# The classification of the languages of the South American Lowlands

# State-of-the-art and challenges

#### Andrey Nikulin

Universidade de Brasília

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#### Overview

- ~ 40 genetic units in the area
- families with at least 15 languages:
  - Macro-Jê (deep, lots of branches)
  - Pano-Tacanan (deep, **two** constituent branches)
  - Arawak (quite deep, lots of branches)
  - Tupian (quite deep, **eight** branches)
  - Cariban (shallow, lots of branches)
  - Tukanoan (shallow, **two** constituent branches)
- presentation:
  - basic information on the family/the respective protolanguage (phonemic inventory, stem structure)
  - information on the relevant recent work and its reliability
  - $\circ$  for references, see handout

## Brief historiography

- Gilij (1780–1784): Arawakan (Maipurean) and Cariban families identified for the first time
- pre-Neogrammarian works based on very scarce documentation (Adam 1890, Rivet 1924, Loukotka 1963, 1968, Mason 1950, *inter alia*)
- Greenberg's multilateral comparison
- second half of the 20th century: comparative method applied for the first time
  - Aryon Dall'Igna Rodrigues (classification, identification of sound correspondences for some families)
  - other authors for individual families (e.g. Irvine Davis for Jê/Maxakalí/Karajá)
- 1990s-present: methodologically correct reconstructions appear for the first time
- 1990s-present: documentation boom

- Possibly the deepest family in South America whose existence most scholars usually recognize
- No consensus on what are the constituting groups. Groups such as Bororo, Purí, Yaathê, Guató, Otí have been included, but this has never been demonstrated using the comparative method
- Not a macrofamily in the Eurasian sense (maybe as old as narrow IE)
- Ongoing work by the present author, fed by novel documentation

#### • Jê

- $\circ$  Cerrado
  - Northern Jê *lato sensu* 
    - Northern Jê *stricto sensu* (5 languages)
    - Panará [+ Southern Kayapó]
  - Xavánte, Akwẽ-Xerénte [+ Xakriabá, Akroá]
- Southern Jê
  - Kaingáng + Laklãnõ
  - [[Ingain]]

#### reconstruction available

reconstruction available solid reconstruction available

solid reconstruction available

solid reconstruction available

solid reconstruction available

#### • Maxakalí-Krenák

#### reconstruction available

- Maxakalí
  - Maxakalí [[+ Pataxó Hãhãhãe, Pataxó, Makoní]]
  - [[Malalí]]
- o Krenák
- [[Kamakã]]
- Karajá (4 dialects)
- [Ofayé]
- Rikbáktsa
- Jabutí

Para-Macro-Jê:

• Chiquitano (3-4 dialects)

reconstruction available

reconstruction available

- typical root structure: \*C(r)V(C)
- only \*/p, m, k, ŋ/ can form complex onsets with \*/r/
- two types of codas (with resp. without echo vowels)

*с-әт <sup>ә</sup>	'its seed'	*-tum	'fat of'
*ũt <sup>⇒</sup>	'to sleep'	*ŋgyt	'louse'

- a large vowel system (back rounded, back~central unrounded, front unrounded)
- nasal onsets (and maybe codas) acquire an oral contour next to an oral vowel:

\*/mi/ \*[
$$m^{b}i$$
] \*/mĩ/ \*[ $m\tilde{i}$ ]

- head-final, derivation mostly via prefixes
- stems are divided into non-relational (no internal argument) vs. relational (obligatory internal argument); the latter include:

inalienably possessed nouns all nominalizations (nonfinite verbs) postpositions finite transitive verbs most stative predicates

*kyp <sup>»</sup>	'fly'	* ndôm <sup>»</sup>	'eye of'
*krət <sup>ə</sup>	'flint'	* juñ	'tooth of'
<b>*</b> ũt <sup>∂</sup>	'to sleep ( <i>finite</i> )'	<b>* ñũt</b> <sup>⇒</sup>	''s sleeping (nonfinite)'
*mũ	'to go.PL (finite)'	* йр	'to give (finite)'
*pĩm <sup>ə</sup>	'firewood'	* ñũk	'of'

