

Historical phonology of Mataguayan

Andrey Nikulin

Javier Carol

Topics in Phonological Diversity



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Our colleague Hannes Kalisch left this world on the very same day this book was finished. It is with great sadness that we dedicate it to his memory. May his love for the cultures of the Chaco be never forgotten.

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Needless to say, all remaining errors are our own.

Abbreviations

Glottonyms

ChL	Chishamnee Lhavos	Mj	Manjui
ChL-Pi	Pilcomayeño	MN	Maka and Nivaclé
	Chishamnee Lhavos	Ni	Nivaclé
ChL-Py	Central Paraguayan	PCh	Proto-Chorote
	Chishamnee Lhavos	PM	Proto-Mataguayan
ChW	Chorote and Wichí	PW	Proto-Wichí
Ijw	Iyojwa'a'ja'	ShL	Shichaam Lhavos
I'w	Iyo'awujwa'	Vj	Vejoz
LB	Lower Bermejeño Wichí	'Wk	'Weenhayek
Mk	Maká	YL	Yita' Lhavos

Glosses

A	agent of a transitive verb	IND	indicative
ACT	active	INTR	intransitive
ALZ	alienizer	IPFV	imperfective
APPL	applicative	IPA	International Phonetic Alphabet
CAUS	causative	IRR	irrealis
CISL	cislocative	LOC	locative
DEM	demonstrative	NFH	non-firsthand
DP	distant past	NIND	non-indicative
GNR	generic or indefinite possessor	NOM	nominative
HAB	habitual	P	patient of a transitive verb
HEN	suffix <i>-hen</i>	PL	plural
I	I-class verb	POSS	possessive
IMP	imperative	REFL	reflexive
IMPRS	impersonal	RES	resultative
INACT	inactive	S	sole participant of an intransitive verb
INCORP	incorporation		

Abbreviations

S _A	S participant aligned with A participant	T	T-class verb
S _P	S participant aligned with P participant	TH	thematic segment
SUB	subordinator	TR	transitive
		WA	WA-class verb

1 Introduction

Mataguayan is a small language family of Southern Chaco (South America). It includes at least four distinct languages, of which two show considerable internal diversity: Maká (Glottocode [maca1260]), Nivaclé ([niva1238]), Chorote (with its varieties Iyojwa’aja’ [iyoj1235], Iyo’awujwa’ [iyow1239], and Manjui), and Wichí (a dialect continuum which includes varieties such as ’Weenhayek [wich1262], Lower Pilcomayeño, Vejoz, and Southeastern). In this book, we systematically apply the comparative method to the extant Mataguayan varieties in order to arrive at a reconstruction of Proto-Mataguayan (= PM) phonology and lexicon.

Basic facts on the individual Mataguayan languages are presented in §1.1. The theoretical tenets of this study are discussed in §1.2. §1.3 surveys all published studies which deal with the reconstruction of Proto-Mataguayan and the historical development of individual Mataguayan languages. §1.4 makes explicit our notation conventions and §1.5 details the structure of this book.

1.1 Mataguayan languages

This section presents some basic facts on each Mataguayan language: Maká (§1.1.1), Nivaclé (§1.1.2), Chorote (§1.1.3), and Wichí (§1.1.4).

1.1.1 Maká

Maká (Glottocode [maca1260]) is the native language of the Maká people of Paraguay. Most speakers currently live in Nueva Colonia Indígena Maká, a community located within the city of Mariano Roque Alonso, in the Gran Asunción metropolitan area (Central department). In addition, some Maká live in the communities of Qemkuket (Presidente Hayes department) and Ita Paso (Itapúa department), as well as in the proximities of Ciudad del Este (Alto Paraná department) (Messineo 2015: 128). The Paraguayan 2012 census (Dirección General de Estadística, Encuestas y Censos 2014) reports the following number of ethnic Maká by department: 1 228 in the Central department, 436 in Presidente Hayes, 32 in Itapúa, 167 in Alto Paraná, 20 in Boquerón (total population in Paraguay:

1 Introduction

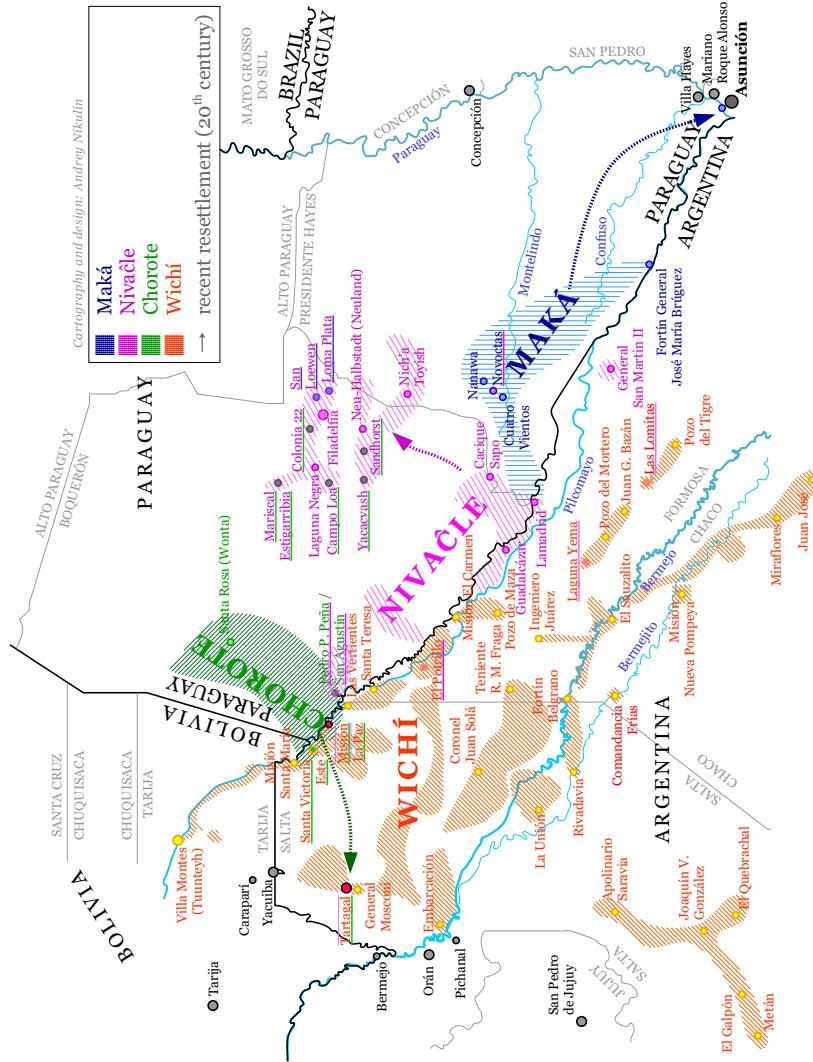


Figure 1.1: Map of the Mataguayan-speaking area

1.1 Mataguayan languages

1 888). In the Argentinean territory, the Argentinean 2022 census reports 13 ethnic Maká, including 5 who speak or understand the language (Instituto Nacional de Estadística y Censos 2024). In earlier literature, the language and the people are sometimes called Enimagá, Towothli, Cochaboth, or Lengua.

Before the Chaco War (1932–1935), the Maká resided in the Paraguayan Chaco, between the headwaters of the Verde, Confuso, and Montelindo Rivers. Their centers were Cuatro Vientos, Nanawa, and Laguna-Guasú, and they are reported to have been divided into two groups, Fisket Łełets and Aseptiket Łełets, who possibly spoke slightly different dialects (Beliaeff 1934, Chase-Sardi 1972, Gerzenstein 1994: 28). After the Chaco War, most of the Maká were transferred to Colonia Fray Bartolomé de las Casas, just across the Paraguay River from Puerto Botánico (Asunción), and in 1985 they relocated to their current location in the city of Mariano Roque Alonso. As of 1991, very few Maká were reported to still live in their homeland in the Chaco (Gerzenstein 1994: 28–29).

Until the 1990s, the Maká language had been known to Western scholars mostly through wordlists. One such wordlist, collected by Wilfrid Barbrooke Grubb and referred to as the Towothli doculect in this book, is reproduced in Hunt (1915: 238–256), whereas several other wordlists (Kysela 1931, Beliaeff 1931, 1934, Schmidt 1937) are published in *Revista de la Sociedad Científica del Paraguay* (partly reproduced in the Appendix in Tacconi 2015). In addition, Demersay (1860: 456) documents a list of 16 words representing a language he calls Lengua, which appears to be a divergent dialect of Maká.¹ These sources do not faithfully reflect the phonological oppositions of Maká and are therefore of limited importance for our study, though they provide philological evidence for dating certain sound changes. Maká data in this book come mostly from Gerzenstein (1989, 1994, 1999), with Messineo (2015) and Tacconi (2015) used as secondary sources. Braunstein (1987), Paraguay (2020, 2022), Unu'uneiki Patricia (2011), and Wycliffe's Bible translations have also been consulted, especially with regard to the opposition between plain and glottalized codas and sonorant onsets, underdifferentiated in other sources.

¹Note that the ethnonym “Lengua” has also been historically used to refer to unrelated ethnic groups of the Chacoan region, including the Enhet (also known as “Lengua Septentrional”, “Northern Lengua”, or “Lengua Norte”), the Enxet (also known as “Enxet Sur”, “Lengua Meridional”, “Southern Lengua”, or “Lengua Sur”), and the Payaguá. The Enhet and the Enxet are speakers of languages classified as members of the Enhet–Enenhet family. The extinct and scarcely attested Payaguá language is best classified as a linguistic isolate, though it may well turn out to be distantly related to Mataguayan (Viegas Barros 2004).

1 *Introduction*

1.1.2 Nivaclé

Nivaclé ([niva1238]) is spoken by the people of the same name in Paraguay and Argentina. The Paraguayan 2012 census (Dirección General de Estadística, Encuestas y Censos 2014) reports 14 768 ethnic Nivaclé in the Paraguayan territory, including 11 705 in the department of Boquerón and 2 932 in the department of Presidente Hayes. In the Argentinean territory, the Nivaclé are known as Chulupí, and their ethnic population is 878, 75.1% of which speak or understand Nivaclé (this corresponds to 659 speakers), according to the Argentinean 2022 census (Instituto Nacional de Estadística y Censos 2024). Historically, the presence of the Nivaclé in what is now Argentina was much more notable, and their area used to extend to the Bermejo River in the south; however, due to conflicts with the military in the early 20th century they retreated north to the Pilcomayo River, and they abandoned their last village on the Bermejo River in 1913 (Hunt 1915: 258). The migration patterns of the Nivaclé in the first half of the 20th century are particularly complex. Between 1900 and 1945, many Nivaclé migrated seasonally from Paraguay to Argentina, seeking to work on sugar plantations in Salta and Tucumán. From 1930 on, a migration flow in the opposite direction – in that of the Mennonite colonies of New-Halbstadt and Filadelfia – became increasingly more intense (Stell 1987: 7–10). In earlier literature, the language and the people are sometimes called Ashlushlay.

Gutiérrez (2015b: 7) reports at least three regional varieties of Nivaclé as defined by linguistic criteria:

1. Chishamnee Lhavos (also known as the Arribeño, or Upriver dialect), spoken along the Pilcomayo River, from Fortín Magariños (to the west from Misión Esteros) in the southeast up to the Pedro P. Peña area (Paraguay) and Salta (Argentina) in the northwest (Stell 1987: 21–22);
2. Shichaam Lhavos (also known as the Abajeño, or Downriver dialect), spoken from Fortín Magariños up to the Missions of San José de Esteros and San Leonardo de Escalante/Fischat, both in Paraguay (Stell 1987: 21–22);
3. and Yita' Lhavos (or the Bush dialect), whose zone lays to the north from the Chishamnee Lhavos area, entirely in Paraguay, reaching Mayor Infante Rivarola and approaching Mariscal Estigarribia, with speakers in the Mission of Santa Teresita.

Little is known about the defining characteristics of the dialects spoken by other groups. The Jotoi Lhavos live in the northern part of the Mennonite colonies area, around Campo Loa, to the southeast from Mariscal Estigarribia, Paraguay,

1.1 *Mataguayan languages*

whereas the Tavashai Lhavos live northeast of the Mission of San Leonardo de Escalante/Fischat, between Fortín General Díaz and Tinfunké, along the northernmost extreme of Estero Patiño, also in Paraguay (Stell 1987: 22–23).

Early work on the Nivaclé language includes a short description and vocabulary in Hunt (1915: 257–305) and some less accessible publications, surveyed in Campbell et al. (2020: 15–17). These early sources are not used in our study, because many phonological oppositions of Nivaclé are not sufficiently well represented there. In this book, we rely on Seelwische (2016) as our main source of the Nivaclé lexicon, whereas Gutiérrez (2015b), Fabre (2014), and Campbell et al. (2020) have served as our main data sources on Nivaclé phonology and grammar. Secondary sources include Stell (1987) and the works by Gutiérrez (2015a, 2016a,b,c, 2020, forthcoming).

1.1.3 Chorote

Chorote is a language, or maybe two closely related languages, spoken by the Iyojwa’aja’ and Iyo’awujwa’ peoples of Argentina and by the Manjui people of Paraguay. The varieties spoken by these peoples are referred to in this book, respectively, as Iyojwa’aja’ [iyoj1235], Iyo’awujwa’ [iyow1239], and Manjui (no Glottocode assigned). Iyo’awujwa’ and Manjui are considerably closer to each other than any of them is to Iyojwa’aja’; they are sometimes collectively referred to as Forest Chorote or, in Gerzenstein’s works, as variety #2 (V2), and individually as Argentinean V2 and Paraguayan V2. By contrast, Iyojwa’aja’ is also known as Riverine Chorote or as the variety #1 (V1). Instituto Nacional de Estadística y Censos (2024) reports 3 238 ethnic Chorote (Iyojwa’aja’ and Iyo’awujwa’) in the Argentinean territory, 75.1% of which speak or understand Chorote (this amounts to 2 431–2 433 speakers). Their main communities in the Chacoan region are Misión La Paz, La Bolsa, La Gracia, La Merced Vieja, and La Merced Nueva, though many have moved to the outskirts of Tartagal in the early 20th century, more specifically, to the communities of Misión Chorote I, Misión Chorote II, Misión Chorote – Parcela 42, Lapacho I, Misión Kilómetro 4, Misión Kilómetro 6, and Misión El Cruce (the latter community is located in the municipality of General Mosconi rather than Tartagal). The Paraguayan 2012 census (Dirección General de Estadística, Encuestas y Censos 2014) reports 582 ethnic Manjui in the Paraguayan territory, almost all of them (579) in the department of Boquerón. Their main centers are Misión Santa Rosa (Wonta, more than 400 individuals), Abizai (close to Mariscal Estigarribia), and San Eugenio–San Agustín. The exonym Chorote is also sometimes spelt Chorotí in earlier literature.

1 Introduction

It should be noticed that in this book we reserve the term *Manjui* (originally a Nivaâle exonym) for the dialect spoken in specific parts of Paraguay, and particularly in Santa Rosa (Wonta). It does not include the variety spoken in the community of San Eugenio, located in the surroundings of Pedro P. Peña near the Pilcomayo River (Paraguay), which is very close to Argentine Iyo'awujwa' spoken in Misión La Paz, Argentina ("almost identical", according to a consultant that has lived in both places). Our usage of the term *Manjui* therefore differs from the everyday usage of the same term in Paraguay, where any Chorote person is referred to as "Manjui", irrespective of the dialect they speak (in Argentina, the term "Chorote" is employed in the same way).

The autonym of the Manjui is *Inkijwas* 'neighbors, those who live together'. Another glottonym found in the literature is *Lumnanas* 'Forest People', spread in the 2000s, but not universally accepted at present (and rejected in Santa Rosa). In turn, *Wikina Wos* 'Northern People' is the name given by the Argentinean Chorote to the ones that live in Paraguay.

The Manjui variety (excluding that of San Eugenio) has two subdialects, which according to Hunt (1994) are *Jlimnájnas* 'Forest People', or *Dialect A*, and *Jlawá'a Wos* 'Outsiders', or *Dialect B*. The first one corresponds to the original dwellers of the area of Santa Rosa, where a Mission of New Tribes was founded by the end of the 1960s, and the second one to neighboring groups, especially to the East, that arrived to Santa Rosa after the foundation of the Mission. The variety spoken in Mariscal Estigarribia is also *Jlawá'a Wos*. There are minor differences between them, which are mainly phonetic and, to a lesser extent, lexical. Unfortunately, we cannot reflect this variation in this book in a systematic way. Although we often report internal variation in Manjui, we are often not able to assign a specific dialectal form to either dialect.²

The varieties of Chorote are generally mutually intelligible to great extent, except that Iyojwa'aja' and Iyo'awujwa' speakers from Argentina do not understand Manjui because of their increased speech rate (the reverse is, however, not true).

