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The prefix *u-* in Karirí (with some Macro-Jê notes)¹

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1. Introduction. Karirí (or Kirirí) was once spoken in northeastern Brazil, in what are today the states of Bahia, Sergipe, and Alagoas. Two of its dialects were fairly well-documented by 17th century missionaries—Kipeá (Mamiani 1877[1699], 1942[1698]), on which this paper is based, and Dzubukuá (Nantes 1896[1709]). Other dialects (Sabujá, Pedra Branca) are only known through short wordlists (Martius 1867: 215-219).² The language was still spoken until at least the first half of the 20th century. There are nowadays around four-thousand ethnic Karirí (including Kirirí, Karirí-Xokó, and Xukurú-Karirí), who are, however, Portuguese monolinguals (Instituto Socioambiental 2000: 535-538). Until very recently some members of the tribe still remembered isolated everyday words from their original language (Bandeira 1972, Meader 1978) and, in some communities, isolated words of the Karirí language are still preserved in traditional religious ceremonies.

Karirí has been included in the Macro-Jê stock (Rodrigues 1986, 1999), although in rather hypothetical terms. However, in spite of the lack of comprehensive lexical comparison to date, recent studies have shown very suggestive cases of grammatical affinities between Karirí and other Macro-Jê languages. One of them, first mentioned by Rodrigues (1992a:386), is the existence, in Jê, Maxakalí, Boróro, and Karirí, of an apparently cognate morpheme marking alienable possession. In most languages, this morpheme is an independent noun which can be translated as ‘thing’, while in Karirí it developed into a prefix. The probable cognates are *õ*, in Northern Jê (Panará, Kayapó, Timbira, etc.), *yõŋ* ~ *?õŋ* ~ *?õ* in Maxakalí, *o* in Boróro, and *u-* in Karirí.

However, the evidence for the existence of this morpheme in Karirí then provided was quite speculative. The main purpose of the present work is to provide further support for the existence of the marker of alienable possession in Karirí, taking into consideration a number of pieces of evidence which were not mentioned in previous works. As I intend to suggest in this paper, a more careful look at the Karirí data reveals rather remarkable similarities with other languages of the Macro-Jê stock, for which a more likely explanation would reside in common genetic inheritance, rather than areal diffusion or coincidence.

2. A few remarks on Karirí morphosyntax. Karirí is typologically unusual among the Macro-Jê languages (most of which are consistently SOV) in that it is verb-initial, with prepositions instead of postpositions, and possessed-possessor order in genitive constructions (1). However, there is evidence that Karirí underwent a process of *typological rearrangement*. This is clearly suggested by the ‘ambiguous’ behavior of adpositions, genitive constructions, and compounds.

Kipeá (Mamiani 1877: 62)

- (1) *Wi-cri* *Pero mo* *s-era* *Paulo.*
go-PAST Pedro LOC 3-house Paulo
‘Pedro went to Paulo’s house.’

Adpositions precede nominal objects (2b), but follow pronominal ones (2a). Possessed nouns precede their nominal possessors (3a), but are preceded by pronominal possessors (3b-c; also see Table 1).

(2) **Kipeá** (Mamiani 1942: 171, 38)

- | | | | | |
|----|-----------------|----|---------------------|--------------|
| a. | <i>hi-dzene</i> | b. | <i>i-dzene</i> | <i>nhewo</i> |
| | 1-EVIT | | 3-EVIT | devil |
| | ‘against me’ | | ‘against the devil’ | |

(3) **Kipeá** (Mamiani 1877: 63; 1942: 29)

- | | | | | | | |
|----|-----------------|--------------|----|-----------------|----|--------------|
| a. | <i>s-era</i> | <i>Paulo</i> | b. | <i>d-era</i> | b. | <i>k-era</i> |
| | 3-house | Paulo | | 3.COR-house | | 1PL-house |
| | ‘Paulo’s house’ | | | ‘his own house’ | | ‘our house’ |

In addition, relics of an older SOV pattern can still be found in compounds. Mamiani (1877: 51-2) describes two kinds of compounding in Kipeá, *composição inversa* ‘inverse compounding’ (4) and *composição direta* ‘direct compounding’ (5). The former (true morphological compounding, a likely retention) follows the order possessor-possessed, whereas the latter (syntactic juxtaposition, a likely innovation) follows the order possessed-possessor:

- | | | | | | | |
|-----|----|----------------|----|------------------|----|----------------|
| (4) | a. | <i>i-po-cu</i> | b. | <i>byri-baya</i> | c. | <i>boro-po</i> |
| | | 3-eye-liquid | | foot-nail | | arm-eye |
| | | ‘tears’ | | ‘toe nail’ | | ‘elbow’ |
-
- | | | | | | | |
|-----|----|-------------------|----|------------------|----|------------------|
| (5) | a. | <i>i-de-hi-nu</i> | b. | <i>i-de-e-nu</i> | c. | <i>i-de-i-nu</i> |
| | | 3-mother-1-child | | 3-mother-2-child | | 3-mother-3-child |
| | | ‘my wife’ | | ‘your wife’ | | ‘his wife’ |

2.1 Person marking. Nouns, verbs, and adpositions share essentially the same inflectional properties, which seem to be limited to person marking. The same sets of pronominal bound forms mark the possessor, with nouns, and the absolute argument, with verbs, in addition to adpositional objects. Mamiani (1877) distributes all nominal, adpositional, and verbal stems into five different ‘declensions’ (Table 1), according to differences in person marking. Mamiani’s 5th declension will be of special interest for the present discussion, since stems formed with the prefix *u-* will belong to it.