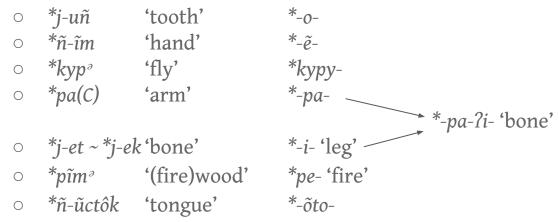
• If the internal argument of a relational stem is 2 or 3 person, person prefixes are used. There are two inflectional classes (I and II), which show the following paradigms.

	class I			class II		
uninfl.	*	*NP k <sup>j</sup> əc	'NP's skin'	*j	*NP juñ	'NP's tooth'
2	*a	*ak <sup>j</sup> əc	'your skin'	*Ø-	*uñ	'your tooth'
3	*i	*ik <sup>j</sup> əc	'her/his skin'	*с-	*cuñ	'her/his tooth'
3CRF	*ta	*tak <sup>j</sup> əc	'her/his skin'	*t-	*tuñ	'her/his tooth'

- Phonologically conservative branches:
  - **Jê** (loses some codas)
  - **Maxakalí** (key language for the **place** of articulation of the codas; loses important contrasts regarding the manner of articulation of the consonants; merges many vowels)
  - **Krenák** (key language for the **manner** of articulation of the codas; loses many other contrasts)
  - Jabutí (loses the codas)
- Phonologically innovative branches:
  - **Karajá** (complicated sound history; Ribeiro 2012)
  - **Rikbáktsa** (many things totally unclear, not too much shared vocabulary)
  - **Ofayé** (available sources are scarce and their phonological analyses diverge greatly)
  - Kamakã (only archival documentation; phonology totally unclear)

#### Macro-Jê and Chiquitano

- First demonstrated by Adelaar (2008)
- Not too much shared vocabulary, but some data look very promising:



• Person prefixes are very similar to those of MJ, and the morphophonological behavior of the class II stems is about the same in MJ and Chiquitano

#### Macro-Jê and Chiquitano

- Some mysteries still exist, such as the possible correspondences of PMJ \**Cr* in Chiquitano
- Typologically very different, including the general head-initial morphosyntax (VAP/VS instead of APV/SV, etc.); however, the person prefixes probably reflect the word order **before** the reorganization.

cf. \**i-pa(C)* 3-arm

- Includes some of the better documented languages in South America
- Contains eight groups that are universally recognized as valid, but it is still debated if they can be further grouped in any way (the answer is probably 'yes')
- Most sound correspondences are successfully identified in the pioneering works by A. D. Rodrigues, but:
  - the diachronic interpretations offered by Rodrigues are too often infelicitous;
  - the PT reconstructions by Rodrigues usually skip intermediate stages (except for the Tupí-Guaraní group, he tends to pick just one representative of each group);
  - language documentation has since advanced for some families, and major breakthroughs have been achieved in the understanding of both synchronic and diachronic morphonology of certain Tupian languages.

- Mawé-Guaraní ("Mawetí-Guaraní")
  - Sateré-Mawé
  - Awetí-Guaraní
    - Awetí
    - Tupí-Guaraní (dozens of languages)
- Mundurukú (Mundurukú [+ Kuruáya])
- Juruna (Yudjá [+ Xipáya])
- Mondé (Suruí-Paiter, [Salamãy, Zoró, Cinta-Larga, Gavião])
- Arikém (Karitiána [[+ Arikém]])
- Tuparí
  - Makuráp
  - Core Tuparí
    - Sakurabiat, Akuntsú
    - Wayoró, Tuparí
- [Puruborá]
- Ramarama (Káro)

#### reconstruction being reworked

reconstruction available

## solid reconstruction available reconstruction available

reconstruction available

- Puruborá and Ramarama are very likely closely related
- Rodrigues posits a binary W/E division (Tuparí + Arikém + Puruborá + Ramarama + Mondé vs. Mawé-Guaraní + Mundurukú + Juruna), which is usually contested