Early sources on Chorote include Hunt's (1915) description of Iyojwa'aja' and Lehmann-Nitsche's (1910–1911) wordlists of Manjui (labeled as "A" and "C") and Iyojwa'aja' (labeled as "B"). However, the transcription in these works is quite unreliable, and we rely on them only when a certain lexeme is not attested in

²In speakers born in the 1970s or later, with which Carol's fieldwork was mainly conducted, both dialects seem to have mixed to some extent. Specific forms were often attributed to one or another dialect depending on the speaker, and different forms were sometimes recognized as representative of the same dialect. Most of Carol's consultants recognized themselves as *Jlawá'a Wos*.

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Carol's field materials. The Iyojwa'aja' data in this book come from Carol's original fieldwork (published in Carol 2014a and Carol 2014b, among other works) and Drayson's (2009) dictionary.³ For the Iyo'awujwa' variety, we rely on Gerzenstein's (1983) grammatical description and vocabulary and on Carol's field notes. For Manjui, we also mostly rely on Carol's field data, published as Carol (2018) and Carol (forthcoming), and on Hunt's (1994) vocabulary when a given datum is lacking from our corpus. Scarpa (2010) is a useful source on Iyojwa'aja' and Iyo'awujwa' phytonymy.

1.1.4 Wichí

Wichí is a dialect continuum spoken by a people known as Wichí in Argentina and as 'Weenhayek in Bolivia. Instituto Nacional de Estadística y Censos (2024) reports 69 080 ethnic Wichí in the Argentinean territory, 73.4% of which speak or understand Wichí (this amounts to 50 671–50 739 speakers), distributed by province as follows: 45.9% in Salta, 32.3% in Formosa, 9.2% in Chaco, 12.6% elsewhere. Instituto Nacional de Estadística y Censos (2024) also reports 179 ethnic 'Weenhayek, 63.1% of which speak or understand 'Weenhayek (this corresponds to 113 speakers). The Bolivian 2012 census (Instituto Nacional de Estadística 2015) reports that 4 551 individuals aged 4 or more learnt 'Weenhayek as their first language, and that 3 482 individuals aged 6 or more use it as their main language in daily life. In earlier literature, the language and the people are sometimes called Mataco, an ethnonym now considered pejorative.

From a linguistic point of view, Wichí can be subdivided into at least four dialectal zones, as will be argued in §9.2.

1. 'Weenhayek [wich1262], also called Noctén or Noctenes in earlier literature, is the variety spoken in Bolivia along the Pilcomayo River, between the city of Villamontes and the Argentinean border;
2. Lower Pilcomayeño (or Guisnay, from Wichí *W'enhayey* [w'ẽnãjey]) [wich1264] is a poorly described dialect (or perhaps a dialect cluster) spoken along the Pilcomayo River and around the city of Tartagal in the Argentinean provinces of Salta and Formosa;

³The pioneering study of Iyojwa'aja' by Gerzenstein (1978, 1979) was instrumental for Carol's own work, but is not extensively cited in this book given our focus on phonetics and phonology. Subsequent research has revealed some inaccuracies in Gerzenstein's transcriptions, especially regarding glottal and glottalized consonants.

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3. Vejoz [wich1263] is spoken in the Argentinean province of Salta along the Bermejo River;
4. Southeastern Wichí (including subdialects such as Lower Bermejeño Wichí and Rivadavia Wichí) is spoken in the Argentinean provinces of Salta, Formosa, and Chaco along the Bermejo River as well as between the Bermejo and Pilcomayo Rivers.

The earliest known record of Wichí, representative of the Vejoz dialect, is Esteban Primo de Ayala's 1795 *Diccionario y arte de la lengua mataca*, published in [Combès & Montani \(2020\)](#). Other early sources include [Pelleschi \(1886, 1897\)](#), [Massei \(1895\)](#), [Remedi \(1896\)](#), [Lehmann-Nitsche \(1910–1911\)](#), [Hunt \(1913a,b, 1937, 1940\)](#). These works do not fully reflect the phonological oppositions of Wichí and are therefore not particularly useful for the purposes of our study. We rely on modern sources instead. For the 'Weenhayek variety, our preferred sources are [Claesson's \(2016\)](#) dictionary and [Alvarsson & Claesson's \(2014\)](#) grammatical description. For Vejoz, we have consulted the vocabularies by [Viñas Urquiza \(1974\)](#) and [Gutiérrez & Osornio \(2015\)](#). For the Lower Bermejeño subdialect of Southeastern Wichí, we mostly rely on [Nercesian \(2014\)](#)'s grammar, whereas [Braunstein \(2009\)](#)'s vocabulary serves as a secondary source; in addition, many flora and avifauna terms have been extracted from [Spagarino \(2008\)](#) and [Spagarino et al. \(2013 \[2011\]\)](#). [Suárez \(2014\)](#) is a useful source on plant names in the Southeastern variety as spoken in Salta. [Terraza \(2009b\)](#) is a description of Southeastern Wichí as spoken in Rivadavia.

1.1.5 Lexicostatistic classification

We have conducted a lexicostatistic survey with the twofold purpose of obtaining a working model of a phylogenetic tree of Mataguayan and assessing the approximate chronological depth of Proto-Mataguayan. An analogous study with similar results had been carried out by [Tovar \(1964\)](#), but it was based on imperfect data and did not take into account the dialectal diversity of Nivaclé, Chorote, and Wichí (each of these languages is represented by only one lect in that study).

For our lexicostatistic calculations, we have used a list of 110 concepts (an extension of the 100-item version of the Swadesh list), which has been compiled for Maká, two Nivaclé lects, three Chorote lects, and four Wichí lects (GLD-mtg) in accordance with the standards adopted in the Global Lexicostatistic Database ([Starostin 2011–2019](#)). Known loanwords have been excluded from the counts. We

1.1 Mataguayan languages

have also calculated approximate divergence dates for each purported intermediate protolanguage based on the formula proposed by [Vasilyev & Saenko \(2017\)](#).⁴ The resulting matrix is given in Table 1.1 (see the [list of abbreviations](#) for the glottonyms).

Table 1.1: Lexical distances between Mataguayan lects (all values in %)

	Ni ShL	Ni ChL	Mj	I'w	Ijw	'Wk	Vej	Riv	LB
Mk	38.10	36.80	28.57	31.00	32.65	22.64	24.51	20.00	19.81
Ni ShL		95.33	43.92	44.12	41.41	34.26	35.58	31.58	31.78
Ni ChL			44.86	46.08	43.43	36.11	37.50	33.77	34.26
Mj				94.12	81.82	54.63	54.37	52.63	49.53
I'w					84.38	54.37	54.00	54.17	49.02
Ijw						59.00	56.25	57.14	54.54
'Wk							93.27	89.47	92.59
Vej								90.67	91.35
Riv									94.80

The languages represented by multiple lects in our survey show unequal degrees of internal diversity. Nivaclé and Wichí are quite internally close-knit: there are 95.33% of matches between two Nivaclé dialects (ca. 560 years of divergence), and 89.47%–93.27% of matches between the main dialects of Wichí (ca. 690–900 years); the Rivadavia and Lower Bermejeño subdialects of South-eastern Wichí show an even higher match percentage (94.80%, or ca. 595 years of independent development). By contrast, Chorote is more internally diverse, with as little as 81.82% of matches between Manjui and Iyojwa'aja' (ca. 1270 years). Iyo'awujwa' is obviously closer to Manjui (94.12%, or ca. 640 years) than to Iyojwa'aja', but it shares more cognates with the latter variety than Manjui due to the Iyojwa'aja'–Iyo'awujwa' contact.

On a macro scale, the clearest node comprising multiple languages within Mataguayan is the so-called Chorote–Wichí branch, with the percentage of matches

⁴The formula in question was chosen because it was designed and tested based on the same type of data sets as the one used here (110-item Swadesh lists for Romance languages compiled in accordance with the standards adopted in the Global Lexicostatistic Database). According to [Vasilyev & Saenko's \(2017\)](#) glottochronological model (the so-called **flow model**), two languages whose most recent common ancestor was spoken t millennia ago are expected to share $e^{-0.61t}(1 + 0.61t)$ cognates on the 110-item Swadesh list.

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ranging between 49.02% and 54.63% for each pair of lects (we exclude Iyojwa’aja’, which shows up to 59.00% matches with Wichí, because its speakers are known to have intensely contacted with the Wichí since at least 1900). Tovar (1964: 371) gives a similar figure, with 61% of matches on a 100-item wordlist and 49% on a 223-item wordlist. Proto-Chorote–Wichí must have split into Chorote and Wichí some 2,515–2,805 years before present. Note that Wichí could be viewed as the most divergent language within Mataguayan from a morphosyntactic point of view (two salient features are its lack of grammatical gender and its use of demonstrative suffixes rather than proclitics), whereas Chorote is much closer to Nivaclé and Maká in this regard; we interpret this as an innovation specific to Wichí, whereby the latter language underwent considerable structural change in a relatively short period of time.

The position of Nivaclé within the Mataguayan *Stammbaum* is less clear: the language shows comparable percentages of matches with Maká (36.80%–38.10%) and Wichí (31.58%–37.50%), whereas the Nivaclé–Chorote matches total at an even higher rate (41.41%–46.08%) due to language contact between Nivaclé and Chorote (note that Nivaclé cannot form a clade with Chorote to the exclusion of Wichí, since Chorote is most closely related to Wichí). Tovar (1964: 371) finds that Nivaclé shares the same amount of cognates with Maká (44% on a 100-item wordlist, 38% on a 223-item wordlist) as with Chorote (44% and 40%, respectively), whereas the pair Nivaclé–Wichí shows less matches (38% and 33%, respectively); Tovar’s (1964) opinion is that some Nivaclé–Chorote matches are of “cultural” nature. There are three interpretation possibilities, none of which can be discarded at present.

1. Nivaclé could be equidistant from Maká and Chorote–Wichí. In this case Proto-Mataguayan split into three branches (Maká, Nivaclé, and Chorote–Wichí) somewhere around 4,460–4,930 years ago, as indicated by the low shares of cognates between Maká and the Wichí lects (19.81%–24.51%; Tovar 1964 likewise identifies 15% of cognates on his 100-item wordlist and 19% on his 223-item wordlist). The higher shares involving pairs such as Nivaclé–Chorote (especially Chishamnee Lhavos and Manjui/Iyo’awujwa’), Maká–Nivaclé (especially the Shichaam Lhavos dialect), Nivaclé–Wichí, and Maká–Chorote would be explained by undetected borrowings between sister languages.
2. Nivaclé could form a clade with Maká. This is proposed by Fabre (2005), Campbell & Grondona (2007), Viegas Barros (2013a: 296). Under this scenario, Proto-Mataguayan split in a binary way into Maká–Nivaclé and

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Wichí–Chorote ca. 4,460–4,930 years ago. The higher shares involving pairs such as Nivaclé–Chorote (especially Chishamnee Lhavos and Manjui/Iyo’awujwa’), Nivaclé–Wichí, and Maká–Chorote would be explained by undetected borrowings between sister languages. Proto-Maká–Nivaclé must have split into Maká and Nivaclé ca. 3,520 years ago, based on the cognate share in the pair Maká–Chishamnee Lhavos (Shichaam Lhavos, which has some additional cognates with Maká, is spoken in an area adjacent to the Maká homeland, and the higher share of matches in the pair Maká–Shichaam Lhavos suggests that there has been some language contact between these lects).

3. Nivaclé could form a clade with Chorote–Wichí to the exclusion of Maká. In this case Proto-Mataguayan would have split into Maká and Nivaclé–Chorote–Wichí ca. 4,460–4,930 years ago. The higher shares involving pairs such as Maká–Nivaclé (especially the Shichaam Lhavos dialect) and Maká–Chorote would be explained by undetected borrowings between sister languages. Proto-Nivaclé–Chorote–Wichí would have split into Nivaclé and Chorote–Wichí somewhere around 3,470–3,880 years before present (based on 31.58%–37.50% of matches between Nivaclé and Wichi). The higher share of cognates involving Nivaclé (especially the Chishamnee Lhavos dialect) and Chorote (especially Manjui and Iyo’awujwa’) is due to language contact.

In principle, it is conceivable that the low share of cognates between Maká and Wichí – 19.81% to 24.51% – is due to vocabulary loss in one of these languages (or maybe in both) due to lexical borrowing from unknown sources. If these figures are ignored, the disintegration of Proto-Mataguayan must be dated at 3,880–4,110 years before present, based on cognate shares such as 28.57% (Maká–Manjui) or 31.58% (Shichaam Lhavos Nivaclé–Rivadavia Wichí).

1.1.6 External relations

The Mataguayan languages have prominently figured in a number of long-range proposals, most notably as a part of the so-called Mataco–Guaicuruan or Macro-Guaicuruan proposal (cf. [Viegas Barros 2013a](#) for the most recent evaluation and references), whereby Mataguayan is considered to be related to the Guaicuruan language family of Argentina, Paraguay, and Brazil (the extinct Guachí and Payaguá languages are also sometimes included into the proposal; [Viegas Barros 2004](#)). The hypothesis hinges on significant morphological similarities between

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Mataguayan and Guaicuruan, but there are also multiple lexical lookalikes involving reconstructed Proto-Mataguayan and Proto-Guaicuruan forms. We find the Mataco–Guaicuruan proposal plausible, though a detailed appraisal is beyond the scope of this book. Some lexical lookalikes involving Mataguayan and Guaicuruan are given below, and many more are pointed out in our etymological dictionary (Chapter 10), where we also indicate whether a given lookalike is mentioned in Viegas Barros’s (2013a) study. The Proto-Mataguayan reconstructions are ours, and the Proto-Guaicuruan ones come from Viegas Barros (2013b).

- (1) Proto-Mataguayan $^{*-\acute{a}\phi e(?)}$ || Proto-Guaicuruan $^{*-o\text{we}}$ ‘tooth’
- (2) Proto-Mataguayan $^{*[w]\acute{a}pil}$ ‘to return hither’, $^{*[t]pil}$ ‘to return thither’ || Proto-Guaicuruan $^{*-op'il}$ ‘to return’
- (3) Proto-Mataguayan $^{*[n]\acute{a}t} \sim ^{*[n]j\acute{a}t}$ ‘to bleed’ || Proto-Guaicuruan $^{*-awot}$ ‘blood’
- (4) Proto-Mataguayan $^{*-\ddot{a}\phi}$ || Proto-Guaicuruan $^{*-a'wá}$ ‘wing’
- (5) Proto-Mataguayan $^{*[j]\acute{a}n}$ || Proto-Guaicuruan $^{*-a(?)n}$ ‘to put’
- (6) Proto-Mataguayan $^{*[j]\acute{e}k\phi a'x}$ || Proto-Guaicuruan $^{*-ewak}$ ‘to bite’
- (7) Proto-Mataguayan $^{*[ji]\acute{a}t} \sim ^{*[ji]j\acute{a}t} \sim ^{*[ji]let} \sim ^{*[ji]l\acute{e}t}$ || Proto-Guaicuruan $^{*-?i(?)lote}$ ‘to flee’
- (8) Proto-Mataguayan $^{*(-)\acute{a}t}$ ‘firewood’ || Proto-Guaicuruan $^{*-o'lét}$ ‘fire’
- (9) Proto-Mataguayan $^{*(-)lo(?)} \sim ^{*(-)ló(?)}$ || Proto-Guaicuruan $^{*\acute{a}(?)lo}$ ‘ashes’
- (10) Proto-Mataguayan *máh ‘go!’ || Proto-Guaicuruan *mo ‘you go; go!’
- (11) Proto-Mataguayan $^{*-má'k}$ || Proto-Guaicuruan $^{*\acute{a}'moqo}$ ‘powder’
- (12) Proto-Mataguayan $^{*-nji'x}$ || Proto-Guaicuruan $^{*-(?)nik}$ ‘smell’
- (13) Proto-Mataguayan $^{*\acute{a}nálu(h)}$ ‘day, world’ || Proto-Guaicuruan $^{*naló?}$ ‘natural light, day, sun’
- (14) Proto-Mataguayan $^{*(-)<n>\acute{a}jix}$ || Proto-Guaicuruan $^{*-a'díko}$ ‘path’
- (15) Proto-Mataguayan *tsáháq || Proto-Guaicuruan $^{*t'aqáqa}$ ‘chajá bird’
- (16) Proto-Mataguayan $^{*-wá'x}$ ‘burrow, anus’ || Proto-Guaicuruan $^{*-wV'g}$ ‘hole’
- (17) Proto-Mataguayan $^{*\acute{a}wále'k}$ || Proto-Guaicuruan $^{*-awalek}$ ‘to walk’
- (18) Proto-Mataguayan $^{*[ji]\acute{a}wán}$ || Proto-Guaicuruan $^{*-wen}$ ‘to see’
- (19) Proto-Mataguayan $^{*[t]at'o}$ || Proto-Guaicuruan $^{*-at'ó}$ ‘to yawn’
- (20) Proto-Mataguayan $^{*\acute{a}x}$ ‘skin, bark’ || Proto-Guaicuruan $^{*\acute{a}ko}$ ‘skin, leather’

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- (21) Proto-Mataguayan $^{*}(j)u'k$ || Proto-Guaicuruan $^{*}iko$ ‘tree (suffix)’
 (22) Proto-Mataguayan $^{*}-\acute{a}w\acute{a}(?)$ || Proto-Guaicuruan $^{*}-awo<q\acute{o}>$ ‘flower’

Mataguayan also displays notable similarities with the Zamucoan language family of Paraguay and Bolivia, which is composed of three languages (Old Zamuco, Ayoreo, and Chamacoco). [Ciucci \(2014\)](#) notes multiple morphological and lexical similarities between Zamucoan, Mataguayan, and Guaicuruan, and attributes them to language contact, but the nature of similarities involved (inflectional morphology, basic vocabulary, shared suppletion pattern in the verb ‘to go (away)’) makes us think that Zamucoan could in fact share a distant common ancestor with Mataguayan (and Guaicuruan). An obstacle for pursuing this promising avenue of research is the fact that there have been no systematic attempts at reconstructing Proto-Zamucoan phonology and lexicon so far. Some lexical lookalikes involving Mataguayan and Zamucoan are given below; the Zamucoan forms are from [Ciucci \(2016: 778–791\)](#).