Table 1. Mamiani’s declensions (the morphological segmentation follows Rodrigues 1994)

person	1 st declension	2 nd declension	3 rd declension	4 th declension	5 th declension
	<i>padzu</i> ‘father’	<i>ambe</i> ‘payment’	<i>ebaya</i> ‘nail’	<i>bate</i> ‘dwelling’	<i>ubyro</i> ‘belly’
1 st .	<i>hi-padzu</i>	<i>hi-ambe</i>	<i>hi-dz-ebaya</i>	<i>hi-bate</i>	<i>dz-ubyro</i>
2 nd	<i>e-padzu</i>	<i>e-y-ambe</i>	<i>e-dz-ebaya</i>	<i>e-bate</i>	<i>a-byro</i>
3 rd	<i>i-padzu</i>	<i>s-ambe</i>	<i>s-ebaya</i>	<i>si-bate</i>	<i>s-ubyro</i>
1PL.INCL	<i>ku-padzu-a</i>	<i>k-ambe, k-ambe-a</i>	<i>k-ebaya</i>	<i>ku-bate-a</i>	<i>k-ubyro-a</i>
3.COR	<i>di-padzu</i>	<i>d-ambe</i>	<i>d-ebaya</i>	<i>di-bate</i>	<i>d-ubyro</i>

As shown in Table 1, while stems belonging to the 1st declension—which is by far the most robust lexical class—take the 3rd person marker *i-*, 2nd, 3rd, and 5th declension

stems take the prefix *s-*. This allomorphy cannot be stated in phonological terms, since 1st declension stems also occur with vowel-initial stems. Such morphological idiosyncrasy finds parallels in several other Macro-Jê families (Karajá, Boróro, Jê, and Ofayé), where a vocalic 3rd person prefix (corresponding to Karirí *i-*) is in complementary distribution with a consonantal one (in general an alveolar consonant, corresponding to Karirí *s-*): Karajá *d-era* ‘his forearm’, *i-wa* ‘his foot’; Panará *s-akoa* ‘his hand’, *ĩ-te* ‘his leg’; etc. (Ribeiro 2002, Rodrigues 1994). In all the languages discussed below (except Maxakalí, where the distinction between the two lexical classes was lost), the ‘marker of alienable possession’ will belong to the class which takes the consonantal prefix—a ‘shared aberrancy’ which further supports the hypothesis of genetic relationship among the languages considered in this paper.

2.2 Classifiers. Karirí makes extensive use of classifiers (Mamiani 1877: 59-61, Rodrigues 1997). Besides the existence of twelve possessive classifiers (Table 2),³ whose use is illustrated in the examples (6a) and (6b) below, there are also twelve classifying prefixes (Table 3), which occur with quantifying words (7) and adjectives of consistency, shape, and color:

(6) **Kipeá** (Mamiani 1877: 61)

- | | | | | | | | |
|----|----------------------|-----------|---------------|----|-----------------------------------|-----------|---------------|
| a. | <i>dz-upodo</i> | <i>do</i> | <i>sabuca</i> | b. | <i>dz-uba</i> | <i>do</i> | <i>sabuca</i> |
| | 1-roasted | INSTR | chicken | | 1-gift | INSTR | chicken |
| | ‘my roasted chicken’ | | | | ‘my chicken (received as a gift)’ | | |

(7) **Kipeá** (Mamiani 1942: 58)

- | | | | | | |
|-------------|---|--------------|----------------|-------------|---------------|
| <i>coto</i> | <i>hietçã</i> | <i>do</i> | <i>bu-bihe</i> | <i>i-bu</i> | <i>masikí</i> |
| steal | I | INSTR | CLAS-one | 3-ear | corn |
|
 |
 |
 |
 |
 |
 |
| <i>do</i> | <i>bu-bihe</i> | <i>erumu</i> | <i>boho</i> | | |
| INSTR | CLAS-one | pumpkin | or | | |
| | ‘I stole an ear of corn, or a pumpkin.’ | | | | |

Table 2. Possessive classifiers in Karirí (Mamiani 1877: 59-61; Rodrigues 1997: 72-74)⁴

<i>enki</i>	‘domestic animals’
<i>uapru</i>	‘gathered (non-cultivated) food’
<i>ude</i>	‘cooked food’
<i>upodo</i>	‘roasted food’
<i>udje</i>	‘produce (except manioc) ⁵ ’
<i>uanhi</i>	‘manioc’
<i>ubo</i>	‘fruits (gathered unripe)’
<i>uito</i>	‘things that have been found’
<i>u-boronunu</i>	‘war booty’
<i>ukisi</i>	‘things received in share’
<i>uba</i>	‘gifts from outsiders’
<i>e</i>	‘things one has carried’

Table 3. Classifying prefixes (Mamiani 1877: 53; Rodrigues 1997: 69-72)

<i>be-</i>	‘hills, dishes, stools, foreheads, etc.’
<i>cro-</i>	‘birds, stones, stars, and round objects (such as beads, fruits, eyes, etc.)’