Easily fillable gaps:

- Awetí-Guaraní reconstruction is lacking
- some important works on Proto-Tuparí phonology exist, but they are not exactly bottom-up; PTpr it can no doubt be reconstructed in greater detail
- the reconstruction of pMawé-Guaraní is incipient; more lexicon can clearly be reconstructed
- no reliable Proto-Mondé (published documentation is scarce)
- ongoing work:
  - Proto-Mundurukú is reportedly being reconstructed in greater detail by G. Picanço;
  - Proto-Juruna is being reconstructed by F. O. de Carvalho

- typical root structure: (CV)CVC
- autosegmental nasality (anchored to the right edge in Mundurukú, Mawé-Guaraní; to the left edge in Tuparian, Karitiana)
- consonants in coda unspecified **only for place of articulation**
- possibly tonal; no work has been done on reconstructing PT tones
- \**u* 1sg, \**e* 2, \**ta* 3crF + 'relational' paradigm:

	class I			class II		
rel.	*	*NP py	'NP's foot'	*j-	*NP jək	'NP's house'
3	*i	*ipy	'her/his foot'	*с-	*cək	'her/his house'
non-rel.	*	*mby	'foot'	*0-	*ək	'house'

- Branches whose historical phonology is relatively clear:
  - Karitiana (great vowel shift)
  - **Tuparí** (key branch for the reconstruction of  $*\Box$ )
  - Mawé-Guaraní (coronal consonants evolve in a complicated way)
  - Mundurukú
- Branches whose historical phonology is obscure:
  - **Ramarama** (seems to be quite conservative)
  - **Puruborá** (data are restricted, seems to be close to Ramarama with an additional shift \*c > t; \*t > d)
  - Jurúna
  - Mondé
- Syllable structure (CV, CVC) is quite faithfully retained in all branches except Guaraní (which loses most codas) and Jurúna (where codas may be resyllabified)

- There is ongoing work on Proto-Tupian reconstruction by the present author and F. O. de Carvalho
- Improves Rodrigues's reconstruction by eliminating fictitious consonants (at the expense of adding two vowels to the inventory)

Rodrigues	updated reconstruct	tion
*ček <sup>w</sup>	*tək	'to grind', 'larva'
*ek <sup>w?</sup> ip	*ә- 🗆 шр	'arrow'
*ер <sup>w</sup>	*јәр	'leaf'
*pičik	*pytyk	'to grab'
*tajtu	*jacju	'armadillo'

#### Arawakan

- Also known as 'Maipurean' and 'Arawak'
- One of the first large language families identified throughout the history of linguistics
- Spans from Belize to south-western Brazil (formerly Paraguay)
- Existing classifications diverge greatly (Payne 1991, Aikhenvald 1999, Ramirez 2019); only a few low-level groups are universally accepted
- Bottom-up reconstruction is absolutely necessary in order to arrive at any meaningful result
- No attempt at a phonological reconstruction since Payne's (1991) work, which is itself very preliminary, but important work has been done on low-level reconstruction

#### Arawakan

- Stem structure: \**CVCV*(*CV*)
  - some erosion in **Palikur**, **Amuesha'** (lots of Quechua borrowings), **Rio Branco** (Wapixána/Mawayána)
  - stems may include fossilized classifiers → some lookalikes whose initial consonants don't correspond may not be cognate at all (they would just share classifiers)
- Much of the PA morphology can be reconstructed
- Person paradigm:

SG PL  
1 \*nu- \*wa-~\*wi- attributive: \*ka-  
2 \*pi- \*hi- privative: \*ma-  
M \*
$$t^h$$
i-  
3 \*na-  
F \*ru-