- (23) Proto-Mataguayan $^{*}[t]'\acute{a}(?)k$ || Old Zamuco $[t]ak$; Ayoreo $[t]ak(e)$; Chamacoco $[t]a:k$ ‘to eat (intransitive)’
 (24) Proto-Mataguayan $^{*}tux$ || Old Zamuco/Ayoreo $[t]agu$; Chamacoco $[t]ew$ ‘to eat (transitive)’
 (25) Proto-Mataguayan $^{*}[ji]m\acute{a}$ || Old Zamuco 1SG $a-im\acute{o}$; Ayoreo mo ; Chamacoco $um\acute{o}?$ ‘to sleep’
 (26) Proto-Mataguayan $^{*}-\acute{e}j$ ‘name’ || Proto-Guaicuruan $^{*}-ej$ ‘to name, to call’ || Ayoreo i ; Chamacoco $i:-tc$ ‘name’
 (27) Proto-Mataguayan $^{*}[j]ik$ / $^{*}-\acute{a}k$ / $^{*}-\acute{a}k$ || Proto-Guaicuruan $^{*}-eko$ ~ $^{*}-iko$ || Ayoreo dik ; Chamacoco $[d]\acute{i}rk$ ‘to go (away)’

It is possible that Mataguayan, Guaicuruan, and Zamucoan are all even more distantly related to a number of more northern language families. [Lafone Quevedo \(1910–1911\)](#) observes some similarities between the person indices of Guaicuruan and Chiquitano (a language now known to be classified as Macro-Jê; [Adelaar 2008](#)). [Viegas Barros \(2005\)](#) notes some morphological and lexical similarities between Mataguayan, Guaicuruan, and Macro-Jê, a major language family of Brazil and Bolivia, with extinct members in Paraguay and Argentina. [Nikulin & Carvalho \(2018: 552–555\)](#) tentatively suggest, based on limited evidence, that Mataguayan, Guaicuruan, and Zamucoan form a phylum which is distantly related to another phylum composed of Tupian, Macro-Jê, Bororoan, Cariban, and

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Karirian (cf. Rodrigues 2013 on this latter grouping); together, all these families are hypothesized to constitute the so-called Macro-Chacoan macrofamily, to which Nikulin (2020: 79–80) adds Yaathê and is currently inclined to think, based on unpublished evidence, that the Harakmbut–Katukina language family of Western Amazonia (established by Adelaar 2000) also belongs there.

Some lexical lookalikes involving Mataguayan and other language families are given below. The sources are as follows: Nikulin (2020) for Proto-Macro-Jê and for the Karirian varieties (Kipeá and Dzubukuá), Camargos (2013) for Proto-Bororoan, Gildea & Payne (2007) for Proto-Cariban, Silva (forthcoming) and Silva (2022, personal communication) for pre-Yaathê, Anjos (2011) for Katukina, Tripp (1995) for Harakmbut, and the first co-author’s ongoing research for Proto-Tupian (partially published in Nikulin & Carvalho 2022). The transcriptions have been adapted to the International Phonetic Alphabet, except for sounds whose reconstructed value has not been established with certainty (Proto-Macro-Jê *â, Proto-Tupian *k̯).

- (28) Proto-Mataguayan *-koj || pre-Yaathê *-koj ‘hand’
- (29) Proto-Mataguayan *pétaj || pre-Yaathê *pVlití-a ~ *pVlití- ‘rain’
- (30) Proto-Mataguayan *-xáte'k ‘head’ || Proto-Guaicuruan *-(a)t'ek ‘head, hair’ || pre-Yaathê *-dáká / *dáká-ka ‘head’
- (31) Proto-Mataguayan *-te? || Old Zamuco/Ayoreo *edo*; Chamacoco *PL il-e ~ il-i* (Ciucci 2022) || Proto-Macro-Jê *-ndom^o || pre-Yaathê *-tò ‘eye’
- (32) Proto-Mataguayan *?ítåχ || Proto-Tupian *at'á / *-j-at'á || Kipeá *isu* / *-usu*; Dzubukuá *iðu* / *-uðu* ‘fire’ || Katukina *ita*, Harakmbut *?ita?* ‘firewood’
- (33) Proto-Mataguayan *[ji]ká't-APPL || Proto-Tupian *-kat || Harakmbut *-kot* ‘to fall’
- (34) Proto-Mataguayan *-φ'i(?) || pre-Yaathê *-pè(j) || (?) Proto-Tupian *-pi / *mbi || Proto-Macro-Jê *-pâr^o || Kipeá *bi(ri-)*; Dzubukuá *bi* || Proto-Bororoan *bire ‘foot’
- (35) Proto-Mataguayan *-k'u ‘horn, club’ || pre-Yaathê *-kì ‘horn’ || Proto-Tupian *(-)kup || Proto-Macro-Jê *(-)ki_im^o ‘tree, horn, club’
- (36) Proto-Mataguayan *-k'o ‘bottom, pit’ || Proto-Tupian *-kā?āc (preserved only in the Mundurukan branch) || Proto-Macro-Jê *-kup^o ‘hole’
- (37) Proto-Mataguayan *-ó? || Proto-Macro-Jê *c(-)3m^o || Proto-Bororoan *a || Proto-Cariban *a-ri ~ *a-tipa ‘seed’
- (38) Proto-Mataguayan *-á? || Proto-Guaicuruan *-a || Ayoreo *a*; Chamacoco *e:-ta?* ‘fruit’ || Proto-Tupian *-?a ‘fruit; head’

1.2 Theoretical tenets

1.2 Theoretical tenets

In this section we describe the theoretical tenets of our study, with an emphasis on how a bottom-up approach to the reconstruction of protolanguages can be meaningfully complemented with elements of a top-down approach. We also discuss the relevance of the different levels of phonological analysis to studies in historical linguistics, and explicit our views on the best practices in the applications of the comparative method and etymological analysis.

The application of the comparative method in this book follows a **bottom-up top-controlled approach**, composed of two important principles: the **bottom-up reconstruction principle (39)** and the **external control principle (40)**.

- (39) **Bottom-up reconstruction principle.** If a given clade is subdivided into subclades, the reconstruction of each element of its protolanguage must be based on the reconstructions of the intermediate protolanguages (the ancestral languages of the aforementioned subclades).
- (40) **External control principle.** If the languages of a given clade do not allow for an unambiguous reconstruction of a given element for its protolanguage (for example, when the evidence is conflicting or incomplete), it is permissible to take into account data from other related languages in order to decide which reconstruction is the most plausible one.

The principles in 39 and 40 are applicable to phonological, lexical, morphological, and syntactic comparanda alike.

In order to comply with the bottom-up reconstruction principle, we make extensive use of Proto-Chorote and Proto-Wichí reconstructions in addition to the data of the contemporary Chorote and Wichí varieties. This is justified by the fact that in each Chorote and Wichí variety, at least some important distinction has been lost as compared to Proto-Chorote and Proto-Wichí, respectively. For example, Iyojwa'aja' has merged the clusters of the shape **hT* (where *T* stands for any stop; metathesized from earlier **Th*) with plain stops, whereas Manjui and Iyo'awujwa' have neutralized the opposition between **a* and **å*. Similarly, Southeastern Wichí has merged Proto-Wichí **u* and **e* and has apparently lost important prosodic distinctions of Proto-Wichí, as well as word-final instances of **h*, whereas 'Weenhayek has suffered a partial merger of **q* and **kʷ*, among other likely innovations.

The external control principle allows us to choose between alternative reconstructions of Proto-Chorote and Proto-Wichí forms in a number of situations. For

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example, as noted above, Manjui and Iyo’awujwa’ have neutralized the opposition between PCh **a* and **å*, preserved in Iyojwa’aja’ after palatal and palatalized consonants. This entails that whenever a Iyojwa’aja’ cognate is unavailable – or if it is available but the vowel in question happens to occur after a non-palatal(ized) consonant –, it would be impossible to decide whether PCh **a* and **å* should be reconstructed in a given protoform based on Manjui and Iyo’awujwa’ evidence alone. For instance, the Proto-Chorote etymon of Manjui *?ahájuk* and Iyo’awujwa’ *ahájik* ‘mistol tree’ (without a cognate in Iyojwa’aja’) could be alternatively reconstructed as PCh **?ahájuk*, **?ahájuk*, **?ahájuk*, or **?ahájuk*. Cognates elsewhere in Mataguayan, such as Nivaclé *?axájuk* and ’Weenhayek *?ahájuk*, clearly show that the correct Proto-Chorote reconstruction is **?ahájuk*.

Throughout this book, we adopt a relatively shallow representation of the data as opposed to sticking to an underlying phonological representation (§1.4.1). This is done for a variety of reasons. First of all, using major allophones rather than phonemes helps circumvent the situation where multiple conflicting analyses have been proposed (for example, aspirated and ejective consonants in Wichí are analyzed as clusters by [Claesson 1994](#) and as phonemes by other authors), or where no deep analysis is available at all (this is the case of Iyo’awujwa’ and of the reconstructed protolanguages). Using a shallow representation also spares us from the necessity of representing archiphonemes in neutralizing environments. Finally, representing the major allophones makes it easier for the reader to track instances of phonetic change in addition to those of phonological change.

The reconstruction of Proto-Mataguayan in this book is grounded in a solid etymological analysis of the extant comparative corpus. We take a strict approach to the etymologies, whereby only precise (or almost precise) formal and semantic matches between languages are considered to satisfy the criteria for cognition. In some cases, we argue that horizontal transmission (rather than cognation) accounts best for some of the observed similarities; this includes borrowings which have possibly been intermediated by non-Mataguayan languages.

1.3 Previous research

The Mataguayan language family in its current limits has been recognized as a valid genetic unit at least since [Métraux \(1942\)](#), who proposed the label Matako–Maká for it. [Mason \(1950: 202–204\)](#), who uses the spelling Mataco–Maká, proposes that the family is split in a binary way into two branches (Mataco and Maká), and that the Mataco branch is further subdivided into Mataco–Mataguayo (equivalent to the present-day Wichí) and Chorotí–Ashluslay, which includes

1.3 Previous research

languages known today as Chorote and Nivaâle. The label Matacoan (or its variants), considered derogatory by the speakers, is sometimes used as a synonym of Mataguayan even today, especially in English-language publications.

Although there have been attempts at a phonological reconstruction of PM (Najlis 1984, Viegas Barros 1993, 2002), none of them can be considered conclusive. The first two predate the publication of two pioneering works on Maká (Gerzenstein 1994, 1999), which appears to be a conservative language in many respects (for example, it preserves a contrast between uvulars and velars, mostly neutralized in other languages). Viegas Barros (2002) makes several improvements, especially regarding guttural (velar, uvular, and glottal) fricatives, but it still predates the publication of important descriptive work on Wichí, Chorote, and Nivaâle, which appeared in the last two decades; therefore, many issues deserve revision in light of the new data. Indeed, recent documentation work has revealed important facts about the phonologies of Nivaâle (Fabre 2014, Gutiérrez 2015b, 2016a,b,c, 2019a,b, forthcoming, Campbell et al. 2020),⁵ Chorote (Carol 2014a,b, 2018), and various dialects of Wichí (Fernández Garay 2006–2007, Spinelli 2007, Avram 2008, Fernández Garay & Censabella 2009, Terraza 2009b, Nercesian 2014). Gutiérrez & Nercesian's (2021) study on the glottal stop and glottalization in the Mataguayan family is the most recent contribution, whose main point is that */ʔ/ should be reconstructed as a phoneme in PM. In our book, all these recent works are taken into account, which at times prompt us to deviate in significant ways from decisions taken in earlier studies in Mataguayan historical linguistics.⁶ This is particularly relevant for Chorote (for which we rely on one of the authors' field data); we show that previous accounts of its historical development have failed to recognize a significant number of phonological processes which are synchronically active in the Chorote varieties.

There are several published studies dedicated to the historical development or comparative studies centered on specific Mataguayan languages. Most of them are dedicated to the dialectal diversity of Wichí, with Najlis (1971), Cayré Baito (2015) focusing on phonology, Nercesian (2019) on morphosyntax, Nercesian & Amarilla (2021) on lexicon, whereas Nercesian (2020) seeks to identify the defining traits of each major dialect of Wichí. In her description of Iyo'awujwa' and Manjui, Gerzenstein (1983) notes a number of differences between these varieties and Iyojwa'aja' and makes an attempt at a reconstruction of Proto-Chorote

⁵Fabre's (2014) grammatical description has also been published as a book (Fabre 2016), an edition we were unable to consult. Our mentions of Fabre's grammar in this book rely on the 2014 version, in particular with regard to the page numbers.

⁶This book was already completed when we learned of Nercesian & Arellano's (2023) and Campbell's (submitted) relevant studies.

1 *Introduction*

forms. [Campbell & Grondona \(2007\)](#) carry out an internal reconstruction of pre-Nivaclé phonology based on the morphophonological alternations found in that language.

Finally, [Viegas Barros \(2013a\)](#) makes a pioneering attempt at a systematic comparison between reconstructed Proto-Mataguayan and Proto-Guaicuruan forms, which reveals a number of promising sound correspondences. The author concludes that a genetic link between those two families is likely (see §1.1.6 for more details).

1.4 Notation conventions

This section presents the conventions used for the representation of linguistic data in this book.

1.4.1 Transcription

Throughout our study, we resort to (and provide a justification for) using broad phonetic representation for the data of the contemporary languages in order to minimize the impact of one's analytical choices on the validity of our statements. The transcription system used is the International Phonetic Alphabet (IPA), with the following exceptions.⁷ The character *å* is employed for the back unrounded vowel /a/ of Nivaclé, 'Weenhayek, Vejoz, Proto-Chorote, Proto-Wichí, and Proto-Mataguayan in order to avoid confusion between the italic versions of *a* and *a*. Similarly, *ä* is used for the near-low front unrounded vowel /æ/ of Proto-Mataguayan (and for the allophone [æ], occasionally found in Manjui) in order to avoid confusion between the italic versions of *æ* and *œ*. The character *β* stands for the labial approximant (IPA /β/) of Nivaclé in order to reduce the use of diacritics; note that there are no voiced fricatives in the Mataguayan languages. Finally, the function of the acute accent depends on the language: it denotes stress in Chorote and Nivaclé, long vowels in 'Weenhayek and Proto-Wichí, and in Proto-Mataguayan it indicates the abstract category of “accent”, which mostly corresponds to stress in Chorote and Nivaclé and to vowel length in 'Weenhayek and Proto-Wichí. The IPA characters ' and , denote, respectively, primary and secondary accent in languages other than Chorote and Nivaclé.

