech (and vice-versa).
- In a first, experimental edition of the gospel according to St. John, in the famous passage in which Jesus talks to the Samaritan woman by the well (John 4:7-9), a [f] was inserted in the word $Samaria$ in the quotation of the Samaritan woman’s speech (Fortune & Fortune 1972:14), by analogy with forms such as ♀ $ritfa$ (♂ $ria$) ‘to walk’:

7 Tahe $Samaria$ Mahâdu hâwyy-ô dobehede […]
    ‘A woman from Samaria came down [to draw water].’
    […]
9 Tahe hâwyy rarybere: kai Judeu Mahâdu tate, Jikarỹ $Samaritxa$
    Mahâdu rare. […]
    ‘Then the woman said: you are a Jew, I am a Samaritan.’

3. Social correlates: $idgôi$ vs. $ifô$

- As Fortune & Fortune (1975) point out, male vs. female speech distinctions are part of a wider set of social rules concerning gender differentiations, very important in Karajá society.
- Besides common roles traditionally associated with each gender (women as ceramists, men as wood carvers; women as manufacturers of delicately woven baskets, men as
manufacturers of rough and sturdy carrying baskets; etc.), social space is clearly delineated geographically as well:

The exclusively-male ritual spaces, where the main festivals are planned and performed, are called idsoi-da ‘the place of the guys’, which is strictly forbidden to women (Toral 1992). Although the women also have their own ritual space, the hirari-da (hirari ‘young girl’), such space is not exclusively for them, as men are free to wander around. While the male ritual space is actively defined as the one where rituals take place and women are forbidden, the female ritual space is passively defined: it is the place where they witness, mostly as mere expectators, the rituals taking place. As Toral (1992:68) points out, “strictly speaking, the only space that truly belongs to the women is the interior of the houses.” The parallels between such social restrictions and language use are transparent: while male speech is characterized by a higher degree of variation and flexibility (since many k-preserving forms can be optionally used by men), female speech is characterized by a higher degree of rigidity, reflecting women’s general lack of social mobility in Karajá society.

3.1 Age groups and ‘hyper-male’ speech

- Certain morphemes, such as -hVkś ‘augmentative,’ may sporadically occur without the velar stop in male speech, although that is considered ‘wrong’ by most speakers.
- Young men, particularly in their teens and early twenties, are at the vanguard of this ‘hyper-male’ speech, often to the disapproval of their older peers, who criticize their exaggerations.
- An extreme, oft-mentioned example is the radical adaptation of Portuguese Coca-Cola into ña ológica [ñá ológica].
- As with other markers of social belonging, such as body-painting and ornaments, the use of language as an emblem of masculinity seems to fade as one enters mature age, retiring from the public sphere. A number of well-respected chiefs and shamans (such as the late Watau, from Santa Isabel do Morro, and Maurehi, from Aruanã) are said to have indulged in adopting female speech forms, in their older years, without incurring any censorship from their communities.
- An even more striking parallel between linguistic behavior and other marks of social belonging concerns the use of labrets, a habit now largely abandoned by the Karajá. As described by Donahue (1982:132-3; italics added), upon their initiation (“usually around twelve or thirteen”), during the hedohokś ‘big house’ festival,

“the boys’ lower lip is pierced and a lip plug is placed in the hole. For the young boys the lip plug is a small stone; as they reach maturity, the plug is longer and longer and is made of wood. As a man reaches his physical prime, the lip plug may reach down to his chest. As he gets older, he uses a smaller and smaller plug, until for old men there is nothing left but a small wood plug that does not even come out of the hole. The Karajá lip plug seems to be a graphic symbol of the rise and fall of potency.”