#### Pano-Tacanan

- Binary split into Panoan and Tacanan
- Some scholars don't regard the relation between Panoan and Tacanan as conclusively proven, but there is compelling lexical evidence

liver
tongue
blood
thou
hand
earth
meat
'muscle'
stone
bone
nail
fat
tooth

Proto-Pano	Ese-Ejja	Araona	Cavineñ
*tak <sup>w</sup> a	e-kak™a	ták™a	e-tak <sup>w</sup> a
*hana	ej-ana	e-ána	j-ana
*himi		ami	ami
*mi	mi-a	mi	mi-
*mi-	e-me	e-me	e-me-tuk
*mai	meſi	mezizo	metsi 'soi
*rami	e-jami	e-ami	e-rami
*maka		mahana	makana
*sao	e-sá	e-tsoa	e-tsau
*mĩ-tsis	e-me-kife	0-mé-tezi	
*și[n]i	e-sei	e-tsei	e-tseri
*șita	e-sé	e-tse	e-tse

Cavineña Takana e-tak<sup>w</sup>a e-tak<sup>w</sup>a j-ana j-ana ami ami mi- mi e-me-tuku e-me metfiʻsoil' med'i e-rami j-ami

> -e-tsau e-me-tid'i e-tsei e-tse

#### Cariban

- Arguably the most well-studied family regarding its historical morphosyntax (Gildea 1998)
- A very high degree of phonological erosion due to a speciall iambic reduction process
- Cariban historical phonology and morphophonology is relatively well understood, but issues with its subgrouping make it difficult to decide which lexical items can be projected to PC and which can't

#### Cariban

- Stem structure: \**CV*(*CV*)(*CV*)
  - $\circ$  ~ there may be some underlying codas recoverable by internal reconstruction:

cf. possessed \**mi-ty* 'root', \**ka-ty* 'fat' (normal possessive allomorph \**-ry*)  $\rightarrow$  \*/mit/, \*/kat/?

- /p, t, k, m, n, r, w, j/
- /a, ə, y, e, i, o, u/

#### Tukanoan

- Clear binary split into Eastern Tukanoan and Western Tukanoan
- Solid reconstruction available (Chacon 2014, 2015)
- Stem structure: \**CVCV*
- Autosegmental nasality

#### Matacoan

- Clear binary split into Wichí-Chorote and Maká-Nivaclé
- Six vowels: \*/a, e, i, a, o, u/

#### Guaicuruan

• Clear binary split into Northern Guaicuruan (Kadiwéu) and Southern Guaicuruan

subject paradigm

• Reconstruction available (Viegas Barros 2013a)

## Sáliban

• Piaroa, Mako, Sáliba (Rosés Labrada 2016; maybe Jodï also related)

SG PL 1 \* tf - /\* - d \* t - /\* - t  $2 * k^{w} - /* - k^{w}$ 3M  $* \emptyset - /* - \emptyset * t^{h} - /* - t^{h}$ 3F  $* k^{h} - /* - k^{h}$ 

## Small families: > 2 languages

- Chapakuran (~12 lects, reconstruction available)
- Nambikwaran (~3 languages, Price 1978)
- Zamuco (binary division: Chamacoco vs. Ayoreo + Old Zamuco)
  - extremely complex morphology (cf. Ciucci 2016)
- Nadahup (4 languages, clear internal structure)
- CVC roots, tonal, autosegm. nasality

- existing reconstruction unreliable
- not uncontroversially related to Kakwa-Nikak or Wãnsöhöt (Epps & Bolaños 2017)
- Yanomaman (~4 languages; Migliazza 1972)

clusters as in Macro-Jê (labials/velars + liquids)

- Guahiboan, Bora-Witoto
- Peba-Yaguan, Zaparoan, Chicham
- Arawan (reconstruction: Dixon 2004; Dienst 2005)
- Maskoy

## Small families: 2 languages

- Kawapanan (Shawi + Shiwilu)
  - complete phonological reconstruction available (Rojas-Berscia & Nikulin forthc.)
- Bororoan (Bororo [+ Umutina] [[+ Otuke]])
  - *i-/a-* pronominal pattern
  - reconstruction by Camargos (2013), but definitely needs revision (Nikulin 2020)
- Kakua-Nikak
  - quite close; no reconstruction as of now, as Nikak has only recently started being properly documented
- Katukina-Harakmbet (quite deep, Adelaar 2000)
- Mỹky/Irantxé (very close to each other)
  - noun-initial *m*-/ $k^{j}$  alternation; maybe related to the prefixal alternation *ma*-/*go* in Guató???
- Mura/Pirahã (Mura is extinct, almost undocumented)
- Tikúna/Yurí (Carvalho 2009; Yurí is possibly extinct, almost undocumented)