When citing data from individual Mataguayan languages, we opt for a relatively shallow level of representation, which in most cases corresponds quite straightforwardly to the orthographies used by their speakers. In some cases,

⁷These exceptions do not apply to narrow transcriptions, for which IPA is used.

1.4 Notation conventions

this may result in representing a greater degree of phonetic detail than is actually contrastive in the respective languages (especially in 'Weenhayek and in the Chorote lects). A major advantage of this approach is that it spares us from the need to use archiphonemes in forms where some distinctions are neutralized. It also ensures comparability of the data and allows us to eschew the need to choose between conflicting analyses of the same linguistic phenomena. Finally, this decision makes it easier for the reader to track sound changes that have applied in any specific form.

We employ capital letters as wildcard characters for natural classes of Proto-Mataguayan sounds. The complete list is as follows: *A* = low vowel, *C* = consonant, *F* = fricative, *L* = coronal, *M* = sonorant, *P* = stop, *V* = vowel, *W* = labial, *X* = guttural fricative. The term “guttural” in this book is used to refer to velar, uvular, and glottal segments, whereas the term “dorsal” refers to velar and uvular segments only (note that this usage differs from Viegas Barros’s (2002) terminology, who uses the term “dorsal” to refer to /h/ alongside velars and uvulars). We assume the feature [±grave] in order to capture the shared phonological behavior of labial and dorsal consonants as opposed to coronals.

A final remark is due on the representation of the glottal stop in what is usually analyzed as onsetless syllables. In most, if not all, Mataguayan lects, a phonetic glottal stop [?] appears to be automatically inserted in any syllable which would otherwise lack an onset, as in Lower Bermejeno /inot/ [?inot] ‘water’. Note, however, that in all Mataguayan languages there are morphemes whose underlying representations demonstrably start with a glottal stop (e.g. PM *-ʔåx ‘skin, bark’ and its reflexes), which are opposed to morphemes whose underlying representations start with a vowel (e.g. PM *-åq ‘food’ and its reflexes), as is evident from the interaction of these morphemes with the material attached to their left (§2.1.6, §2.2.4). Word-initially, \emptyset (absence of an onset) and /?/ are neutralized in favor of [?] in the Mataguayan languages; we represent such instances of [?] as ?. Even if some, most, or all instances thereof turn out to be ultimately epenthetic, representing them as actual segments is useful because they may be subject to sound change in some languages (notably in Wichí, where *? dissimilated to *h in certain environments; see §9.1.1.8).

1.4.2 Special characters

Asterisked forms (such as *-te?) refer either to reconstructions or to hypothetical forms suggested by one’s expectations but contradicted by the actual data. Two asterisks are used for hypothetical reconstructions contradicted by the comparative data (as in “the reflexes in the daughter languages point to the reconstruction

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kajáh* rather than to the expected form *hóhkajah*). Slashes and brackets are used for phonological and phonetic representations, respectively, including reconstructed forms (for example, **/k/* **[k̥]*). Forms cited verbatim after premodern sources are given in chevrons (for example, Mk <hipès> ‘hand’). The symbol \sim is used to separate alternative reconstructed forms where the evidence from the daughter lects is conflicting (some lects point to one reconstructed form, whereas other lects suggest a different reconstruction). By contrast, the symbol \sim is employed when the evidence from the daughter lects is insufficient to choose between two or more possible reconstructions. In addition, \sim is used when two or more forms are synchronically attested in a given lect as variants.

Much of the discussion in this paper is based on analyzing cognate sets. In some cases, a given form is not synchronically segmentable, but only a part of it is cognate with the material of other languages. The part which is deemed non-cognate is then given in angle brackets, as in **-lá<hwah>*.

The Mataguayan languages make a clear-cut distinction between **absolute** (unpossessable without additional morphology) and **relational** (obligatorily possessed) nominal stems (Salanova & Nikulin *forthcoming*). Since relational stems always take a prefixal person index, they are given with a hyphen at the left margin of the stem. That way, the notation PM **-éj* ‘name’ signifies that the stem in question could not occur without a possessor in Proto-Mataguayan, and it needed to combine with a person index in order to constitute a valid wordform (as in PM **j-éj* ‘my name’, **?-éj* ‘your name’, **t-éj* ‘her/his name’). Conversely, absolute nominal stems are given without a hyphen at the left margin, as in PCh **két* ‘nasal mucus, cold’, implying that imaginary forms such as PCh ***?i-két* ‘my nasal mucus’, ***?a-két* ‘your nasal mucus’ ***h²-két* ‘her/his nasal mucus’ were not possible according to our reconstruction. For a handful of nominal stems, the expression of a possessor is optional; these are called **relationally labile** stems. These are given with a hyphen enclosed in parentheses. For examples, Mk *(-)filik* ‘drum’ signifies that the root *filik* in Maká can occur both on its own and with prefixal person indices (as in *ji-filik* ‘my drum’). Such stems are a minority in the Mataguayan languages.

1.4.3 Plurals

In all Mataguayan languages, noun pluralization is attained by means of adding a plural suffix to the stem. There are multiple plural suffixes in each language, and the choice of a particular suffix is lexicalized to a great extent. Moreover, the accretion of a plural suffix often triggers alternations of different types in the

1.4 Notation conventions

stem, such as vowel syncope or metathesis, velar stop spirantization or deletion, and deglottalization, as shown in (41).

(41) Nivaâle

- a. *-klutseʃ* ‘bow, gun’ → *-klutsxe-s* ‘bows, guns’
- b. *jitsu'x* ‘male’ → *jitsx-åj* ‘males’
- c. *ma'nu'k* ‘Manjui.sg’ → *manxu-j* ‘Manjui.PL’
- d. *nijåk* ‘cord, rope’ → *nijxå-j* ‘cords, ropes’
- e. *jinkå'p* ‘year’ → *jinkåp-es* ‘years’

The application of the internal reconstruction method to such alternations in Nivaâle by [Campbell & Grondona \(2007: 5–10\)](#) unveiled a number of sound changes, which the authors attribute to the so called “pre-Nivaâle” (“pre-Chulupí”) stage. It must be said, however, that analogous alternations are found not only in Nivaâle, but also in all other Mataguayan languages. In this book, we assume that most of the sound changes reconstructed by [Campbell & Grondona \(2007\)](#) based on the Nivaâle data (i.e., the vowel syncope, the glottal stop deletion, and the velar stop spirantization) had already been complete by the Proto-Mataguayan stage. We thus reconstruct separately the singular and the plural Proto-Mataguayan forms for every noun for which it is possible.

In this book, the plural form is given after the singular form separated by a comma. For example, “Ni *nijåk, nijxå-j*” is to be read as “Nivaâle *nijåk* (singular), *nijxå-j* (plural)”. If the accretion of a plural suffix causes no changes in the stem, only the form of the suffix is given after the stem, enclosed in parentheses. For example, “Wk *-t-úp (-is)*” stands for “Weenhayek *-t-úp* (singular), *-t-úp-is* (plural)”. This notation is also used for the stems ending in *-?*, which is always lost before a plural suffix (§5.2.1): “Ni *-ta?(-s)*” is to be read as “Nivaâle *-ta?* (singular), *-ta-s* (plural)”.

1.4.4 Allomorphy of the third-person index in verbs

In verbs, it is sometimes useful to specify the allomorph of the third-person prefix they select for. In our notation, it is enclosed in square brackets immediately before the stem. For example, “LB *[?i]lon*” is to be read “Lower Bermejeño *-lon*, third person *?i-lon*”. In Chorote, the third-person prefix *?i-* often causes the palatalization of the initial consonant of the stem; in such cases, we give both the form inflected for the third person (with the prefix enclosed in square brackets) and the bare stem, with no palatalization effect, as in “Mj *[?i]ll'én / -lán*” (to be read as “Manjui *-lán*, third person *?i-l'én*”).

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In nouns, the choice of the allomorph of the third-person prefix is usually predictable (at least in Proto-Mataguayan and in some daughter languages), so we do not spell it out. It should be noted, however, that in some words – especially those that denote parts of animals or plants – the third-person prefix tends to fossilize to the stem in some languages; alternatively, it may remain analyzable, but the form inflected for the third person is the only one actually in use. Such cases will be commented on explicitly in Chapter 10.

1.4.5 Glottonyms

We have standardized the choice and the spelling of the glottonyms throughout this book in order to warrant consistency. That way, we always refer to the Nivaclé language as *Nivaclé* (and not as *Nivacle*, *Niwaklé*, *Chulupí*, *Ashlushlay*, or *Suhin*), even if the cited source uses an alternative name or spelling. In general, in-prose mentions of specific (proto-)languages and dialects in this book refer to each lect by its full name. At the same time, we employ **abbreviated glottonyms** when they are not syntactically integrated into the prose (for example, when presenting linguistic data).

1.5 Structure of this book

In Part I, we put forward a detailed proposal regarding the phonological reconstruction of Proto-Mataguayan. It contains four chapters, each dealing with a separate aspect of PM phonology: the reconstruction of consonants (Chapter 2), vowels (Chapter 3), word-level prosody (Chapter 4), and morphophonological alternations (Chapter 5). In each chapter, we provide a declarative account of the reconstructed inventory of segments and phonological processes that were synchronically active in Proto-Mataguayan. We then proceed to examine the sound correspondences on which our reconstruction is based. For non-trivial reconstructive decisions, a justification is provided.

In Part II, we outline the phonological evolution of each Mataguayan language all the way from Proto-Mataguayan to the contemporary lects. It contains four chapters, one on Maká (Chapter 6), one on Nivaclé (Chapter 7), one on Chorote (Chapter 8), and one on Wichí (Chapter 9). For Nivaclé, Chorote, and Wichí, we also provide a detailed description of the sound changes which have led to the diversification of Proto-Nivaclé, Proto-Chorote, and Proto-Wichí.

Part III contains the Mataguayan etymological dictionary (Chapter 10), where we list the cognate sets on which our reconstruction is based. Each entry in-

1.5 *Structure of this book*

cludes the reconstructed form (and some diagnostic inflected forms, when applicable); its gloss; its reflexes in each daughter variety (including Proto-Chorote and Proto-Wichí) with the respective sources; comments on irregular developments, non-trivial reconstructive decisions, and rejected cognates; comments on similar forms in the Guaicuruan languages; and references to earlier comparative studies when available.

We conclude the book by summarizing the main findings of the preceding chapters and the differences between our proposal and earlier ones (Chapter 11). We also discuss the distribution of the innovations identified in the chapters of the Part II, and conclude that Chorote and Wichí likely form a valid clade of the family, whereas Nivaâcle shares some innovations with Chorote–Wichí and others with Maká, making its classification dubious. Finally, we briefly comment on the possible external relations of the Mataguayan family.

2 Consonants

This chapter deals with the reconstruction of the Proto-Mataguayan (PM) consonants. We reconstruct an inventory composed of seventeen plain (non-glottalized) consonants, including six voiceless stops,¹ six voiceless fricatives, three approximants, and two nasals, in addition to a series of glottalized consonants, as shown in Table 2.1. Note that the phonemic status of PM *ɬ is dubious; this sound arose when an underlying */ɬ/ coalesced with an underlying heteromorphemic */ʔ/ (§2.2.4).

Table 2.1: PM consonants

	labial	dental	alveolar	velar	uvular	glottal
stops	*p *p'	*t *t'	*ts *ts'	*k *k'	*q *q'	*?
fricatives	*ɸ *ɸ'	*ɬ (*ɬ')	*s *s'	*x	*χ	*h
approximants	*w *w'	*l *l'		*j *j'		
nasals	*m *m'	*n *n'				

We depart from earlier proposals in reconstructing */ɸ/ (based on the reflexes in Maká and Nivaçle) instead of */xʷ/ (a reconstruction based on the Wichí reflex) and show that this segment was related to */p/ in the same way that */ɬ/ s x χ/ were related to */t ts k q/. Although in most Mataguayan varieties the glottal stop is automatically inserted in onsetless syllables (at least word-initially), we show that in Proto-Mataguayan vowel-initial stems clearly contrasted with *ʔ-initial stems, as shown by the alternations in prefixes which attached to such stems.

We follow Viegas Barros (2002) in reconstructing an opposition between velar, uvular, and glottal stops and fricatives. The opposition in question is relatively well preserved in Maká, whereas in other languages it has been subject to partial, conditioned mergers.

The reconstruction of a glottalization feature in consonants is somewhat controversial: at least in some cases it is possible to show, via internal reconstruction,

¹PM *ts is reconstructed as an affricate, but it fits phonologically into the stop series (see Rubach 1994, Clements 1999 on the possibility of analyzing affricates as strident stops).

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that glottalized onsets in contemporary Mataguayan languages go back to earlier clusters of the type $*/C?/$. No such evidence is available for tautomorphemic glottalized onsets. It is unproblematic to derive most glottalized consonants from Proto-Mataguayan $*/C?/$ clusters, given that there is independent evidence for the sound change $*/C?/ > */C'/$ and that clusters of the type $*/C?/$ are otherwise not reconstructed. However, this solution is not available for the consonants $*'l$ and $*'m$, which synchronically contrast with the clusters $*l?$ and $*m?$.

The basic sound correspondences for plain onsets and codas are discussed in §2.1. §2.2 deals with the status of the glottalized onsets in PM. §2.3 is dedicated to the glottalized codas. In §2.4, we discuss the reconstruction of the consonant clusters of the type $*CX$ (where C stands for a consonant and X for a velar or postvelar fricative). Tautosyllabic consonant clusters of other shapes are dealt with in §2.5. In §2.6, we show that some affixes formed a syllable on their own despite containing a single consonant in PM.

2.1 Plain onsets and codas

In this subsection, we present our reconstruction of the PM consonants in the most basic environment, i.e. when they occur as simplex onsets or codas. Table 2.2 shows the basic reflexes of the PM consonants in individual Mataguayan languages.

2.1.1 PM $*p$

PM $*p$ is a stable phoneme: it is preserved in all daughter languages as *p*.