<i>cru-</i>	'liquids and rivers'
<i>epru-</i>	'clusters and bunches'
<i>he-</i>	'sticks, legs, and wooden objects'
<i>ho-, hoi-</i>	'ropes, vines, threads, snakes'
<i>ya-</i>	'iron objects, bones, and pointed things'
<i>mu-, mui-</i>	'edible roots'
<i>nu-</i>	'holes, wells, mouths, fields, valleys, fenced spaces'
<i>ro-</i>	'clothes, fabric, and furs'
<i>woro-</i>	'ways, conversations, speeches, stories'
<i>bu-</i>	'houses, arrows, containers, corn-cobs, and living beings but birds' [also the generic classifier]

2.3 Ergativity. Karirí is an ergative language (Mamiani 1877; Larsen 1984). Nominal absolutive NPs follow immediately the verb and are not morphologically marked, while nominal ergative arguments are marked by the preposition *no* (8):

- (8) **Kipeá** (Mamiani 1877: 63)
Pa-cri Paulo no Nhiho mo d-era.
 kill-PAST Paulo ERG Indian LOC 3.COR-house
 'The Indians killed Paulo in his own house.'

Pronominal absolutive arguments can be expressed by a series of independent pronouns or by a series of bound morphemes attached to the verb (the same series listed in Table 1 above). Pronominal ergative arguments are marked by the adposition *na*,⁶ which also takes the same series of bound morphemes listed in Table 1 above.

- (9) **Kipeá** (Mamiani 1942: 164)
 a. *Waicutçu ewatçã hi-nha mo i-dze Padzu...*
 baptize you 1-ERG LOC 3-name father
 'I baptize you in the name of the Father...'
 b. *A-ca do e-waicutçu hi-nha mo yebedzu Tupã?*
 2-want INSTR? 2-baptize 1-ERG LOC water God
 'Do you want me to baptize you?'

3. A Macro-Jê marker of alienable possession. One of the few morphological pieces of evidence for the genetic relationship among some of the languages of the Macro-Jê stock, pointed out by Rodrigues (1992: 386), is the existence, in Jê, Maxakalí, Boróro, and Karirí, of an apparently cognate morpheme marking alienable possession—a generic noun which can generally be translated as 'thing'. The probable cognates are *õ*, in Northern Jê (Panará, Kayapó, Timbira, etc.), *yõŋ ~ ʔõŋ ~ ʔõ* in Maxakalí, *o* in Boróro, and *u-* in Karirí. The use of this morpheme is illustrated by the examples below, from Panará and Parkatêjê (Northern Jê) and Boróro:

- Panará** (Dourado 2002: 97)
 (10) a. *mara y-õ koa* b. *s-õ koa*
 he REL-POS house 3-POS house
 'his house' 'his (own) house'

- (11) **Parkatêjê** (Ferreira 2001: 150)
- | | | | | | |
|----|------------------|-------------|----|--------------|-------------|
| a. | <i>Piare j-õ</i> | <i>hêti</i> | b. | <i>h-õ</i> | <i>hêti</i> |
| | Piare REL-thing | spider | | 3-thing | spider |
| | 'Piare's spider' | | | 'his spider' | |
- (12) **Boróro** (Crowell 1977: 178)
- | | | | | | |
|----|--------------|-------------|----|------------|-------------|
| a. | <i>i-n-o</i> | <i>tori</i> | b. | <i>Ø-o</i> | <i>tori</i> |
| | 1-REL-POS | rock | | 3-POS | rock |
| | 'my rock' | | | 'his rock' | |

3.1 The marker of alienable possession in Karirí. The evidence then presented by Rodrigues for the existence of the 'marker of alienable possession' in Karirí was, however, much less compelling than the one shown for the other languages. As we have seen, there are twelve possessive classifiers in Karirí (Table 2). Since the great majority of these classifiers begin with *u-*, Rodrigues (1992) suggests that this *u-* would be a fossilized prefix cognate with Jê *õ*, "to which other, more specific morphemes were added."

Although this hypothesis was not further examined by Rodrigues, the occurrence of a segmentable *u-* seems to be obvious in the case of the classifier stem for 'war booty', whose basic form is *boronunu* (Mamiani 1877:22); when preceded by a pronominal possessor, this stem requires the prefix *u-*: *dz-u-boronunu do ro* 'my clothes, which were obtained as war booty' (Mamiani 1877:60). As for the other possessive classifiers, Rodrigues's hypothesis still needs to be investigated upon the examination of the remaining Karirí corpus.

However, a more careful look at the data reveals that the distribution of the prefix *u-* in Karirí is much wider and straightforward than initially suggested by Rodrigues.⁷ Thus, as described by Mamiani (1877: 25), some stems—such as *su* 'fire'—require the use of a prefix *u-* "when one wants to declare the possessor":

"A esta [quinta] declinação se reduz o nome *Isù*, fogo ou lenha, que usando-se ordinariamente pela primeira Declinação, quando se quer declarar o possessor da lenha, se usa por esta quinta Declinação, & então perde o I natural na composição com os artigos: v. g. *Dzusù*, minha lenha; *Asù*, tua lenha; *Susù*, sua lenha. E do mesmo modo se declina algum nome semelhante, que a praxe ensinará melhor." [Mamiani 1877, 25]

The morphological behavior of this stem in Karirí is strikingly similar to what happens in Panará, for example. In this language, the citation form of the stem 'fire' is *isí* (Dourado 2001). The *i-* is dropped, however, when the stem is preceded by a possessor. As in Karirí, this stem cannot be directly possessed, requiring the possessive morpheme *õ*. Given the rather uncertain nature of the genetic relationship between the Karirí and Jê families so far, it is quite interesting to find such a remarkable morphosyntactic parallelism, involving affixes and stems which are in all likelihood cognates (compare 13b and 14b).