#### Isolates

- Pantanal:
  - Guató
- Brazilian Northeast:
  - Yaathê
- Central Brazil:
  - Trumai
- Venezuela/Roraima:
  - Puinave, Jodï, Warao, Maku of Roraima, Arutani, Sapé, Betoi
- Mamoré-Guaporé region:
  - Kwazá, Aikanã, Kanoê, Yurakaré, Itonama, Movima, Mosetén/Tsimané
- Western Amazon:
  - Andoke, Camsá, Cofán, Waorani, Urarina, Candoshi, Munichi, Taushiro, Omurano

## Poorly documented unclassified languages

- Purí (small family, clusters as in Macro-Jê)
  - formerly classified as Macro-Jê; Ramirez et al. (2015) have shown that it is due to presence of Maxakalian elements in the Koropó wordlists
- Payaguá
  - Viegas Barros thinks it is Mataco-Guaicuruan
- Guachí
  - Viegas Barros thinks it is Mataco-Guaicuruan
- Otí
- Jirajaran (small family)
- Timotean (small family)

### Long-range hypotheses

- Greenberg's findings appear to be of little to no relevance (not only his methods were flawed, but in the particular case of South America his data are of questionable reliability)
- For an example of informed critique, cf. Gildea & Payne 2007 (discussing Greenberg's Macro-Carib)
- Below, I will first discuss hypotheses whose validity I (or other authors) find doubtful
- Then I will proceed to hypotheses that seem more promising

#### Charruan: two or three unrelated families?

- Family posited by Viegas Barros
  - Chaná as spoken by a rememberer, who learnt it under extraordinary conditions
  - Chaná as documented by Larrañaga (1923; limited data)
  - Charrúa as documented by Vilardebó (1842; a handful of ill-transcribed word)
  - Güenoa, for which a very short catechesis is available
- on the Swadesh list between Larrañaga's Chaná and Jaime's Chaná, only three words coincide ('to hear', 'sun', 'one'); other nine show no resemblance
- Charrúa and Larrañaga's Chaná share two words out of four ('two', which could be a borrowing, and 'mouth': Charrúa <ej>, Chaná <hek> -- coincidence?)
- Charrúa and Jaime's Chaná share zero words out of 18
- Güenoa shares two pronominal roots with Larrañaga's Chaná ('who', 'how') and the numeral 'one' with Charrúa (which could be a borrowing)

Word	Chana	Charrua	Larranaga	Guenoa
we			{ampti / am-} M, {rampti	{rambui}
give	ar'a {ará}		{da jú} 171	
sun	{dioi}		{diói} 165	
go	nder'e {nderé}	{bajiná} 'to walk'	{do} 168	
thou			{empti / em- / m-} 168, {n	
one	{gili / güi}	$\{y\dot{u} \sim yu\}$	{gil} 168; {ugil} 'único' 16	{yut isa} 'only one'
who			{guarepti} 169	{guarete}
sand	{lgori}	2	{han} 167	
mouth	{uvá}	{ej}	{hek} 167	
that			{huati / huat-} 168	
white	{noá}		{huóc} 167	
good			{latár} 172	
hear	{timotéc}		{montéc} 170	
come	nder'e {nderé}		{na} 165	
not	{reé}		{=mén} 169	
what			{rseca} 'what', {rsepti} 'wh	{retant} 'how many? what
two	am'a {amá}	{sam ~ sán}	{san} 168	
know			{seker, seker} 169, 172	
see			{solá} 'mirar' 173 (2, 3 {s	
mountain			{to e} 169	
woman	{adá}		{ukái / =kái} 'female' 169	
I			{yti / i-~y-} 168, {vmpti	
all	op'a {opá}			