- (1) PM $*-åp$, 3 $*'[j]ip$ ‘to cry’ > Mk *-ap*, 3 *ip* || Ni *-ap*, 3 *[j]ip* || PCh $*[j]áp$ || PW $*'[j]ip$
- (2) PM $*-åpil$ ‘to return thither’ > Mk *[w]apil* || Ni *[β]apek* || PCh $*[j]ápil$ || PW $*[j]ápil^h$
- (3) PM $*-φapá(?)$ ‘shoulder’ > PCh $*-hwopó?$ || PW $*-x^wápo$
- (4) PM $*-φapá-ke?$ ‘shoulder blade’ > Ni *-φápå-ke* || PCh $*-hwopó-ke?$
- (5) PM $*lo'p$ ~ $*ló'p$, $*lop-íts$ ~ $*lóp-its$ ‘winter’ > Mk *lo'p*, *lop-its* || Ni *klo'p*, *klop-is* || PCh $*lóp$ || PW $*lop$ ~ $*lóp$
- (6) PM $*p$ ‘that (outside the speaker’s sight and never seen before)’ > Mk *p-* || Ni *pa?* || PCh $*pá?$ ~ $*pá?$ || PW $*=pa$
- (7) PM $*[t]pá'j$ ‘to be bitter’ > Ni *[t'a]på'j* || PCh $*páhj-i?$ || PW $*[t]páj$

2.1 Plain onsets and codas

Table 2.2: PM consonants and their reflexes

Proto-Mataguayan	Maká	Nivaçlé	Proto-Chorote	Proto-Wichí
*p	p	p	*p	*p
*t	t	t	*t	*t
*ts	onset coda	ts	ts s	*s
*k	onset coda	k	k, tʃ ^A	k
*q		q	k	*q
*ʔ		ʔ	ʔ, Ø ^C	*ʔ, Ø ^C , *h ^D
*ɸ	onset coda	f	ɸ	*hw *m
*ɬ	onset coda	ɬ	ɬ	*hl *ɬ
*s		s	s	*s
*x	onset coda	x	x, ſ ^A	*h, *hw ^E *h, *m ^E
*χ	onset coda	χ	x	*h, *hw ^F *h
*h	onset coda	h	h	*h, *∅ ^G
		∅	∅	*h, *∅ ^H
*w		w	β	*w
*l	onset coda	l	kl k	*l
				*l, *l ^{II}
*j		j	j	*j
*m		m	m	*m
*n		n	n	*n, *n ^J

^A = before or after non-back vowels, except when preceded by a back vowel, possibly with an intervening [+grave] consonant (§7.1.1.3); ^B = after a back vowel (§9.1.1.2); ^C = word-finally in posttonic syllables (§7.1.1.8, §9.1.1.14); ^D = preceding a syllable with a glottalized onset (§9.1.1.8); ^E = following *u (§8.1.1.4, §9.1.1.3); ^F = following *o or *u (§8.1.1.4, §9.1.1.3); ^G = in onsets of unstressed syllables (§8.1.1.4); ^H = following a syllable with a glottalized sonorant onset (§9.1.1.10); ^I = word-finally (§9.1.1.13); ^J = as an onset of a word-final open syllable (§9.1.1.12)

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- (8) PM *-pás(-e[?]t) 'lip' > Mk -pas || Ni -pás<e[?]t> || PCh *-pás<at> ~ *-pás<åt> || PW *-pás<et>
- (9) PM *-pát ~ *-pát 'to shuck' > Ni [t]påt-xan / [n(i)]påt-a? || PCh *[?i]påt
- (10) PM *pátse(?)χ 'fast, quick' > Ni påtsex || PCh *(-)pásah
- (11) PM *påttséχ 'jabiru' > Ni påtsex || PCh *påtsáh || PW *påtsáχ
- (12) PM *pätóχ 'to be deep' > Ni [?a]patox || PCh *-pítohw<ij?> || PW *pitóx^w
- (13) PM *[ji]pé[?]j-a? 'to hear' > Mk [ji]pi[?]j-e? || Ni [ji]pe[?]j-a || PCh *[?i]pé[?]j-a?
- (14) PM *péta(-?)j, *péta[?]its 'rain' > Mk pi[?]ej (-its) || PCh *péhlaj? || PW *péta[?], *péta[?]is
- (15) PM *phå[?]m 'up' > Mk -pha[?]m || PCh *p[?]hå[?]m || PW *-phå / *phåm-
- (16) PM *[t]pil 'to return hither' > Mk [t(e)]pil || Ni [t(a)]pik ~ [t(a)]pek || PW *[t]pil^h
- (17) PM *pitéχ, *pité-ts 'long' > Ni pitex, pite-s || PW *pitáχ, *pité-s
- (18) PM *[t]pó[?]-ex 'to be full' > Mk [to]po[?]-ox || Ni [to]po[?]-x || PCh *[t[?]]pó-eh || PW *[t]pó-jeχ
- (19) PM *[ji]pónit-ex 'to fill' > Mk [j]<o>pon-het-ix || Ni [ji]pont-eʃ || PCh *[?i]pónit-eh || PW *[?i]tá-ponit-eχ
- (20) PM *pútäh 'tapeti rabbit' > Ni puta || PCh *púteh
- (21) PM *-pxúse?(*-j^h) 'beard' > Mk -<a>pxusi?(-j) || Ni -påse(-j) || PCh *-púse?(*-j^h) || PW *-påse (*-j^h)
- (22) PM *-ú[?]p, *-úp-its 'nest' > Mk 3 t-up (-its) || Ni -u[?]p, -up-is || PCh *-úp (*-is) || PW *-t-úp (*-is)
- (23) PM *xnáwå[?]p 'spring' > Mk xinawa[?]p || Ni snaβåp ~ snåβåp || PCh *náwop || PW *xnáwop
- (24) PM *xu(-?)p 'grass' > Mk xup<el> || PCh *húp || PW *hup
- (25) PM *xpå[?]k ~ *xpå[?]k 'straw' > Mk xupa(-?)k ~ xupek || Ni xpå[?]k || PCh *?ipåk
- (26) PM *(-)X₂₃pél 'shadow' > Ni xpek || PCh *-pél || PW *hpél^h / *-hpel^h

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable.

- (27) PM *(-)jipku?(*-l) 'hunger' > Mk (-)jipku?(-l) || Ni jipku? / -jipku (-k)
- (28) PM *pák'o 'heel' > PCh *pók'o? || PW *pák'o

2.1 Plain onsets and codas

- (29) PM **pá̄jih* ‘frog (*Leptodactylus sp.*)’ > PCh **pá̄jih* || PW **pá̄jih*
- (30) PM *[*i*]pén ~ *[*i*]pán ‘to cook’ > PCh *[*i*]pén || PW *[*i*]pén
- (31) PM **kpéna*(*)X₁₂* ~ **kpána*(*)X₁₂*, **kpénX₁₃a-ts* ~ **kpánX₁₃a-ts* ‘orphan’ > PCh **kpénah*, **kpéhna-s* || PW **k^jpénaχ*, **k^jpéhna-s*
- (32) PM **púle*(*)* (*-ts) ‘sky, cloud’ > PCh **púle*?(*-s) || PW **púle* (*-s ~ *-tajis)
- (33) PM **púm* ‘drum’ > PCh **púm* || PW **púm*
- (34) PM **qapá*(*)p* ~ *-ā- ‘dwarf’ > Mk *qep<ep>e*(*)p* || Ni *kapap* ‘dwarf dog’
- (35) PM **spú*(*)p* ‘dove’ > PCh **s^opúp* || PW **spúp*
- (36) PM **waben* ~ **wäben* ‘to be ashamed’ > Mk *wepin* || Ni *βaben*

2.1.2 PM **t*

PM **t* is a stable phoneme: it is preserved in all daughter languages as *t*. An irregular glottalized reflex is found in Wichí in (79).

- (37) PM **n-át* ‘to fall on its own’ > Ni *n-at* || PW **<n>át*
- (38) PM *-áme(*)t* / -ámt- ‘word’ > PCh *-ámt- || PW *-ámet, -ámt-s
- (39) PM *[*n*]át ~ *[*n*]áte ‘to bleed’ > Mk [*n*]at-xu? || Ni [*n*]át || PCh **<n>át-* || PW **<n>át-* ~ **<n>át-*
- (40) PM *-á^jt, *-á^jt-its ‘drink’ > Ni -á^jt, -á^jt-is || PCh *-á^jt (*-es) || PW *-t-á^jt
- (41) PM *-áte(*)* (*-j^h) ‘jar’ > PCh *-áte?(*-j^h) || PW **<j>áte* (*-j^h)
- (42) PM *[*j*]áte(*)χ* ‘to be fat’ > Ni [*j*]átex || PCh *[*j*]átaħ || PW *[*j*]átaħ
- (43) PM **ɸa^jt* ~ **ɸá^jt* ‘fire’ > Mk *fe^jt* || PCh **hwát*
- (44) PM *(-)ɸétā^jts ‘root’ > Mk *fitets* || Ni *-ɸeta^js* || PCh *-hwéetus || PW *(-)x^wétes
- (45) PM **ɸi^jjáit* ‘cold weather, south wind’ > Ni *ɸi^jjat* || PCh **hwi^jjét* || PW **x^wi^jjét*
- (46) PM *-ɸqató(*-l) ‘elbow’ > Ni -(?V)ɸkato(-k) || PCh *-qató?(*-l) || PW *-qáto(*-l^h)
- (47) PM *-ɸu^jt ~ *-ɸú^jt, *-ɸtú-ts ‘flatulence’ > Mk -ftu-ts || Ni -ɸu^jt, -ɸtū-ts || PCh *-hwút
- (48) PM **jiná^jt*, **jinát*-its ‘water’ > Ni *jiná^jt, jinát-is* || PCh **?i^jnát*(*-es) || PW **?iná^jt*(*-es)
- (49) PM *-kat ‘collective of plants’ > Mk -ket || Ni -tfat / -kat || PCh *-kat || PW *-k'at (*-at after *k^w, *q)
- (50) PM *[*ji*]ká^jt-APPL ‘to fall’ > Ni [*ji*]ká^jt-APPL || PW *[*ni*]k^já^jt-APPL
- (51) PM **khá^jt* ‘cactus’ > Mk *khat-u^jk* || Ni *kxat* || PCh **kåhá^jt* || PW **k^jåhá^jt*

2 Consonants

- (52) PM *-kitá? (*-wot) ‘elder sister’ > Ni -*tſita?* (-bot) || PCh *-kitá? (*-wot) || PW *-k'ítta
- (53) PM *-kút-ex ‘to meet’ > Mk [w(e)]*kut-ix-u'č* || Ni [βa]*kut-ef* || PCh *[?i]*kút-eh* || PW *-k'út-ex
- (54) PM *k'ú(t)sta(?)χ, *k'ú(t)sta-ts ‘barn owl’ > Ni (?) *k'ustax, k'usta-s* ‘mockingbird’ || PCh *k'ústah, *k'ústa-s || PW *k'ústaχ
- (55) PM *k'utX₂₃á'n, *k'utX₂₃án-its ‘thorn’ > Ni *k'utxa'n, k'utxan-is* || PCh *k'utá'n, *k'után-is || PW *k'uthá'n, *k'uthán-is
- (56) PM *[ji]lát ~ *[ji]lát ~ *[ji]let ~ *[ji]lét ‘to flee’ > Mk <i>lat ~ <i>lit || Ni [ji]klát || PCh *-<[j]í>lt<an> ~ [?i]<?jí>lt<an> || PW *[?i]lét<han>
- (57) PM *lkéte ‘squash’ > Mk *lekiti* || PCh *kéte?
- (58) PM *lóta-(ju)k ‘tree for making bows’ > Ni *klota<tf>* || PCh *lóta-juk || PW *lóte<q>
- (59) PM *(-)hél(?)t ‘firewood’ > Mk *tit<u?>* || PCh *-<?a>hlét ~ *-<?a>hlét || PW *-tét
- (60) PM *-’mat ‘negative quality, physical defect’ > Mk -’met || Ni -’mat || PCh *-’mat
- (61) PM *mät ‘hither, nearby’ > Mk *met* ‘nearby’ || PCh *mét ‘hither’
- (62) PM *-n-xáte?(*-l) ~ *-n-xáti? ‘dream, sleepiness’ > Mk -*nixati?(-l)* || Ni *nxåte(-k)* || PCh *ihnáti? || PW *naháti
- (63) PM *-nX₂₃atå? ‘nasal mucus’ > Ni -*nxatå?* || PCh *-hnát<ijah-PL>
- (64) PM *-nX₂₃aq(?)åt ‘to snore’ > Ni [ta]nxakåt || PCh *[?i]hnåq'åt
- (65) PM *-nånxte? ‘tapeti rabbit, cavy’ > Mk *nijaxti?* || Ni *nånxate* || PCh *-nåhåte? || PW *nåte
- (66) PM *-pås-e'č ‘lip’ > Ni -*pås<e'čt>* || PCh *-pås<at> ~ *-pås<åt> || PW *-pås<et>
- (67) PM *-påt ~ *-påt ‘to shuck’ > Ni [t]påt-xan / [n(i)]påt-a? || PCh *[?i]påt
- (68) PM *pätóχ ‘to be deep’ > Ni [?a]patox || PCh *-pítōhw<ij?> || PW *pitóx^w
- (69) PM *pitéχ, *pité-ts ‘long’ > Ni *pitex, pite-s* || PW *pitáχ, *pité-s
- (70) PM *[ji]pónit-ex ‘to fill’ > Mk [j]<o>pon-het-ix || Ni [ji]pont-ef || PCh *[?i]pónit-eh || PW *[?i]tá-ponit-ex
- (71) PM *pútäh ‘tapeti rabbit’ > Ni *puta* || PCh *púteh
- (72) PM *-p'o'č ‘lid’ > Mk -*p'ot<o?>* || Ni -*p'o'čt* || PCh *-p'ót || PW *-p'ot

2.1 Plain onsets and codas

- (73) PM **qati*⁷*ts*, **qatits-él* ‘star’ > Ni *kati*⁸*s* || PCh **qatés*, **qates-él* || PW **qates*, **qatéts-él^h*
- (74) PM *-*så*⁹*t* ‘vein’ > Mk -<*a*>*sa*¹⁰*t* || Ni -*så*⁹*t* || PCh *-*såt-* || PW *-*såt*
- (75) PM *(-)*skä*¹¹*t* ‘mesh’ > Ni -*stfa*¹²*t* || PW **sikjet*
- (76) PM **sténi*(?) ‘white quebracho’ > Mk *sitin-u*¹³*k* || PCh **?sténi?* || PW **?isté*¹⁴*nih*
- (77) PM **stwú*¹⁵*n*, **stwún-its* ‘king vulture’ > Ni *staþu*¹⁶*n*, *staþun-is* || PCh **?stúu*¹⁷*n*, **?stúun-is* || PW **?istíwin*
- (78) PM **tänük* (*-*its*) ‘feline’ > Mk *tenuk* (-*its*) || Ni *tanuk* (-*is*) || PCh **tinük* (*-*is*)
- (79) PM **táxχan* ‘to thunder’ > Mk *texen* || Ni *tafxen* || PW **t'áχan*
- (80) PM *-*taχ*, *-*ta-ts* ‘pseudo-’ > Mk -*taχ*, -*te-ts* || Ni -*tax*, -*ta-s* || PCh *-*tah*, *-*ta-s* || PW *-*taχ*, *-*ta-s*
- (81) PM *[*ni*]-*tåφä*(?)*l-APPL* ‘to know, to be acquainted’ > Ni [*ni*]*tåφakl-APPL* || PCh *[*ni*]*tåhwel-APPL* || PW *-*tåx^wel-APPL*/ *-*tåx^wnh-APPL*
- (82) PM **tå*¹⁸*t* ‘to sprout’ > Mk *ta*¹⁹*t* || Ni *tå*¹⁹*t* || PCh **tåt* || PW **tåt*
- (83) PM *-*tåmte*?(*-*ts*) ‘daughter-in-law’ > Ni -*tåmte*<*e*>(-*s*) || PCh *-*tåmte*?(*-*s*)
- (84) PM *-*tåtse*?(*-*j^h*) ‘eyelash’ > Mk -*tetsi*?(*-j*) || Ni -*tåtse*(*-j*) || PCh *-*tåse*?(*-*j^h*)
- (85) PM *-*tåwä*²⁰*x*, *-*tåwxä-ts* ‘(abdominal) cavity’ > Mk -*tawe*²¹*x*, -*tawxe-ts* || Ni -*tåβa*²²*f*, -*tåβxa*-*s* || PCh *-*tóweh* || PW *-*tóweχ*
- (86) PM *-*tä*(?)*ts*, *-*täts-él* ‘trunk, base’ > PCh *-*tés* (*-*el*) || PW *-*tes*, *-*téts-el^h*
- (87) PM *-*täts-u*²³*k*, *-*täts-ku-j^h* ‘trunk’ > Ni -*tats-uk*, -*tas-ku-j* || PCh *(-)*tés-uk*, *-*tés-ku-j^h*
- (88) PM *-*te*?, *-*té-j^h* ‘eye’ > Mk -*t<o>?*(*-j*) || PCh *-*ta-té*?(*-*j^h*) || PW *-*t(a)-te*?(*-*j^h*)
- (89) PM **téwo*(?)*k* ~ **téwå*(?)*k* ‘river’ > Ni *toþok* ~ *toþåk* || PCh **téwok* ~ **téwåk* || PW **téwok^w*
- (90) PM *-*ti*²⁴*t* ‘to spin, to sew’ > Mk [*ji*]*ti*²⁵*t* || Ni *ti*²⁴*t* || PCh *[*j*]-*ti*²⁵*t*
- (91) PM **tite*(?)*k*, **títhe-j^h* ‘plate’ > Ni (-)*titetsf*, (-)*titxe-j* || PCh **títek*, **tíhte-j^h*
- (92) PM *-*t(á)ko*?(*-*l*) ‘face’ > Mk -*tko*<*rek*> || Ni -*tako*?(*-k*) || PCh *-*tóko*?(*-*l*) || PW *-*ták^jo*(*-*l^h*)
- (93) PM *-*t(á)ko-se*?(*-*j^h*) ‘eyebrow’ > Mk -*tko-si*?(*-*j*) || PCh *-*tóko-se*?(*-*j^h*) || PW *-*ták^jo-se*(*-*j^h*)
- (94) PM **tlú*²⁶*k* ‘blind’ > Ni *taklū*²⁷*k* || PCh **t^olúk* || PW **tilúk^w*
- (95) PM **tós* (*-*its*) ‘snake’ > Ni *tos* (-*is*) || PCh **tós* (*-*is*)