- (13) **Panará** (Northern Jê; Luciana Dourado, personal communication)
- | | | | | | | |
|----|----------------------|------------|-----------|----|------------|-----------|
| a. | <i>nãsow</i> | <i>y-õ</i> | <i>sí</i> | b. | <i>s-õ</i> | <i>sí</i> |
| | vulture | REL-POS | fire | | 3-POS | fire |
| | 'the vulture's fire' | | | | 'his fire' | |

- (14) a. **Kipeá** (Mamiani 1942: 157; 1877: 25)
s-u-su nhewo
 3-POS-fire devil
 ‘the devil’s fire’
- b. *s-u-su*
 3-POS-fire
 ‘his fire’

As we have seen, stems formed with the prefix *u-* belong to Mamiani’s 5th declension (Table 1). Besides comprising “all nouns [and verbs] beginning with *u-*” (Mamiani 1877:22-25), this declension includes a number of nouns beginning with other vowels and consonants, including a number of lexemes denoting items of material culture (*buicu* ‘arrow’, *warandzi* ‘medicine’, *seridze* ‘bow’, *eru* ‘shredder’, etc.). As occurs with *boronunu* and *i-su*, such nouns, listed in the Appendix, will require the prefix *u-* when occurring with a possessor. Furthermore, the prefix *u-* also occurs with loanwords borrowed into Karirí, such as *tayu* ‘money’ (15), *tasi* ‘hoe’, *wirapararã* ‘sugar cane mill’, and *awi* ‘needle’, from Tupinambá, and *bara* ‘basket’ and *setu* ‘basket’, probably from Portuguese *balaio* and *cesto*. This strongly suggests that this prefix was still productive at the time the language was documented.⁸

- Kipeá** (Mamiani 1877: 100; 1942: 186)
- (15) a. *I-coto gora do tayu hi-dio-ho.*
 3-steal Negro INSTR money 1-DAT-EMPH
 ‘The Negro robbed me of my money.’
- b. *E-coto cune do s-u-tayu-a.*
 2-steal by.the.way INSTR 3-POS-money-PL
 ‘Did you, by the way, steal someone else’s money?’

3.2 Relative constructions and the ‘antipassive’ prefix *u-*. In Karirí—which, as we have seen, is an ergative language—, relative constructions referring to the absolutive argument of a verb can be created by adding the 3rd person co-referential prefix *di-* and the ‘nominalizer’ suffix *-ri* to the verb stem (16a). In addition, a relative construction referring to the agent of a transitive verb (that is, the ergative argument) can be created by adding the prefix *u-* to the verb stem (16b):⁹

- (16) **Kipeá** (Mamiani 1877: 83)
- a. *udza di-di-ri no ware*
 knife 3.COR-give-RELVZ ERG priest
 ‘the knife that was given by the priest’
- b. *ware d-u-di-ri udza*
 priest 3.COR-ANTI?-give-RELVZ knife
 ‘the priest who gave the knife’

Thus, the prefix *u-* in such constructions plays one of the roles commonly associated with *antipassive* markers, permitting the occurrence of the ergative argument as the head of a relative construction. Constructions such as *d-u-di-ri* above belong to Mamiani’s 5th declension (exactly as the nouns prefixed with the alienable possession

marker *u-* shown above; see also Table 1), and it is likely that this ‘antipassive’ prefix in Karirí is indeed cognate with the marker of alienable possession. As I suggest elsewhere (Ribeiro 2002a), ‘markers of alienable possession’ are similar to devices which signal changes in the grammatical relations between a verb and its arguments—antipassive markers, for example, as well as applicatives. The use of the prefix *u-* with both nouns and relative constructions could be particular instances of its general use as a grammatical-relation changing morpheme.¹⁰

4. An etimological exercise: ‘fire’ in Macro-Jê. The word for ‘fire’ was reconstructed by Davis (1966:21) as **kuzi*, for Proto-Jê. However, based on the Panará form *i-si*, I suggest that Davis’s reconstructed form actually includes two morphological elements: a morpheme **ku*, whose precise meaning remains to be determined, and the stem **zi* ‘fire’. This hypothesis is further supported by Karirí *i-su* and Rikbaktsá *izo*. The formative **ku* became fossilized in most Jê languages, but the Panará data suggest that the stem **zi* was still an independent morphological entity in Proto-Jê. This morpheme **ku-* may have been another 3rd person marker, which would occur in complementary distribution with the ancestor of the Jê prefix *i-* (cognate of Karajá *i-*, Ofayé *ǝ-*, Rikbaktsá *i-*, Karirí *i-*, etc.).¹¹ The existence of a 3rd person marker *ku-*, less productive than *i-*, is described for several Northern Jê languages, including Apãniekrá (Castro 2002), Apinajé and Parkatêjê.¹²

As we have seen, in both Panará and Karirí, the stem for ‘fire’ occurs with the prefix *i-* in the citation form, and it is rather clear that, in these languages, such initial *i-* is a morpheme synchronically analyzable. The occurrence of the stem for ‘fire’ with an initial vowel which happens to ‘coincide’ in shape with a 3rd person marker can also be seen in Ofayé (*ǝ/ǝw* ‘fire’, *ǝ-* ‘3rd person’) and Rikbaktsá (*izo* ‘fire’, *i-* ‘3rd person’), although in these languages it is not as clear whether such initial vowel is a synchronically analyzable morpheme.¹³ Thus, the use of the morpheme **ku* with the stem for ‘fire’ in most Jê languages (Parkatêjê *kuhi*, Suyá *kusi*, etc.) would be an innovation. Panará is apparently the only member of the Jê family to preserve the more conservative pattern still found in Karirí, Rikbaktsá, and Ofayé.¹⁴