Word	Chana	Charrua	Larranaga	Guenoa
sleep	{utalá}	{andó diabun} 'vamos a de		
foot	bed'e=ber'a {vedé verá}	{atit}	5 -	
kill	{ña}	{aú}		
go	nder'e {nderé}	{bajiná} 'to walk'	{do} 168	
stand	{reé utalá}	{basquadé} 'levantarse'		
mouth	{uvá}	{ej}	{hek} 167	
hand	{nam}	{guar}		
moon	{aratá}	{guidai}		
water	at'a {atá}	{hué}	а. -	
nose	{uti}	{ibar}	5	
eye	ok'al {ocál}	{ijou}		
ear	tim'o {timó}	{imau}		
head	{ta ~ ta ug vedé}	{is}		
hair	{moni}	{itaj}		
fire	žow'in {yogüin}	{it}		
dog	agʻo {agó}	{samayoi}		
two	am'a {amá}	{sam ~ sán}	{san} 168	
one	{gili / güi}	{yú ~ yu}	{gil} 168; {ugil} 'único' 16	{yut isa} 'only one'

Word	Chana	Charrua	Larranaga	Guenoa
person				{ëevvuit edam} 'si è fatto u
who			{guarepti} 169	{guarete}
die	ла {ña}			{hallen}
name				{hapatam} # 'his name'
we			{ampti / am-} M, {rampti	{rambui}
what			{rseca} 'what', {rsepti} 'wh	{retant} 'how many? what
one	{gili / güi}	{yú ~ yu}	{gil} 168; {ugil} 'único' 16	{yut isa} 'only one'

#### Macro-Jê in Rodrigues's sense

- The influential classification by Rodrigues (e.g. 1999) classifies Boróro, Purí, Yaathê, and Guató as Macro-Jê. This is not confirmed by my research
- For Boróro, Rodrigues is based on Guérios (1939)
  - spurious matches, low quality transcriptions, arbitrary morphological segmentation
  - $\circ$  *i-/a-* pattern is suggestive, but many families in Eastern SA have it
- For Purí, Ramirez et al. (2015) have shown that it is due to presence of Maxakalian elements in the Koropó wordlists
- For Yaathê, no lexical evidence is available
  - $\circ$  *i-/a-* pattern is suggestive, but many families in Eastern SA have it
- For Guató, no evidence is available at all
  - Martins (2011) makes an attempt, but the results are not convincing at all

#### Mataco-Guaicurú; Macro-Guaicurú

- favorable stance: D'Orbigny (1839), Lafone Quevedo (1896), Henry (1939), Viegas Barros (1993, 2013b), Mason (1950), Swadesh (1959), Greenberg (1987), Kaufman (1994)
- skepticism: Brinton (1898), Koch-Grüneberg (1904), Lafone Quevedo (1915), Campbell & Grondona (2007)
- Structural similarities, no shared lexicon (matches suggested by Viegas Barros 1993 are not very convincing)
- Some person markers are further shared by many other families of South America
- Still may hold, but a very careful reconstruction of both PM and PG is necessary
- Only then can the inclusion of Guachí and Payaguá be assessed

#### Tupian and Macro-Jê

3CRF tooth give father husband kill burn<sub>tr</sub> tree eat name meat \*pyk<sup>»</sup> \*ko \*ũp \*jom \*mbin \*wĩ \*-jet \*ñĩt PMJ \*ta- \*juñ<sup>°</sup> \*kym<sup>»</sup> \*pwk \**□*o \*ũp \*jup \*t∂-\*jãc \**□u*p \*mẽt \*wĩ \*jet \*ẽt РТ

#### narrow distribution either in MJ or in Tupian:

	sour	burn <sub>intr</sub>	arrive	ABL	ripe	arm	bat
PMJ	*ndap <sup>»</sup>	*tit <sup>ə</sup>	*wyc <sup>ə</sup>	*wi	*ndêp <sup>"</sup>	*pa(C)	*nĵip <sup>»</sup>
PT	*ndəp	*tit	*w <i>uc</i>	*wi	*ndep	*pa?	*jip