2 Consonants

- (96) PM **tóχ-APPL*, **tó-ts-APPL* 'far' > Mk *-toχ-ij*, *to-ts-ij* || Ni *tox-APPL* || PCh **tóh(w)-APPL*, **tó-ts-APPL* || PW **tóxʷ-ejʰ*
- (97) PM **túku(?)ts* 'ant' > Ni *tukus* || PCh **túkus*
- (98) PM **túsu(?)ts* 'lesser yellowlegs' > Ni *tusus* || PCh **túsus* || PW **túsus*
- (99) PM *-*txo'k* ~ *-*txó'k*, *-*txóko-wot* 'uncle' > Mk *-txo'k* || Ni -*txo'k*, -*txoko-βot* || PCh *-<i>tók, *-<i>tóko-wot || PW *-<wi>*thokʷ*
- (100) PM *-*tséwte(?)* (*-*jʰ*) 'tooth' > Ni *-tseβte* (-*j*) || PW *-*tsóte* (*-*jʰ*)
- (101) PM **tsópha-taχ* 'fruit of a shrub (*Lycium americanum*)' > Mk *tsofe-taχ* || Ni *tsoφ-tax*
- (102) PM **tsópha-ta-(ju)k* 'shrub (*Lycium americanum*)' > Mk *tsofe-te-k* || Ni *tsoφ-ta-juk* || PW **tsóxʷa-t-ukʷ*
- (103) PM **wátå(?)χ* 'palo flojo fruit' > Ni *βåtåx* || PW **wátoxʷ*
- (104) PM *-*wät* 'place' > Mk -*wet* || Ni -*βat* || PCh *-*wét* || PW *-*wet*
- (105) PM *-*xáte'k*, *-*xáthe-jʰ* 'head' > Ni *-fate'f*, *-fatxe-s* || PCh *-*hétek*, *-*héhte-jʰ* || PW *-*t-éteq*, *-*t-éthe-jʰ*
- (106) PM **xunxátaχ* 'tusca fruit' > Mk *xunxetaχ* || Ni *xunfatax* || PCh **?ihnátah* || PW **xnhátaχ*
- (107) PM **xunxáta-(ju)k* 'tusca tree' > Mk *xunxete-k* || Ni *xunfata-juk* || PCh **?ihnáta-k* || PW **xnháte-q*
- (108) PM **xunxáta-kat* 'tusca grove' > Mk *xunxete-ket* || Ni *xunfata-tsat* || PCh **?ihnáta-kat*
- (109) PM *...*X₂₃a't*(*-its) 'earth' > Ni <*kots>xa't*, <*kots>xat-is* || PCh *<?a>h<n>át ~ *<?å>h<n>át (*-es) || PW *<*hon>hat*, *<*hon>hát-es*
- (110) PM **X₁₃ó't* 'sandy place' > Ni *xo't* || PCh **hót* || PW **hót*
- (111) PM *[*ji*]*X₁₃út* 'to push' > Ni [*ji*]*xut* || PCh *[*?i*]*hút* || PW *[*ji*]*hút*
- (112) PM **?atú'χ* ~ **?atú'χ* 'snake (sp.)' > Ni *?atu'x* || PCh **?atúh*
- (113) PM *-*?áX₂₃te(?)* (*-*jʰ*) 'female breast' > Ni -*?axte* (-*j*) || PCh *-*?áhate?* (*-*jʰ*) || PW *-*t-áte* (*-*jʰ*)
- (114) PM **?á'jteχ*, **?á'jte-ts* 'to hurt' > Mk *a?taχ*, *a?ti-ts* || Ni *?á'jtex* ~ *?á'βtex* || PCh **?áj?tah-APPL*, *-*?áj?te-s-APPL* || PW **?ájtaχ*, **?ájte-s*
- (115) PM **?á'lá-taχ*, **?á'lá-ta-s* 'Argentine boa' > Ni *?á'klá-tax*, *?á'klá-ta-s* || PCh **?á'lá-tah>* ~ **?á'lá<tah>*, **?á'lá<ta>-s* ~ **?á'lá<ta>-s* || PW (?) **lá<taχ>*
- (116) PM **?ánitih* 'wasp (sp.)' > Ni *?ánihi* || PCh **?ánitih*

2.1 Plain onsets and codas

- (117) PM *ʔåtits ~ *-í- ~ *-e- ~ *-é- ‘wild pepper’ > Mk *atits* || PCh *ʔåtés
- (118) PM *ʔítå(?)χ, *ʔítå-ts ‘fire’ > Ni *ʔitåx*, *ʔitå-s* || PCh *ʔítåh, *ʔítå-s || PW *ʔítåχ, *ʔítå-s
- (119) PM *-ʔo⁷t ~ *-ʔó⁷t ‘chest’ > Ni -ʔo⁷t || PCh *-ʔót

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable. The correspondence between a plain stop in Wichí and a glottalized stop in Chorote in (127) is irregular.

- (120) PM *-ata(?)x ~ *-ä- ‘food’ > Mk -ete(?)x || Ni -ataf
- (121) PM *[j]åfti(?)t ‘to spin’ > Mk [j]afti(?)t || Ni [j]åfti⁷t
- (122) PM *jiʔixåtaχ, *jiʔixåta-ts ‘ocelot’ > Mk iʔixataχ, iʔixate-ts || Ni *jixåtax*, *jixåta-s*
- (123) PM *[ji]ká(?)t ‘to be red’ > PCh *[ʔi]kǻt || PW *[ʔi]k^jǻt
- (124) PM *kójXa(?)t ‘to be heavy’ > PCh *kóhjat-APPL || PW *k^jóhhat
- (125) PM *ktá⁷nih ‘Chaco tortoise’ > PCh *kitá⁷nih || PW *k^jtá⁷nih
- (126) PM *ktéta(?) ~ *ktáta(?) ‘white algarrobo fruit (*Prosopis elata*)’ > PCh *kitéta? || PW *k^jtéta
- (127) PM *-kVnt(?)... ‘kidney’ > PCh *-kánt’ijaa? || PW *-k^jóntowaj
- (128) PM *-k’óX₂₃te(?) (*-j^h) ‘ear’ > PCh *-k’óote? (*-j^h) || PW *-k^j’óte (*-j^h)
- (129) PM *k’uhate-nha? ‘pacu fish’ > Mk <i>k’uheti-nhe?(-j) || Ni k’unxate<nxax>(-j)
- (130) PM *[ji]lå(?)t ‘to feel’ > PCh *[ʔi]lǻt-ej^h || PW *[ʔi]lǻt
- (131) PM *-tí⁷wte? ‘heart’ > Mk -liti? || Ni -ti⁷βte
- (132) PM *[t]qásí(?)t / -qasí(?)t ‘to stand’ > PCh *[t^o]qásit || PW *[t]qásit; IMP *qasít
- (133) PM *-qá⁷tu(?) ‘yellow’ > PCh *-qá⁷tu? || PW *qá⁷tu
- (134) PM *silóʔtåφV ~ *siwóʔtåφe ‘Caatinga puffbird’ > PCh *silóʔtåhwV? || PW *siwótåx^we
- (135) PM *stá-⁷q ‘toothpick cactus (*Stetsonia coryne*)’ > PCh *ʔ⁷stá-k || PW *ʔistá-q
- (136) PM *stáφe(?) ‘Chaco chachalaca’ > PCh *ʔ⁷stáhwe? || PW *ʔistáx^we
- (137) PM *(-)tak’o(h) ~ *(-)täk’o(h) ‘kind of utensil’ > Mk *tok’o* || Ni -tak’o-tax
- (138) PM *tana(h) ~ *täna(h) ‘standing, vertical’ > Mk *te:ne, tene-m* || Ni *tana*

2 Consonants

- (139) PM *-témä(?)k ~ *-tämä(?)k, *-témh-aj^h ~ *-tämh-aj^h ‘bile’ > PCh *-témek, *-téhm-aj^h || PW *-témeq, *-témh-aj^h
- (140) PM *tkéna(?)X₁₂ ~ *tkána(?)X₁₂, *tkénX₁₃a-ts ~ *tkánX₁₃a-ts ‘precipice; hill, mountain’ > PCh *t³kénah, *t³kéhna-s || PW *tk³énax, *tk³éhna-s
- (141) PM *(-)tútse(?)χ ‘smoke’ > PCh *(-)túsah || PW *(-)tútsaχ
- (142) PM *tux-*APPL* ‘to burn (vi.)’ > Mk tux-xem, tux-e? || Ni tux-a³m, tux-ej
- (143) PM *[ji]-tXá(?)t ‘to throw, to put’ > PCh *[?i]tát-*APPL* || PW *[?i]thát
- (144) PM *wósak’V(?)t ‘red-crested cardinal’ > PCh *wós³k’at || PW *wósak³it
? ~ *wósak³ut
- (145) PM *(?)wut ‘a bushy leguminous plant’ > Mk wut || Ni βut
- (146) PM *ʔáte(?)k ~ *ʔátä(?)k ‘cebil, vinal’ > PCh *ʔátek || PW *ʔáteq
- (147) PM *ʔåfте'l ‘orphan’ > Mk afti'l || Ni ʔåfте'k
- (148) PM *ʔomhatäk ~ *ʔomhätäk ‘queen palm fruit’ > Mk omhetek || Ni ʔomxatats
- (149) PM *-ʔó'thale(?) ~ *-ʔó'thåle(?) ‘heart’ > PCh *-ʔóhtale? ~ *-ʔóhtåle? || PW *-t-’ótle

In a number of *t*-initial verbs in Maká, which belong to the 7th conjugation in Gerzenstein’s (1994) classification, the initial consonant changes to *t*- after the prefixes *xite-* 1INCL.IND, *xinte-/qinte-* 1INCL.NIND, *k'e-* 1>2, *ts-* 3>1, *ne-* 3>2, \emptyset - 2IMP (Gerzenstein 1994: 96, 100, 145). Their cognates in Nivaclé present a similar alternation: their citation form starts with a *t*-, which changes to *t*- after the reflexive prefix *βat-* (Fabre 2014: 191, fn. 163). All such verbs select for a zero third-person prefix in Nivaclé, which is also true of their cognates in Maká and Wichí (but not in Chorote, where they take the allomorph *ʔi*-). The origins of the alternation between *t*- and *t*- are as of yet unclear.

- (150) PM *tiɸ ~ *tíɸ ‘to spend’ > Ni tiɸ || PCh *[?i]tíℳ
- (151) PM *ti'ɸ ‘to suck breast’ > Mk tu'f/-tu'f || Ni ti'ɸ || PCh *[?i]tíℳ || PW *tip
- (152) PM *ti'j ‘to weave’ > Mk tij / -tij || Ni ti'j
- (153) PM *tijå'χ ‘to shoot, to throw’ > Mk tija'χ / -tija'χ || Ni tija'x || PCh *[?i]tíjåh
|| PW *tijåχ
- (154) PM *tiłå'x ‘to carry on one’s shoulders’ > Mk tiło'x / -tiło'x || Ni tiłå'x ||
PCh *[?i]tíhlåh || PW *tiłåχ
- (155) PM *tim ‘to swallow’ > Mk tim-xu? / -tim-xu? || Ni tim || PCh *[?i]tíℳ ||
PW *tim

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- (156) PM **tis* ‘to invite, to pay’ > Mk *tis-ix* / -*tis-ix* || Ni *tis* || PCh *[ʔi]tís|| PW **tis*
- (157) PM **tiχ* ‘to dig’ > Mk *ti(χ)x-APPL* / -*ti(χ)x-APPL* || Ni *tiʃ* || PCh *[ʔi]tíh-ij? || PW **tiχ*
- (158) PM **tux* ‘to eat.TR’ > Mk *tux* / -*tux* || Ni *tux* || PCh *[ʔi]túM || PW **tux^w*

2.1.3 PM **ts*

PM **ts* is preserved as a distinct segment in all Mataguayan languages except Chorote, which merges it with PM *s as PCh *s in all positions.

- (159) PM **φátsu(χ)*, **φátshu-ts* ‘centipede’ > Ni *φatsux*, *φatsxu-s* || PCh *(h)wásuh, *(h)wásu-s || PW *x^wátsux^w
- (160) PM **ftsána(χ)* ‘suncho (*Baccharis sp.*)’ > Ni *ftsåanax* || PCh *sánah || PW *x^witsánaχ
- (161) PM **fts-u'k* ‘palm (*Copernicia alba*)’ > Mk *fits-uk* || Ni *fts-u'k* || PCh *hwis<úk> || PW *x^wits<uk^w>
- (162) PM *(-)k'útsaχ, *(-)k'útsha-ts ‘old’ > Mk k'utsaχ, k'utshe-ts || Ni k'utsaχ, k'utsxa-s || PCh *-k'úsah, *-k'úsa-s || PW *-k'útsaχ
- (163) PM **látsen-u'k* ‘chañar plant’ > Mk <xu>letsin-u'k || PCh *léseni-k || PW *létsen-uk^w
- (164) PM *(-)lútse'x, *(-)lútsxe-ts ‘bow’ > Ni klütsəf / -klütseʃ, (-)klütsəf-s || PCh *(-)lúseh (*-es) || PW *(-)lútseχ, *(-)lútsə-s
- (165) PM **pátse(χ)* ‘fast, quick’ > Ni *pátsex* || PCh *(-)pásah
- (166) PM **pátséχ* ‘jabiru’ > Ni *pátsex* || PCh *pátsáh || PW *pátsáχ
- (167) PM *-tátse?(*-j^h) ‘eyelash’ > Mk -*tetsi?(-j)* || Ni -*tátse(-j)* || PCh *-tásə?(*-j^h)
- (168) PM **ts-* ‘that (within the speaker’s sight)’ > Mk *ts-* || PCh *sé? || PW *=*tsoh* ‘that (moving away)’
- (169) PM **tsáháq* (*-its) ‘chajá bird’ > Mk *tsahaq* (-its) || PCh *såhák, *såháq-es
~ *såháq-is || PW *tsåháq
- (170) PM **tsänú'k* ‘duraznillo trees’ > Ni *tsanu'k* || PCh *sinúk || PW *tsinúk^w
- (171) PM **tséχ-APPL* ‘full (river)’ > Ni *tsex-APPL* || PCh *-sáh || PW *tsáχ-APPL
- (172) PM *-tséwte(?) (*-j^h) ‘tooth’ > Ni -*tseβte* (-j) || PW *-tsóte (*-j^h)
- (173) PM **tsópha*(?) ‘fruit of a shrub (*Lycium americanum*)’ > PCh *sóhwa? || PW *tsóx^wa(?)

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- (174) PM *tsópha-taχ ‘fruit of a shrub (*Lycium americanum*)’ > Mk *tsofe-taχ* || Ni *tsoφ-tax*
- (175) PM *tsópha-ta-(ju)’k ‘shrub (*Lycium americanum*)’ > Mk *tsofe-te-k* || Ni *tsoφ-ta-juk* || PW *tsóχʷa-t-ukʷ
- (176) PM *wátshan ~ *wátsχan ‘to be healthy, alive’ > Ni *βatsxan* || PCh *wásan || PW *wátshan
- (177) PM *?áwu(C)tseχ ‘peccary’ > Ni ?aβuktsex ~ ?aβoktsex || PCh *?áwusah || PW *?áwutsaχ
- (178) PM *(?a)X₁₃útsa(?)χ, *(?a)X₁₃útsha-ts ‘crested caracara’ > Ni *xutsax, xutsxa-s* || PCh *(?a)húsah, *(?a)húsa-s || PW *?ahútsaχ, *?ahútsha-s
- (179) PM *?ál(V)tse(?)χ, *?ál(V)tse-ts ‘cháguar (*Deinacanthus urbanianum*)’ > Ni ?áktsex, ?áktse-s || PCh *?ál’sah, *?ál’se-s || PW *?áletsaχ

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable.