Table 4. ‘Fire’ in several Macro-Jê languages

Ofayé	<i>ǝ-ǝw</i>											
Karirí	<i>i-su</i>											
Maxakalí	<i>kicap</i>											
Rikbaktsá	<i>izo</i>											
Karajá	<i>hekođi</i>											
Jê ¹⁵	<table border="0"> <tr> <td rowspan="5" style="font-size: 3em; vertical-align: middle;">}</td> <td>Panárá</td> <td><i>i-si</i></td> </tr> <tr> <td>Suyá</td> <td><i>kusi</i></td> </tr> <tr> <td>Apinajé</td> <td><i>kuví</i></td> </tr> <tr> <td>Parkatêjê</td> <td><i>kuhi</i></td> </tr> <tr> <td>Davis’s Proto-Jê</td> <td><i>*(ku-)zi</i></td> </tr> </table>	}	Panárá	<i>i-si</i>	Suyá	<i>kusi</i>	Apinajé	<i>kuví</i>	Parkatêjê	<i>kuhi</i>	Davis’s Proto-Jê	<i>*(ku-)zi</i>
}	Panárá		<i>i-si</i>									
	Suyá		<i>kusi</i>									
	Apinajé		<i>kuví</i>									
	Parkatêjê		<i>kuhi</i>									
	Davis’s Proto-Jê	<i>*(ku-)zi</i>										

Thus, the data discussed above suggest that, in Proto-Macro-Jê, the stem for ‘fire’ would have been monosyllabic, as can still be clearly seen in Panará (*si*) and Karirí (*su*). Although a comprehensive lexical comparison among the languages which are supposed to be part of the Macro-Jê stock is yet to be conducted, the few lexical correspondences

found so far seem to corroborate the correspondences for the initial consonant of this stem in the several languages: the initial phoneme would have been an alveolar consonant whose reflexes are Karirí *s*, Karajá *d*, Maxakalí *c*, Ofayé *f*, Rikbaktsá *z*, and Proto-Jê **z*—*h* in Parkatêjê, zero in Apinajé, *s* in Panará, *ð* in Xoklêng, and so on. For example, the correspondence between Proto-Jê **z* and Karirí *s* (as well as Karajá *d*) is further illustrated by the consonantal third-person prefix mentioned above (see Section 2.1): Karirí *s*-, Karajá *d*-, Parkatêjê *h*-, Xoklêng *ð*-, Apinajé *Ø*-, Panará *s*-, etc. (Ribeiro 2002).¹⁶

The correspondences for the vowel, however, seem to be at first less straightforward: although this vowel is generally a central one (*i* in Karajá and Jê, *a* in Ofayé, and *a* in Maxakalí), it is a round one in Karirí and Rikbaktsá. The Maxakalí and Ofayé data, however, provide a plausible explanation for this ‘puzzle’: the vowel was probably followed by a labial consonant, such as Maxakalí *p* or Ofayé *w*. This consonant would have disappeared in Jê, Karajá, Rikbaktsá, and Karirí, but with very different results: in Karajá and Jê, the final consonant was dropped without leaving any trace, while in Karirí and Rikbaktsá the consonant would have triggered assimilation in [or would have coalesced with] the previous vowel before disappearing.

5. Final remarks. As Rodrigues acknowledges (1999a: 165), the very existence of Macro-Jê as a genetic unit is still “a working hypothesis”. However, this may be a result of the scarcity of studies of the individual families that are thought to be part of the Macro-Jê stock, rather than an inherent weakness of the hypothesis. Fortunately, this situation tends to steadily improve as the descriptions of the languages that likely belong to the Macro-Jê stock are improved. As this paper attempts to show, comprehensive studies of the Macro-Jê languages may reveal a great deal of additional evidence for their genetic relationship—even in cases such as Karirí, an extinct language with rather limited documentation.

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Appendix. Some stems that take the prefix u- (apud Mamiani 1877: 22-25)¹⁷

Karirí	Mamiani's Portuguese translation	English
1. <i>andze</i>	'pannos velhos'	'old cloth'
2. <i>awi</i>	'agulha'	'needle'
3. <i>babasite</i>	'espeto'	'skewer'
4. <i>bada</i>	'instrumento de boca'	'flute'

5. <i>badi</i>	'ornato de penas'	'feather ornament'
6. <i>bara</i>	'balayo'	'basket'
7. <i>beba</i>	'colar de osso'	'bone necklace'
8. <i>byro</i>	'barriga'	'belly'
9. <i>bybyte</i>	'palheta de jogar'	'a kind of toy'
10. <i>boronunu</i>	'escravo, presa'	'slave; prey'
11. <i>bubanga</i>	'rabisco de fruta'	
12. <i>bubêho</i>	'forno ou alguidar'	'oven'
13. <i>bucunu</i>	'capoeira, roçado velho'	'old, overgrown garden'
14. <i>bududu</i>	'guirajão'	
15. <i>buibu</i>	'cabaço'	'gourd'
16. <i>buicu</i>	'frecha'	'arrow'
17. <i>burehe</i>	'pappas'	'grits'
18. <i>buruhu</i>	'fuso'	'spindle'
19. <i>coto</i>	'comer que se guarda [matula?]	'food (which one keeps for later)'
20. <i>crayote</i>	'cacimba'	'well, cistern'
21. <i>crae</i>	'alfange'	'dagger'
22. <i>crenu</i>	'marapirão'	
23. <i>creya</i>	'assado em covas'	'food baked underground'
24. <i>creyahe</i>	'fouce'	'sickle'
25. <i>cro</i>	'pedra'	'rock, stone'
26. <i>cronhaha</i>	'milho cozido'	'cooked maize'
27. <i>cunubo</i>	'pó que fica da farinha'	'powder (from flour)'
28. <i>curote</i>	'colher'	'spoon'
29. <i>damy</i>	'carga aos ombros'	'cargo (which one carries on the shoulders)'
30. <i>datu</i>	'couza pizada'	'smashed, ground thing'
31. <i>dedi</i>	'cerca de paos'	'wood fence'
32. <i>dzitu</i>	'embira ou corda'	'rope'
33. <i>ecuwōbuyē</i>	'Ceo superior'	'sky'
34. <i>eicore</i>	'escaço'	'rare, scarce'
35. <i>eyapo</i>	'crueiras de mandioca'	'manioc dough'
36. <i>endi</i>	'algodão'	'cotton'
37. <i>eru</i>	'ralo de ralar'	'grinder, shredder'
38. <i>iba</i>	'carro'	'cart'
39. <i>inghe</i>	'criança'	'child'
40. <i>inio</i>	'concerto de ferramenta'	'fixing a tool'
41. <i>yaridzi</i>	'espora'	'spur'
42. <i>yawo</i>	'gancho'	'hook'
43. <i>keite</i>	'geito'	'way, manner'
44. <i>keitene</i>	'diligente'	'diligent'
45. <i>kibu</i>	'osso da garganta'	'the bone of the throat'
46. <i>kyhiki</i>	'peneira'	'sieve'
47. <i>maiba</i>	'pareas, ou clara de ovo, &c.'	'egg whites'