### Cariban, Karirí, and Bororoan

• Some Cariban-Karirí matches have been spotted by de Goeje (1932), but no pC reconstruction was available back then

pBoróro Karirí	tooth ear *ə *bidza dza bepe	to go tree *tu *i dzi	tongue nunu	root mu	hand (a)m <del>i</del> sã	fat *ka	seed *a	fish name heavy *karo *idze *motiti dze madi
pCariban	*(j)ə *pana	*tə *jeje	*nuru	*mi(t-)	*əmija	*ka(t-)	*а	*kana
	pT *jãc pMJ *juñ		pA *nene pKw *nini			pT *kap	pMJ pT *j	*jəm <sup>,,</sup> pT *jet ia pMJ *-jet

## Kakua-Nikak and Wãnsöhöt

- Epps and Bolaños (2017) point out some similarities but hesitate to claim that there Kakua-Nikak is genetically related to Wãnsöhöt
- There are however regular sound correspondences:

0	Wa	KN e
0	Wã	KN e
0	Wэ	KN <del>i</del>

 $\circ$  W O KN  $\tilde{t}$ 

Wãnsöhöt	Kakua	Nikak		Proto-Nadahup
m- <mark>ã</mark> m	m- <mark>ẽ</mark> m	m- <mark>ẽ</mark> m	'thou'	*-m
mã?	m <mark>ẽ</mark> (?ẽ)p	m <mark>ẽ?ẽ</mark> p	'blood'	*miji:w
h <mark>a</mark> ?	he	h <b>e(e</b> )	'stone'	
nãm-?ot 'liver',	n <mark>ẽ</mark> m	n <mark>ẽ</mark> ?	'liver'	
nãm-de 'belly'				
-t <mark>a</mark> (ou <i>da</i> p 'hand'?)	d <mark>e</mark> p		'meat'	*nVp
(də?-) <mark>a</mark> j	t <del>i</del> =h <mark>e</mark> j	(t <del>i</del> a=)h <mark>e</mark> i	'smoke'	
s <mark>a</mark> j	t∫ej	t∫ei	'night'	*c'əm
də?ə	ti	tia	'fire'	*təːŋ
kət	k <del>i</del> j	kii	'star'	
je?	ji	jii, aji	'fat'	
-huj	huj	hui	'to hear'	
2i2	?ip	i(i)p	'father'	*? <del>i</del> p
2ĩn	2ĩn	?ĩ(ĩ)n	'mother'	*?ĩ:n

Wãnsöhöt	Kakua	Nikak		Proto-Nadahup
bidu(t) dap p <mark>a</mark> m	fit tej'- peb-pat	wiit t <mark>e</mark> i? ~ teip	'we' 'hand' 'fan'	Hup nVp-ũh
-ou bo? dok wow	?ŧw mŧh-nã? nĩk wŧw	?ŧ̃ũ nŧ̃(ĩ)k wuw	'to sleep' 'arm' 'tongue' 'alligator'	*?ã:h
dap=sõ =sak hui	tej'=t∫oa t∫ãk hõĩ	tſããk hãw	'nail' 'to bite' 'ant, termite'	

Wãnsöhöt	Kakua	Nikak		Proto-Nadahup
Weird correspondences	•			
-hei		hue?	'good'	
jək	wik	w <del>i</del> g, w <del>i</del> ik	'nose'	
-b <del>i</del> k	wi?	Wi	'to give'	
but	mũnĩ?	mãri-it, mũnĩ-n <del>ĩ</del> t	'ear'	*muːj