- (180) PM *[j]åtsi(?)j ‘to spill’ > Mk *[j]atsij-xu?* || Ni *[j]åtsij*
- (181) PM *-kéjåts (m.), *-ké(j)tså-ts (pl.) ‘grandchild’ > PCh *-kéjås, *-kétsås || PW *-k'éjås, *-k'étsås
- (182) PM *k(?)utsá(?)X₁₂ ~ *k(?)utsé(?)χ ‘cháguar (*Bromelia hieronymi*)’ > PCh *k'usáh || PW *k'utsáχ
- (183) PM *låttsiki-ju’k ‘willow’ > Mk *lattsiki-ju’k* || Ni *klåttsiki-juk*
- (184) PM *níltsa(?)X₁₂, *níltsX₁₃a-ts ‘white-lipped peccary’ > PCh *<?ih>nílsah, *<?ih>nílsa-s || PW *nítsaχ, *nítsha-s
- (185) PM *qatsíwo(?) ‘limpkin’ > PCh *qasíwo<?oh> || PW *qatsíwo
- (186) PM *(-)tútse(?)χ ‘smoke’ > PCh *(-)túsah || PW *(-)tútsaχ
- (187) PM *tsaqaq ~ *-ä- ‘plant (sp.)’ > Mk *tseqeq* || Ni *tsakak*
- (188) PM *[ji]tså(?)j ‘to spill’ > PCh *[?i]sáj? || PW *[?i]tsåj
- (189) PM *tsémlå(?)k ~ *tsámlå(?)k ‘silk floss tree’ > PCh *sémlåk || PW *tsémlåkʷ
- (190) PM *tsóna(?) ‘red brocket’ > PCh *tsóna? || PW *tsó?nah
- (191) PM *?utsi(h) (*-l) ‘eel’ > Mk *utsi (-l)* || Ni ?utsi (-k)

2.1 Plain onsets and codas

However, the occurrence of *ts* is synchronically limited to the onset position in Nivaâcle (Gutiérrez 2015b: 45) and Wichí (Claesson 1994: 15, Terraza 2009b: 42, Nercesian 2014: 50).² This restriction arose as a result of a diachronic deaffrication of PM **ts* > *s* in codas in these languages. Of all Mataguayan languages, only Maká preserves PM **ts* in the coda position.

- (192) PM *-*ɸälits* ‘daughter-in-law, sister-in-law’ > Mk *-felits* || Ni *-ɸaklís* <?a> ‘sister-in-law’ || PCh *-*hwélis* ‘daughter-in-law’
- (193) PM *(-)*ɸétä’ts* ‘root’ > Mk *fitets* || Ni *-ɸeta’s* || PCh *-*hwétus* || PW *(-)x^wétes
- (194) PM **jija’ts* ‘dew’ > Mk *ije’ts* || Ni *jija’s* || PCh **?ijes-tah* || PW **?ijás*
- (195) PM *-*léts* ‘offspring’ > Mk *-lits* || Ni *-kles* || PCh *-*lés* || PW *-*lés*
- (196) PM *-*tä(?)ts*, *-*täts-él* ‘trunk, base’ > PCh *-*tés* (*-el) || PW *-*tes*, *-*téts-el^h*
- (197) PM *-*täts-u’k*, *-*täts-ku-j^h* ‘trunk’ > Ni *- tats-uk*, *- tas-ku-j* || PCh *(-)tés-uk, *-tés-ku-j^h
- (198) PM *-*(i)ts* ‘PL’ > Mk *-(i)ts* || Ni *-(i)s* || PCh *-*(i)s* || PW *-*(i)s*
- (199) PM **qati’ts*, **qatits-él* ‘star’ > Ni *kati’s* || PCh **qatés*, **qates-él* || PW **qates*, **qatéts-el^h*
- (200) PM *-*qátsile*(?) (*-j^h) ‘guts’ > PCh *-*qásile-j^h* || PW *-*qásle-j^h*
- (201) PM *-*?aqhu’ts* ~ *-*?aqhú’ts* ‘knee’ > Mk *-aqhu’ts* || Ni *-(?a)kxu’s* || PCh *-*?aqús*
- (202) PM **?ätits* ~ *-i- ~ *-e- ~ *-é- ‘wild pepper’ > Mk *atits* || PCh **?ätés*

In some etyma, the erstwhile presence of an affricate in certain forms is suggested by the synchronically active alternations in Nivaâcle and Wichí: compare Ni *-fetats-ij* ‘roots’, *-(?a)kxatsu-j* ‘knees’, *- tats-uk* ‘trunk’ (where *ts* is syllabified as an onset and thus fails to deaffricate) vs. *-fetas* ‘root’, *-(?a)kxu’s* ‘knee’, *- tas-ku-j* ‘trunks’; PW *-*téts-el^h* ‘trunks, bases’, **qatéts-el^h* ‘stars’ vs. *-*tes* ‘trunk, base’, **qates* ‘star’.

Both in Nivaâcle and Wichí, underlying *ts* can also alternate with *t* in the coda position: compare Ni *xa-nuts-xa-jan* ‘I cause him/her to be angry’, *kuts-xanax* ‘thief, robber’, *xa-taβkits-xat* ‘I make him/her/it dizzy’ (see footnote 2 on the status of *tsx*) vs. *xa-nut* ‘I get angry’, *la-t-kut* ‘you steal’, *tsi-taβkit* ‘I am dizzy, I get dizzy’ (Campbell et al. 2020: 50); LB *mati-qut* ‘the one who always drinks mate’ vs. *mati-quts-es* ‘the ones who always drink mate’ (Nercesian 2014: 200).

²As an exception, in Nivaâcle *ts* can occur in codas when followed by *x* or *ɸ*. Although it could be tempting to assume that the sequences *tsx* and *tsɸ* are always tautosyllabic in Nivaâcle, Gutiérrez (2015b) reports that *ts* does syllabify as a coda in such cases.

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These data suggest that in some cases PM **ts* could deaffricate to *t* in the coda position in Nivaçle and Wichí. However, we have been unable to identify Mataguayan etymologies for morphemes that undergo the alternation in question, and the question regarding its diachronic origins thus remains unresolved.

2.1.4 PM **k*

PM **k* is preserved as a velar stop in Maká, whereas in other languages it has suffered a number of splits. In Nivaçle, it palatalizes to *tf* before or after non-back vowels (PM **i*, **e*, **ä*, **a* > Ni *i*, *e*, *a*), except when preceded by a back vowel, possibly with an intervening [+grave] consonant (see §7.1.3 for more details). In Chorote, it is usually reflected as PCh **k* (typically reflected as *k^j* in the contemporary Chorote lects); however, in several cases it is reflected as PCh **q* in onsets when next to the vowel **u*. In Wichí, PM **k* always palatalizes to PW **k^j* in the onset position, whereas in codas it is reflected as PW **q* (phonetically **[k]*) following front vowels and as PW **k^w* following back vowels. The tendency of PM **k* to palatalize in the daughter languages suggests that it may have had a palatalized allophone (at least in onsets when next to front vowels) already in Proto-Mataguayan, as is still the case in Maká (Gerzenstein 1989: 24).

The following examples show the development of PM **k* in the onset position, where it is reflected as Mk *k*, Ni *k* or *tf*, PCh **k*, PW **k^j*. The correspondence between a glottalized stop in Maká and a plain stop in Chorote in (219) is irregular. The failure of PM **k* to palatalize in Nivaçle before an *a* in (204) is unexpected; if the gender distinction seen in Maká goes back to Proto-Mataguayan, we might be dealing with a contamination of PM **kå?* (masculine) and **ka?* (feminine), whose expected reflexes in Nivaçle would be **kå?* and **tfa?*, respectively.

- (203) PM **fkéna(?)χ* ‘north wind, north’ > Ni *ɸtſenax* || PCh **hw[?]kénah*
- (204) PM **k-* ‘that (outside the speaker’s sight)’ > Mk *k-* || Ni *ka?* || PCh **kå?*
- (205) PM **-ka*, **-ká-l* ‘tool, skillful person’ > Ni *-tſa? (-k)* || PCh **-ká? (*-l)* || PW **-k^ja*, **-k^já-l^h*
- (206) PM **-kat* ‘collective of plants’ > Mk *-ket* || Ni *-tſat* / *-kat* || PCh **-kat* || PW **-k^jat* (*-at after **k^w*, **q*)
- (207) PM **[ji]ka[?]χ ~ [ji]kå[?]χ* ‘to take away’ > Mk *[j]<e>ka[?]χ* || Ni *[ji]tſa[?]x* || PW **[ji]k^jåχ*
- (208) PM **-kåñ* (*-its) ‘testicle’ > Ni *-kåñ-sij* || PCh **-kåñ<is>* || PW **-k^jåñ<is>*

2.1 Plain onsets and codas

- (209) PM *-kå's, *-kås-él 'tail' > Ni -kå's, -kås-ek || PCh *-kås || PW *-kås, *-kås-él^h
- (210) PM *[ji]kå't-APPL 'to fall' > Ni [ji]kå't-APPL || PW *[ni]kå't-APPL
- (211) PM *kéłχa-ju'k, *kéłχa-jku-j^h 'red quebracho' > Mk kełxa-jku- || Ni tsełxa-juk, tsełxa-ku-j || PCh *kéhla-juk / *kéhla-jku- || PW *kéł-juk^w, *kéł-k'u-j^h
- (212) PM *[ji]kén 'to send' > Mk [j]<u>kin || Ni [ji]tsen || PCh *[?i]kén || PW *[?i]kén
- (213) PM *-ke?(*-j^h) 'feminine' > Mk -ki?(-j) || Ni -ts'e / -ke (-j) || PCh *-ke?(*-j^h) || PW *-k'e (*-j^h)
- (214) PM *khåt 'cactus' > Mk khat-u'k || Ni kxat || PCh *kåhåt || PW *kåhåt
- (215) PM *-kíphah, *-kípha-ts 'neighbor' > Mk -kife(-ts) || Ni -tſipha(-s) || PCh *-kíhwah, *-kíhwa-s
- (216) PM *-kilá?(*-wot) 'elder brother' > Ni -tſekla? / tſikla-(-bot) || PCh *-kilá?(*-wot) || PW *-k'ila
- (217) PM *-kitá? (*-wot) 'elder sister' > Ni -tſita? (-bot) || PCh *-kitá? (*-wot) || PW *-k'ita
- (218) PM *-ko(?)j (*-áj^h) 'hand, arm' > Mk -koj (-ej) || PCh *-kój?, *-koj-áj^h
- (219) PM *k(?)ój-APPL 'to be round' > Mk k'o:j-xi? || PCh *kój<oj>-APPL
- (220) PM *-(j)ku-j^h 'trees (suffix)' > Mk -(j)kw-i || Ni -ku-j || PCh *-(j)ku-j^h || PW *-k'u-j^h
- (221) PM *kula'j ~ *kulá'j 'sun' > Ni <xum>kukla'j || PCh *kuláj?
- (222) PM *[ji]kú't 'to answer' > Mk [j]<e>ku't || Ni [ji]ku't || PCh *[?i]kúhl-APPL || PW *[ni]k'útl
- (223) PM *[t]kú'm-APPL 'to grab; to work' > Mk [te]ku'm-APPL || Ni [t'a]ku'm-APPL || PCh *[?i]kúm-APPL || PW *[t]k'ú(?)m-APPL
- (224) PM *-kun ~ *-kún 'to eat.INTR' > Ni <tsak>kun || PCh *[t³]<?já>kun
- (225) PM *kús ~ *kúts 'heat' > Mk (?) kus (*Pyrocephalus rubinus*) || Ni kus || PCh *kús-APPL
- (226) PM *-kút-ex 'to meet' > Mk [w(e)]kut-ix-u't || Ni [βa]kut-eʃ || PCh *[?i]kút-eh || PW *-k'út-ex
- (227) PM *kú'X₁₂ 'sweat' > Ni -'β-ku'x || PW *k'úx^w
- (228) PM *(-)lkä(?)t 'nasal mucus, cold' > Mk -leke(?)t || PCh *kéł || PW *kéł-tax, *kéł-ta-s
- (229) PM *lkéte 'squash' > Mk lekiti || PCh *kéte?

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- (230) PM **[ji]qáku?* ‘to distrust’ > Mk *[je]qeku?* || Ni *[ji]kaku* || PCh **[ji]qáku?* || PW **[ji]qák^ju-APPL*
- (231) PM **(-)skä^jt* ‘mesh’ > Ni *-stfa^jt* || PW **sik^jet*
- (232) PM **-t(á)ko?*(*-l) ‘face’ > Mk *-tko<jek>* || Ni *-tako?*(*-k) || PCh **-tóko?*(*-l) || PW **-ták^jo*(*-l^h)
- (233) PM **-t(á)ko-se?*(*-j^h) ‘eyebrow’ > Mk *-tko-si?*(*-j) || PCh **-tóko-se?*(*-j^h) || PW **-ták^jo-se*(*-j^h)
- (234) PM **túku(?)t*s ‘ant’ > Ni *tukus* || PCh **túkus*
- (235) PM **-txók-owot* ‘uncles’ > Ni *-txok-oβot* || PCh **-<i>tók-owot*

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable. The correspondence between a plain stop in Wichí and a glottalized stop in Chorote in (248) is irregular.

- (236) PM **(-)jipku?*(*-l) ‘hunger’ > Mk *(-)jipku?*(*-l) || Ni *jipku?* / *-jipku*(*-k)
- (237) PM **ká^jlah*, **ká^jla-ts* ‘lizard’ > PCh **ká^jlah*, **ká^jla-s* || PW **k^já^jlah*, **k^já^jla-s*
- (238) PM **[ji]kála^jt* ‘to fry’ > Mk *[j]<a>kale^jt* || Ni *[ji]kaklát^jt* / *-kaklát^jt*
- (239) PM **[ji]ká(?)t* ‘to be red’ > PCh **[?i]ká^jt* || PW **[?i]k^já^jt*
- (240) PM **[ji]kå?* ‘to be torn’ > PCh **[?i]kå?* || PW **[?i]k^jå?*
- (241) PM **-kéjå(?)*(f.), **-kéjåts*(m.), **-ké(j)tså-ts*(pl.) ‘grandchild’ > PCh **-kéjå?*, **-kéjås*, **-kétsås* || PW **-k^jéjå*, **-k^jéjås*, **-k^jétsås*
- (242) PM **kójXa(?)t* ‘to be heavy’ > PCh **kóhjat-APPL* || PW **k^jójhat*
- (243) PM **kó^jl* ‘locust’ > PCh **kó^jl* || PW **k^jól^h*
- (244) PM **kowä^jx* / **-kowä^jx* ‘hole’ > PCh **kowéh* / **-kóweh* || PW **k^jowex* / **-k^jóweχ*
- (245) PM **ktá^jnih* ‘Chaco tortoise’ > PCh **kitá^jnih* || PW **k^jtá^jnih*
- (246) PM **ktéta(?)~ktáta(?)* ‘white algarrobo fruit (*Prosopis elata*)’ > PCh **kitéta?* || PW **k^jtéta*
- (247) PM **[wa]kuma^jχ* ‘to run’ > Mk *[we]kuma^jχ* || Ni *[βa]kuma^jx*
- (248) PM **k(?)utsá(?)X₁₂~k(?)utsé(?)χ* ‘cháguar (*Bromelia hieronymi*)’ > PCh **k^jusáh* || PW **k^jutsáχ*
- (249) PM **-kVnt(?)...* ‘kidney’ > PCh **-kánt^jijaa?* || PW **-k^jóntowaj*
- (250) PM **låttsiki-ju^jk* ‘willow’ > Mk *lattsiki-ju^jk* || Ni *klåtsiki-juk*

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- (251) PM *-qáka (*-l) ‘medicine’ > PCh *-qáka? (*-l) || PW *-qák^ja (*-l^h)
- (252) PM *tkéna(?)X₁₂ ~ *tkána(?)X₁₂, *tkénX₁₃a-ts ~ *tkánX₁₃a-ts ‘precipice; hill, mountain’ > PCh *t^okénah, *t^okéhna-s || PW *tk^jénaχ, *tk^jéhna-s
- (253) PM *wkína(?)X₁₂, *wkínX₁₃a-ts ‘metal’ > PCh *w^okínah, *w^okíhna-s || PW *k^jínaχ, *k^jíhna-ts

In the coda position, PM *k is reflected as Mk k, Ni k or tf, PCh *k, PW *q or k^w (see §9.1.1.2). Note that this consonant never occurs in codas following the vowel PM *a.