48. <i>mairu</i>	'farinha de milho fresco'	'fresh maize flour'
49. <i>marã</i>	'inimigo'	'enemy'
50. <i>meca</i>	'sinal no corpo'	'scar'
51. <i>mereba</i>	'girao para moquem'	'grill, grid for roasting food'
52. <i>mymyca</i>	'fita'	'tape'
53. <i>myte</i>	'genro'	'son-in-law'
54. <i>nhupy</i>	'vinho de milho'	'corn wine'
55. <i>nupyte</i>	'instrumento de tirar fogo'	'fire-making device'
56. <i>pepe</i>	'péla de jugar'	'ball'
57. <i>pobeba</i>	'fogaça'	
58. <i>poponghi</i>	'roca de fiar'	'spinning wheel'
59. <i>pretore</i>	'mentiroso'	'liar'
60. <i>renghe</i>	'marido'	'husband'
61. <i>rine</i>	'carne salgada'	'salted meat'
62. <i>rute</i>	'velha, mulher'	'old woman, wife'
63. <i>sanhicrã</i>	'monte mór de cousas comestiveis'	'a pile [a deposit?] of edible things'
64. <i>sasa</i>	'saya de pindoba'	'palm leaf skirt'
65. <i>seby</i>	'cadeiras'	'hips'
66. <i>sekiki</i>	'carimá'	'manioc flour'
67. <i>seridze</i>	'arco'	'bow'
68. <i>seti</i>	'cordão'	'cord, string'
69. <i>setu</i>	'cesto'	'basket'
70. <i>tayu</i>	'dinheiro'	'money'
71. <i>tamy</i>	'agulhada'	'spike'
72. <i>tasi</i>	'eixada'	'hoe'
73. <i>tça</i>	'cousa moida, pizada'	'ground, smashed thing'
74. <i>tçuiru</i>	'assovio de rabo de tatu'	'whistle made of armadillo's tail'
75. <i>terere</i>	'corropio'	'a children's game or toy'
76. <i>tinhe</i>	'alcofa'	'basket; baby crib'
77. <i>tocracu</i>	'marca de ferro'	'cattle branding iron'
78. <i>tora</i>	'cortesia com o pé'	'greeting with the feet'
79. <i>torarã</i>	'carta, livro'	'letter, book'
80. <i>totonghi</i>	'bordão'	'cane'
81. <i>warandzi</i>	'mezinha'	'medicine'
82. <i>waraero</i>	'bejù'	'manioc tortilla'
83. <i>waridza</i>	'boca'	'mouth'
84. <i>warudu</i>	'bolo de mandioca amassada'	'manioc cake'
85. <i>werete</i>	'prato para fazer louça'	'a plate for making pottery'
86. <i>wima</i>	'abano'	'fan'
87. <i>wirapararã</i>	'engenho de moer'	'sugar cane mill'
88. <i>woncuro</i>	'tear'	'loom'
89. <i>woroby</i>	'novas'	'news'
90. <i>woroya</i>	'espia'	'spy'

Abbreviations: ANTI ‘antipassive marker’; CLAS ‘classifier’; 3.COR ‘3rd person co-referential’; ERG ‘ergative adposition’; EVIT ‘evitative adposition’; INSTR ‘instrumental’; LOC ‘locative adposition’; REL ‘relational prefix’; RELVZ ‘relativizer’.

¹ This paper is a result of an ongoing project of lexical compilation and grammatical analysis of the Karirí language, whose main short-term goal is to gather all the lexical information available in Mamiani’s (1877, 1942) and Nantes’s (1896) works. As a result of a work in progress, this paper would certainly benefit from any comments, suggestions, and criticisms, which I welcome. I can be reached at avepalavra@yahoo.com. The Panará, Apinajé, and Parkatêjê data used in this paper were kindly provided by Luciana Dourado, Chris Oliveira, and Marília Ferreira, whom I would like to thank. I would also like to thank Jeanie and Ronnie Castillo, for their kindness and hospitality. Any shortcomings in this paper are, naturally, my sole responsibility. This work was originally presented at the 2002 WAIL under the title ‘On the grammaticalization of an antipassive marker in Karirí and Karajá.’ The present title, however, represents more closely the kind of findings discussed in this paper. In my WAIL talk, I suggested that the antipassive marker *ɔ-* in Karajá (Ribeiro 2001) could very well be a result of the grammaticalization of a generic incorporated noun, a likely cognate of *Jê ò* ‘thing’. This hypothesis will not be pursued in this paper. The Karirí examples preserve Mamiani’s transcription. Maxakalí and Rikbaktsá data are from Pereira (1992) and Boswood (1973), respectively. The Ofayé data mentioned here were obtained in a field trip I conducted last summer under the auspices of a Tinker Field Research Grant, administered by the Center for Latin American Studies of the University of Chicago. Both the transcription and the morphological analysis of the Ofayé data are still preliminary.