#### Probable cultural vocabulary/borrowings:

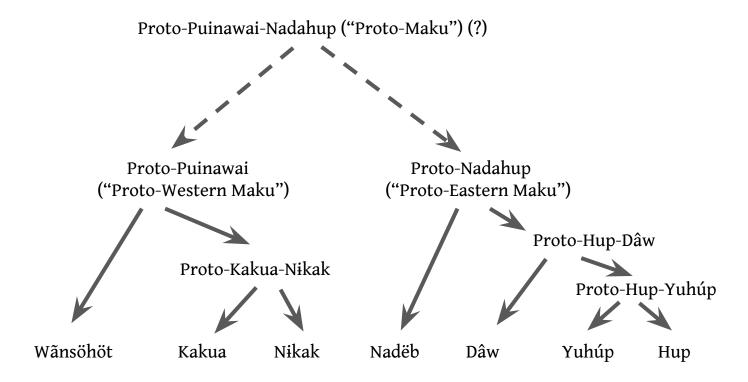
wãm	wãm	wããm	'pan'	
həp	hĩp	huup	'tobacco'	
d <del>i</del> t-	t <del>i</del> t	t <del>i</del> t, tut	'thread, cord,	*tit
			vine'	
?ut	?ut	ut	'thorn'	Hup-Dâw: *?ut
juu	ju		'armadillo'	Hup-Dâw: *jəw

## Kakua-Nikak, Wãnsöhöt, and Nadahup

• Person markers/pronouns:

	Wãnsöhöt	Kakua-Nikak	Nadahup
1SG	2-	(*w-)	*-h
2SG	<i>m</i> -	*m-	*-m

#### Kakua-Nikak, Wãnsöhöt, and Nadahup



## Macro-Chaco hypothesis

Jê-Tupí-Cariban Macro-Tupian Tupian Macro-Jê + Chiquitano Macro-Cariban Cariban Karirí Boróro Macro-Guaicurú Matacoan Guaicurú (?) Zamuco

# Shared morphology

- Many families exhibit phenomena related to the insertion of a typically coronal consonant at the prefix-stem boundary (Macro-Jê, Tupian "Class II", Bororoan vowel-initial stems, but also Matacoan, Guaicuruan...)
- Proto-Macro-Jê shares with Proto-Tupian the morphophonology of the expression of the II class third person (\*j-  $\rightarrow$  \*c-)...
- ...and with Matacoan the morphophonology of the II class second person

	Proto-Macro-Jê		Wichí Lhomtes		Wichí Noctén		
	Ι	II	Ι	II	Ι	IIa	IIb
1	*Ø ~ *ij-	* <b>j</b> ~ *ij- <b>j</b>	'n-	'n- <mark>-</mark> -	O-	0-4-	0- <b>t'-</b>
2	*a-	* <mark>Ø-</mark>	ha-	Ø-	a-	Ø-	Ø-
3	*i-	* <b>c</b>	la-	ł	la-	ł	t'
NP	*	* <b>j</b>		ł		ł	t'

#### Basic vocabulary: Macro-Chaco

- 'tooth': PT \**j*-ãc, PMJ \**j*-uñ, PBo \*o, Chq o?o-, PK \**j*ə, PKrr \**dza*, PG \*-owe
- 'liquid': PT \**j*-*w*, Chq *u*?*u* 'honey', PM \*-?*i*
- 'name': PT \*j-et, PMJ \*-jet, PBo \*idze, PK \*dze, PM \*-ej, PZ \*i, (?) Chq iri-
- 'blood': PT \**au*, PMJ \**j*-*O*, PM \*'woj-, PG \*-awot, Ayoreo ijo
- 'seed': pre-pMundurukú \**j*-a, PMJ \**j*-əm, PBo \*a, Chq *ijo*-, PC \*a, PM \*-o?, PG -a 'fruit'

## Basic vocabulary: Jê-Tupí-Cariban

- 'to go': PT \*to, PBo tu, PK \*[wi]tə[mə]
- 'arm': pMundurukú \*pa?, PMJ \*paC, Chq pa-, PKrr \*bo(ro-), PK \*apə-ri
- 'foot': PT \*py, PMJ \*pVrV, PBo \*bure, Krr \*bi(ri-), (?) Chq pope-, (?) PK \*pupu-ru
- 'seed': pTuparí-Karitiana \*j-upa, PK \*əpi (\*-tipə)
- 'stone': PMJ \*kra(C), PKrr \*kro
- 'tree': PBo \**i*, PKrr \**dzi*
- 'to sleep': pJabutí \*nũtã, Chq a-nu, PBo unutu / -nutu, PKrr \*-unu, (?) PMJ \*ũt<sup>3</sup>