4. Possible diachronic origins

4.1 Language contact and the ‘Xavánte hypothesis’

- The development of male and female speech distinctions such as the ones occurring in Karajá may, in several cases, be the result of situations of language
contact. The classical example of such a situation occurs in the so-called Island-Carib language (Arawak), mentioned as early as the 17th century (Jespersen 1964:237, Taylor and Hoff 1980:301)

- Rodrigues (1999) suggests for Karajá a scenario very similar to what may have happened in Island-Carib:

Perhaps in the past the women of one dialectal group of Karajá could have been subjugated by warriors speaking another language, say one lacking velar stops but having glottal stops. Such warriors could have killed all Karajá male adults, taken their place as husbands and learned the Karajá language from their new wives, but substituted their glottal stops for the velar stops of the women. This bad pronunciation by the new masters of the group would then have been maintained through the following generations and spread to other dialectal groups. In the course of time, the articulation of the glottal stop would have weakened and finally disappeared, giving place to vowel sequences and contractions. [...] It happens that the neighboring language Xavante has historically undergone the systematic change of velar consonants into glottal stops. [...] This language, which does not show a similar difference correlated with the sex of the speakers, may well be the source of the difference between Karajá men’s and women’s speech. [Rodrigues 1999:177-8]

- This imaginative hypothesis runs into a series of obstacles, of course: in addition to the lack of lexical evidence of intimate contact; early Karajá wordlists, collected by Castelnau (1850), already show k-dropping forms, whereas the first Xavante vocabularies, collected by Pohl (1832) and by Castelnau (1850) demonstrate that the rule transforming *k into a glottal stop had not taken place yet.

### 4.2 Internal factors: a hypothesis on the origins of male v. female speech distinctions

- It is not uncommon for phonological processes to be treated differently according to the gender of the speaker (Labov 2001).
- When one compares the consonantal inventory of Karajá with that of Proto-Jê (Table 5 below), an eye-catching difference is the gap, in Karajá, in the inventory of voiceless stops: Karajá lacks both a /p/ and a /t/.

Table 4. Consonantal inventory of Karajá

<table>
<thead>
<tr>
<th></th>
<th>(tʃ)</th>
<th>k</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>d</td>
<td>(dʒ)</td>
</tr>
<tr>
<td>d</td>
<td>0</td>
<td>(ʃ)</td>
</tr>
<tr>
<td>l</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>w</td>
<td>r</td>
<td></td>
</tr>
</tbody>
</table>
Table 5. Proto-Jê phonological inventory (Ribeiro 2005)

<table>
<thead>
<tr>
<th>p</th>
<th>t</th>
<th>k</th>
</tr>
</thead>
<tbody>
<tr>
<td>m</td>
<td>n</td>
<td>ŋ</td>
</tr>
<tr>
<td>s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>w</td>
<td>r</td>
<td>j</td>
</tr>
</tbody>
</table>

- Lexical comparisons (Davis 1968, Ribeiro 2005) indicate that Karajá underwent a systematic process of voiceless-stop lenition. Before /r/, the process of lenition would have resulted in the complete deletion of the consonant (21); before a vowel, *p and *t would have become the approximants /w/ (Proto-Jê *pər‘foot’ :: Karajá wa) and /r/, respectively.

(11)

<table>
<thead>
<tr>
<th>Proto-Jê</th>
<th>Karajá</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. *krə</td>
<td>ra</td>
</tr>
<tr>
<td>b. *kra</td>
<td>ra</td>
</tr>
<tr>
<td>b. *pri</td>
<td>ri</td>
</tr>
<tr>
<td>c. *prəm</td>
<td>rəbə</td>
</tr>
</tbody>
</table>

- Curiously enough, the only voiceless stop in Karajá, /k/, happens to be the one which is often deleted in male speech—hardly a coincidence, given the apparent overall tendency towards voiceless stop lenition just described.
- If a similar process of lenition had affected *k before vowels to the same extent in which it affected both *p and *t, a likely reflex would have been the velar approximant *u̯, a rare and diachronically unstable phoneme which could have been further weakened, giving rise the alternation between /k/ and zero found in Karajá today.
- Thus, there seems to be rather compelling (albeit circumstantial) evidence for an internal (rather than contact-induced) origin for the differentiation between male and female speech in Karajá, although the lack of comparative evidence may never allow for a conclusive explanation.
- Further possibility: dialect borrowing

5. Possible additional topic
- The situation in Javaé