² Although I refer to Kipeá and Dzubukuá as different ‘dialects’ of the same language, they could very well be considered as different ‘languages.’ For Nantes (1896:iv), the differences between Kipeá and Dzubukuá were substantial enough (comparable to the differences between Portuguese and Spanish) to grant each ‘language’ its own catechism. For Lucien Adam (1897:ii), on the other hand, Dzubukuá and Kipeá would be simply two dialects of the same language. At this point, I refrain from making any conclusive statements concerning this matter, as a careful comparison of Kipeá and Dzubukuá (as well as Sabujá and Pedra Branca) is yet to be conducted.

³ For more on possessive classifiers, see section 3.1 below.

⁴ Possessive ‘classifiers’ are simply nouns with generic meaning, and in fact they do not seem to be more grammaticalized than any other nouns in the language. Besides their use in classificatory constructions such as in (6) above, such morphemes can also occur by themselves:

Kipeá (Mamiani 1942:107)					
<i>no</i>	<i>si-di-cri-bae</i>	<i>vdje</i>		<i>boho,</i>	
since	3-give-PAST-IMP	vegetables		or	
<i>uneca</i>		<i>boho</i>	<i>no</i>	<i>Tupã</i>	<i>cu-do-ho.</i>
livestock		or	ERG	God	2PL-DAT-ENF
‘[...] since God gives us everything, be they produce from the gardens, or livestock.’					

Possessive classifier constructions such as *dz-uba do sabuca* ‘my chicken received as a gift’ and noun phrases with adpositional adjuncts such as *ariba do bunha* ‘clay dish’ (*bunha* ‘clay’) seem to be syntactically identical, which suggests that in possessive classifier constructions the ‘classifier’ is in fact the head of the noun phrase, whereas the ‘classifíee’ is in fact an adjunct. Note that the adposition *do* ‘instrumental, allative, dative’, is also used to introduce appositive phrases (*Santa Maria do ide Tupã* ‘Holy Mary, mother of God’; Mamiani 1942: 227). A more literal translation of *dz-uba do sabuca* would thus be ‘my gift, the chicken’.

⁵ Actually, ‘manioc’ can also occur with the generic classifier for ‘produce’ (Mamiani 1942:108; Ribeiro 2002a:38).

⁶ The initial consonants of the adpositions *na* ‘ergative’ and *do* ‘instrumental; locative; allative’ undergo palatalization when preceded by the 1st person marker *hi-* (*hi-nha, hi-dio*) and the 3rd person marker *i-* (*i-nha, i-dio*).

⁷ For a more extensive discussion of this prefix and other morphemes of similar functions in Macro-Jê and Tupí, see Ribeiro (2002a).

⁸ Although phonological correspondences among the Macro-Jê languages remain largely to be worked out, Karirí *u* seems to generally correspond to Jê *ô*: Xerente *n-ôitô, s-ôitô* ‘to sleep’, Kipeá *dz-unu, a-nu, s-unu, k-unu*; etc. If that is the case, one has to explain the apparent disparity between the vowels in Karirí *su* ‘fire’ and Panará *sí*. A likely explanation for this will be presented in section 4 below.

⁹ Relative constructions referring to non-argument NPs are constructed with the suffix *-te*: *di-coto-cri-te* ‘the thing which was stolen’.

¹⁰ This is, of course, a hypothesis to be further investigated as the analysis of Karirí lexicon and morphosyntax advances. Although Mamiani (1877), as well as Rodrigues (1999), call them ‘nouns’ or ‘participles,’ constructions such as the ones above preserve all tense/aspect distinctions displayed by a full sentence, including the past tense suffix (?) *-cri* (a) and the sentence-final clitic *=di* (b). Our knowledge on the precise ‘part-of-speech’ nature of relative constructions in Karirí—which is made difficult by the lack of clear-cut inflectional differences between nouns and verbs—will certainly benefit from a thorough investigation of the Karirí corpus. At any rate, if constructions such as *d-u-di-ri* are to be analyzed as nouns, then the head of the relative construction could be seen as a possessor (although displaying a less ‘canonical’, more archaic possessor-possessed pattern), thus furthering the similarities between the use of the prefix *u-* with both nouns and relative constructions.

Kipeá (Mamiani 1942: 52, 50)

- a. *l-nhu-rã* *Tupã* *di-pa-cri-ri* *mo* *crusa*
 3-offspring-male God 3COR-kill-PAST-REL LOC cross
 ‘The son of God, who was killed in the cross.’
- b. *bihe* *ro* *sutu* *di-pro-kie-ri* *e-na-a=di*, *si-me* *Tupã*.
 only this fruit 3.COR-eat-NEG-REL 2-ERG-PL=FUT 3-say God
 ‘“Only this fruit you (plural) shall not eat”, said God.’

¹¹ Both prefixes would probably occur as generic possession markers, although it is impossible to establish, at this stage of the research, which semantic, grammatical, or phonological factors would condition their distribution.

¹² In some cases, it is Panará which presents a [probably fossilized] *ku-* prefix: Apinajé *kre* ‘house’, Panará *kukre*. A likely cognate of this prefix can apparently also be found in Krenák (another Macro-Jê family; Seki 2002:23), maybe also in a fossilized form: Krenák *kupãŋ* ‘liver’ (Karajá *bã*, Proto-Jê **ma*, Ofayé *fa*, etc.).

¹³ In Ribeiro (2002a), I suggest that the stem for ‘fire’ would have been an inalienably possessed stem in Proto-Macro-Jê, as suggested by its occurrence, in several languages, with what can be analyzed as a 3rd person marker, which was reanalyzed as a part of the stem in some of the families. This prefix would refer to a primary possessor (indicating maybe the type of fire—‘wood fire’, ‘straw fire’, etc.). As it is still the case in Panará and in Karirí, in order to introduce a secondary possessor, the use of the marker of alienable possession would be required, exactly as it happens with body-part terms and other obligatorily-possessed stems. In Ofayé, the stem for ‘fire’ (whose ‘citation form’ is *ã/ãw*) also cannot be directly possessed, requiring the morpheme *ji*, another ‘marker of alienable possession’ with likely cognates in Jê and Tupí languages (Ribeiro 2002a). There is some variation concerning the treatment of the initial vowel of *ã/ãw* ‘fire’, which seems to be treated as a prefix, by some speakers, or as part of the stem, by others:

Ofayé (Eduardo Ribeiro, field notes, September/2002)

- a. *ã-fãw*
 3-fire
 ‘fire’
- b. *a-ji* (*ã-ji*)/*ãw*
 1-POSS (3-)fire
 ‘my fire’

¹⁴ Thus, both morphemes, **ku-* and **i-*, were probably already present in Proto-Jê. Although there is strong evidence for considering **i-* a retention from Proto-Macro-Jê, the same cannot be said with relation to **ku-* at this point. There is no evidence so far for the existence of a cognate of Jê 3rd person/generic possessor marker **ku-* in Karajá, the same being apparently the case in Maxakalí. If the analysis suggested here concerning the shape of the proto-stem ‘fire’ is correct, a possible diachronic source for the hypothetical formatives *ki-* and *kɔ-* in the words for ‘fire’ in Maxakalí and Karajá could be the stem for ‘wood,

firewood' in both languages: Maxakalí *kík* 'firewood', Karajá *ko* 'wood'. These stems find likely cognates in Jê (Xerénte *ku* 'wood', etc.; Ribeiro 2002) and may very well be another lexical retention from Proto-Macro-Jê.

¹⁵ In some languages of the Jê family, the word for 'fire' is a reflex of the Proto-Jê word for 'firewood' (reconstructed by Davis 1955 as **pĩ*), rather than being a cognate of **zi* 'fire'. Such is the case in the Southern Jê branch of the family (Kaingáng *pĩ* 'fire, firewood'; Wiesemann 1971:188) and in Jeikó (*ping* 'fire'; Martius 1867:143).

¹⁶ Thus, Panará *s-õ sí* (13b) and Karirí *s-u-su* 'his fire' (14b) are perfect matches, presenting not only an exact correspondence morpheme-by-morpheme, but phoneme-by-phoneme as well. As Rodrigues (1999:201) points out, complete sets of cognates for all the Macro-Jê families are difficult to obtain, but partial sets for several lexical items corroborate the phonological correspondences for the initial consonant in 'fire' and the 3rd person prefix (Karirí *s*, Karajá *d*, Panará *s*, Ofayé *ʃ*, etc.) Thus, while a cognate for the Proto-Jê word for 'seed', **zi*, was not found in the portions of the Karirí corpus which have been analyzed thus far, partial sets for this stem in other families corroborate the phonological equations set forth above: Ofayé *ʃa*: 'seed', Karajá *dĩ*, Panará *sĩ*, Parkatêjê *hĩ*, Xoklêng *õĩ*, etc. For additional lexical correspondences, see Ribeiro (2002).

¹⁷ In some cases, the translations provided above are only approximate and may change as the research project progresses; in cases in which I could not establish a reasonably precise meaning, I limited myself to providing only the Portuguese translation given by Mamiani. This fact illustrates well the difficulties into which one may run when studying an extinct language, with a limited corpus, such as is the case of Karirí. For example, Portuguese *fogaça* (as Mamiani translates the Karirí word *pobeba*) may refer more generically to a large type of cake, or, more specifically, to a cake or other present which, during festivals, is offered to the Church, in order to be auctioned on its behalf. It may also refer, even more generically, to any present or offer which is given to someone in retribution for a good deed. Therefore, in order to determine the precise meaning of the Karirí word *pobeba*, one must be able to observe it in context; it may be the case, however, that this is the only occurrence of this word in the whole surviving Karirí corpus.

Although it is just a limited sample of the Karirí lexicon, the list above illustrates well the kind of glimpse into the Karirí culture which may be provided by the careful analysis of the language's data. The importance of manioc in Karirí agriculture and culinary, for example, is shown not only by the occurrence of a rather specialized vocabulary for manioc derivatives, but also by the fact that the language has a possessive classifier exclusively for manioc, *uanhi* (see Table 2 above). In addition, the lexical sample above reveals a certain familiarity with cattle-raising activities (introduced by the Portuguese colonizers), providing an interesting look at the cultural changes which were already taking place when the language was documented.