- (254) PM *-aje^jk ~ *-ajé^jk ‘honey comb’ > Ni -aje^jtf || PCh *-q-ájek
- (255) PM 1 *h-åk, 2 *t-åk, 3 *[j]ik; CISL *n-åk ‘to go away’ > Mk 1 h-ak, 2 t-ak, 3 ik; CISL n-ek || Ni 1 x-åk, 2 t-åk, 3 [j]itf; CISL n-atf || PCh 1 ?åk, 2 *hl-ék || PW 2 *t-eq, 3 *[j]iq; CISL *n-eq
- (256) PM *(-)fetek ~ *-éte- ~ *-eté- ‘mortar’ > Mk (-)fitik || Ni -fetetf || PCh *(-)hwVhlek || PW *x^wéteq
- (257) PM *[ji]phi^jk ~ *[ji]phi^jk ‘to hide’ > Ni [ji]phi^jtf || PCh *[?i]hwík
- (258) PM *φts-u^jk ‘palm (*Copernicia alba*)’ > Mk fits-uk || Ni φts-u^jk || PCh *hwis<úk> || PW *x^wits<uk^w>
- (259) PM *-ti^jk ~ *-tí^jk, *-tí-j^h ‘thread’ > Ni -ti^jtf, -ti-j<is> || PCh *-hlík, *-hlí-j^h
- (260) PM *-tu^jk, *-tú-j^h ‘yica bag, load’ > Mk -tu^jk, -tu-j || Ni -tu^jk || PCh *-hlúk, *-hlúj-... || PW *-tuk^w, *-tú-j<is>
- (261) PM *-má^jk, *-mhá-j^h ‘powder, flour’ > Ni -må^jk, -mxå-j || PCh *-måk || PW *-mók^w, *-mhó-j^h
- (262) PM *-muk, *-mhu-j^h ‘feces’ > Mk -<i>muk, -<i>mhu-j || Ni (-)<sa>muk, (-)<sa>mxu-j || PCh *-<?já>muk || PW *-<?já>muk^w, *-<?já>mhu-j^h
- (263) PM *^zmók (*-its) ‘zorzar bird (*Turdus sp.*)’ > Mk mok (-its) || Ni mok (-is) || PCh *^zmók (*-is)
- (264) PM *néwo(?)k ‘wild manioc’ > Ni noβok || PCh (?) *n^owák || PW *néwok^w
- (265) PM *(-)níjåk, *(-)níjhå-j^h ‘rope, cord’ > Mk (-)nijak, (-)nijha-j || Ni -nijåk, -nijxå-j || PCh *níjåk, *níjhå-j^h || PW *níjåk^w, *níjhå-j^h
- (266) PM *-p'o^jk ~ *-φ'o^jk ‘fence’ > Ni -p'o^jk || PCh *-p'ók || PW *-p'ok^w
- (267) PM *tänúk (*-its) ‘feline’ > Mk tenuk (-its) || Ni tanuk (-is) || PCh *tinúk (*-is)
- (268) PM *téwo(?)k ~ *téwå(?)k ‘river’ > Ni toβok ~ toβåk || PCh *téwok ~ *téwåk || PW *téwok^w

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- (269) PM **títe*([?])*k*, **títhe-j^h* ‘plate’ > Ni (-)titetʃ, (-)titxe-*j* || PCh **títek*, **tíhte-j^h*
- (270) PM **tlú’k* ‘blind’ > Ni *taklä’k* || PCh **t^əlúk* || PW **tilúk^w*
- (271) PM *-[~]*txo’k* ~ *-[~]*txó’k* ‘uncle’ > Mk -*txo’k* || Ni -[~]*txo’k* || PCh *-<*i*>*tók* || PW *-<*wi*>*thok^w*
- (272) PM **tsänú’k* ‘duraznillo trees’ > Ni *tsanu’k* || PCh **sinúk* || PW **tsinúk^w*
- (273) PM *-*(j)uk* ‘tree (suffix)’ > Mk -*(j)uk* || Ni -*(j)uk* || PCh *-*(j)uk* || PW *-*(j)uk^w*
- (274) PM *-*wá’k* ‘bad mood’ > Mk -*wak* || Ni -*βå’k* || PCh *-*wá’k* || PW *-*wá’k^w*
- (275) PM **wäk* ‘all’ > Mk *we:k* || Ni -*βatʃ* || PCh *-*wek* || PW *-*weq*
- (276) PM *-*xáte’k*, *-*xáthe-j^h* ‘head’ > Ni -*sate’tʃ*, -*satxe-s* || PCh *-*hétek*, *-*héhte-j^h* || PW *-*t-éteq*, *-*t-éthe-j^h*
- (277) PM **xpå’k* ~ **xpå’k* ‘straw’ > Mk *xupa*([?])*k* ~ *xupek* || Ni *xpå’k* || PCh **ʔipå’k*
- (278) PM **X₁₃ó’k* ‘palo santo (*Bulnesia sarmientoi*)’ > Ni *xo’k* || PCh **hók* || PW **hók^w*
- (279) PM *-*X₁₃u’k*, *-*X₁₃ú-j^h* ‘firewood’ > Ni -*xu’k*, -*xu-j* || PCh **(ʔítåh)-huk* || PW *-*huk^w*, *-*hú-j<is>*
- (280) PM **ʔaqåje’k* ‘wild honey’ > Ni *ʔakåjetʃ* || PW **ʔaqåjeq*
- (281) PM *[*t*]’ä([?])*k* ‘to eat.INTR’ > Mk [*t*]’*ek* || PW *[*t*]’*eq*

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichi), whose PM age is thus questionable.

- (282) PM **phinåk*, **phinhå-j^h* ‘tobacco’ > Mk *finak*, *finha-j* || Ni *phinåk*, *phinxå-j*
- (283) PM *(-)*φ’ok* ~ *(-)*φ’ók* (*-*its*) ‘arrow’ > Mk (-)*φ’ok* (-*its*) || Ni (-)*p’ok* (-*is*)
- (284) PM **ɳtå’k* ‘two’ > PCh **ɳtå’k* || PW **nitå’k*
- (285) PM *-*témä*([?])*k* ~ *-*tämä*([?])*k*, *-*témh-aj^h* ~ *-*tämh-aj^h* ‘bile’ > PCh *-*témek*, *-*téhm-aj^h* || PW *-*témeq*, *-*témh-aj^h*
- (286) PM **tsémłå’k* ~ **tsámlå’k* ‘silk floss tree’ > PCh **sémhłåk* || PW **tsémłåk^w*
- (287) PM *-*X₁₃úsek* ~ *-*X₁₃úsäk* ‘temperance’ > PCh *-*húsek* || PW *-*húseq*
- (288) PM **ʔáte’k* ~ **ʔätä’k* ‘cebil, vinal’ > PCh **ʔátek* || PW **ʔáteq*
- (289) PM **ʔa’nqo’k* ‘paralytic’ > Mk *onqok* || Ni *ʔa’nko’k*
- (290) PM **ʔomhatäk* ~ **ʔomhätäk* ‘queen palm fruit’ > Mk *omhetek* || Ni *ʔomxatats*

As we will see in §5.2.3, in some cases stem-final PM **k* may alternate with PM **h* (or zero after fricatives).

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2.1.5 PM *q

PM *q is preserved as a distinct segment in Maká, Proto-Chorote, and Wichí, but not in Nivaclé, where it yields k (phonetically, it can still be pronounced as uvular in some environments, but there is no longer an opposition between velars and uvulars in Nivaclé). In codas, it merges with PM *k as PCh *k in Chorote. Note that when PM *q occurs in a coda position, it can only be preceded by a low vowel (PM *a or å). In one cognate set, there is an irregular correspondence between a plain stop in Nivaclé and a glottalized stop in Chorote (294).

- (291) PM *-åq, *-qå-ts ‘**food**’ > Mk -aq, -qa-ts || Ni -åk, -kå-s || PCh *-åk, -qå-s || PW *-t-åq, *-qå<s>
- (292) PM *-φqató(*-l) ‘**elbow**’ > Ni -(?V)φkato(-k) || PCh *-qató?(*-l) || PW *-qáto(*-l^h)
- (293) PM *(**-håqke?** ‘**well**’ > Mk haqqi? ‘**river**’ || Ni -xåke ‘**dry well**’ || PCh *-hååke? ‘**artificial well**’
- (294) PM *-nX₂₃aq(’)åt ‘**to snore**’ > Ni [ta]nxakåt || PCh *[?i]hnåq’åt
- (295) PM *qa ‘**in order to**’ > Mk qe || Ni ka || PCh *qa
- (296) PM *qá- / *q- ‘**indirect possession**’ > Mk qe- / qa- / qo- / q- || Ni ka- / k- || PCh *qá- / *q- || PW *qá- / *q-
- (297) PM *[ji]qáku? ‘**to distrust**’ > Mk [je]qeku? || Ni [ji]kaku || PCh *[ji]qáku? || PW *[ji]qákju-APPL
- (298) PM *-qalå? (*-j^h) ‘**leg**’ > Ni -kaklå? (-j) || PCh *-qa'lå? ~ *-qå'lå? (*-j^h) || PW *-qålå? (*-j^h)
- (299) PM *qati'ts, *qatits-él ‘**star**’ > Ni kati's || PCh *qatés, *qates-él || PW *qates, *qatéts-el^h
- (300) PM *[t]qåñhan ‘**to fish with a hook**’ > Mk [ta]<qa>qanhen || PCh *[t^o]qåhnán || PW *[t]qåñhan
- (301) PM *-qåtsile(?) (*-j^h) ‘**guts**’ > PCh *-qåsile-j^h || PW *-qåsle-j^h
- (302) PM *-qéj (*-its) ‘**costume**’ > Ni -kej (-is) || PCh *-qéj? (*-is) || PW *-qéj (*-is)
- (303) PM *slåqha(?)j, *slåqhaj-its ‘**wild cat**’ > Ni sklåkxaj ~ sklåkxaj(-is) || PCh *s^olåhqaj? ~ *s^olåhqåj? (*-is) || PW *silåqhåj
- (304) PM *tsåhåq (*-its) ‘**chajá bird**’ > Mk tsahaq (-its) || PCh *såhåk, *såhåq-es ~ *såhåq-is || PW *tsåhåq
- (305) PM *?aqåje'k ‘**wild honey**’ > Ni ?akåjetf || PW *?aqåjeq
- (306) PM *-?aqhu'ts ~ *-?aqhú'ts ‘**knee**’ > Mk -aqhu'ts || Ni -(?a)kxu's || PCh *-?aqús

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The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable.

- (307) PM **qapa*([?])*p* ~ *-ä- ‘dwarf’ > Mk *qep<ep>e*([?])*p* || Ni *kapap* ‘dwarf dog’
- (308) PM *-*qáka* (*-*l*) ‘medicine’ > PCh *-*qáka?*(*-*l*) || PW *-*qákja*(*-*l^h*)
- (309) PM *[*t*]*qásí*([?])*t* / -*qasi*([?])*t* ‘to stand’ > PCh *[*t³*]*qásit* || PW *[*t*]*qásit*; IMP **qasít*
- (310) PM **qatsíwo*([?]) ‘limpkin’ > PCh **qasíwo*<?oh> || PW **qatsíwo*
- (311) PM *-*qáwa*([?])*q* ‘belt, band’ > PCh *-*qáwak* || PW *-*qáwaq*
- (312) PM *-*qá?tu*([?]) ‘yellow’ > PCh *-*qá?tu?* || PW **qá?tu*
- (313) PM *-*qótso*([?]) ‘node’ > PCh *-*qósó-ke?* || PW *-*qótso*
- (314) PM **stá-?**q* ‘toothpick cactus (*Stetsonia coryne*)’ > PCh *?*stá-k* || PW *?*istá-q*
- (315) PM **tsaqaq* ~ *-ä- ‘plant (sp.)’ > Mk *tseqeq* || Ni *tsakak*
- (316) PM **?a’nqo’k* ‘paralytic’ > Mk *onqok* || Ni *?a’nko’k*
- (317) PM *-*?a*([?])*q* ‘rope, cord’ > PCh *-*?ák* || PW *-*t-’aq*

2.1.6 PM *?

In Proto-Mataguayan, as in most contemporary Mataguayan varieties, all syllables are required to have an onset, unless the nucleus is a syllabic consonant (see §2.6). The default consonant inserted in order to satisfy this requirement is PM *?. For example, underlying vowel-initial stems such as PM *-äse? ‘daughter’ (which contrast with underlying PM *?-initial stems, such as *-?úlu ‘urine’) take a zero allomorph of the second-person prefix, and a glottal stop is inserted in order to prevent the resulting word from starting with an onsetless syllable: compare PM *?*áse?* ‘your daughter’ (with an inserted glottal stop) and *?*úlu* ‘your urine’ (with an underlying glottal stop). For similar rules in the contemporary Mataguayan languages, see Gutiérrez (2015b: 43, 67, 102-5) for Nivaçle, Carol (2014a: 90) for Iyojwa’aja’ (word-initially only).

If a stem that starts with PM *? is incompatible with prefixes, it is impossible to determine whether the glottal stop is inserted or underlying. This is also the case with intervocalic occurrences of PM *? within a morpheme. Whether one analyzes them as underlying or epenthetic is, therefore, a matter of one’s theoretical preferences. In the contemporary languages, PM *? in onsets is preserved at least in Nivaçle, Iyojwa’aja’, Manjui, ’Weenhayek, Lower Bermejeño Wichí, and possibly other varieties, except that in Wichí it dissimilates to PW **h*

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whenever the onset of the following syllable is a glottalized consonant. In Maká, PM *? is preserved between vowels, but not word-initially. Some examples follow; note that in (331) the initial syllable is irregularly lost in Wichí (provided that the Wichí datum belongs to the cognate set in question).

- (318) PM **ɸa?*áj ‘algarrobo fruit (*Prosopis alba*)’ > Ni *ɸa?aj* || PCh **hwa?*áj? || PW **xʷa?*áj^b
- (319) PM **nú?uh*, **nú?u-ts* ‘dog’ > Ni *nú?u* (-s) || PCh **nú?uh*, **nú?u-s*
- (320) PM **?aɸu* ~ **?aɸú* ‘woman’ > Mk *efu* || PCh **?ahwú?*
- (321) PM **?átu*(?) ‘iguana’ > Ni *?átu* (-s) || PCh **?áhlu?*(*-s) || PW **?átu*
- (322) PM **?ám?åh*, **?ám?å-ts* ‘rat’ > Ni *?am?å* (-s) || PCh **?ám?ah* ~ **?ám?åh*, **?ám?å-s* ~ **?ám?å-s* || PW **?áma*
- (323) PM **?áp'a*(?)χ ~ **?áp'a*(?)χ ‘jararaca’ > Ni *?ap'ax* || PCh **?áp'ah*
- (324) PM **?aqáje*k ‘wild honey’ > Ni *?akájetʃ* || PW **?aqájeq*
- (325) PM **?atu'χ* ~ **?atú'χ* ‘snake (sp.)’ > Ni *?atu'x* || PCh **?atúh*
- (326) PM **?áwu(C)tseχ* ‘peccary’ > Ni *?abuktsex* ~ *?aboktsex* || PCh **?áwusah* || PW **?áwutsaχ*
- (327) PM **?áxa?* ‘stork’ > Mk *exe?*maguari stock’ || PCh **?áha?*jabiru’
- (328) PM **?aX₁₃áje*(?)χ ‘mistol fruit’ > Ni *?axåjex* || PCh **?ahájah* || PW **?ahåjaχ*
- (329) PM **?aX₁₃áj-uk*-^b*k*, **?aX₁₃áj-ku-j*^b ‘mistol tree’ > Ni *?axåj-uk*, *?axåj-ku-j* || PCh **?aháj-uk*, **?aháj-ku-j*^b || PW **?ahåj-uk*^w
- (330) PM **?ál(V)tse*(?)χ, **?ál(V)tse-ts* ‘cháguar (*Deinacanthus urbanianum*)’ > Ni *?åktsex*, *?åktse-s* || PCh **?ál°sah*, **?ál°se-s* || PW **?åletsaχ*
- (331) PM **?å'lá-taχ*, **?å'lá-ta-s* ‘Argentine boa’ > Ni *?å'klå-tax*, *?å'klå-ta-s* || PCh **?å'lá-tah* ~ **?å'lá-tah*, **?å'lá-ta-s* ~ **?å'lá-ta-s* || PW (?) **?lá-tay*
- (332) PM **?ånhajex* ‘wild bean (*Capparis retusa*)’ > Mk *anhejaχ* || Ni *?ånxajex* || PCh **?óhnajah* || PW **?ånhjaχ*
- (333) PM **?ånitih* ‘wasp (sp.)’ > Ni *?åniti* || PCh **?åñitih*
- (334) PM **?åsk'äla*(?)χ ‘widower’ > Ni *?åstʃ'aklax* || PCh **?åsk'élah*
- (335) PM **?åtits* ~ *-i- ~ *-e- ~ *-é- ‘wild pepper’ > Mk *atits* || PCh **?åtés*
- (336) PM **?éle*(?) ‘parrot’ > Ni *?ekle* || PCh **?éle?* || PW **?éle*
- (337) PM **?ítå*(?)χ, **?ítå-ts* ‘fire’ > Ni *?itåx*, *?ítå-s* || PCh **?ítåh*, **?ítå-s* || PW **?ítåχ*, **?ítå-s*

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- (338) PM *?*zóna*([?])χ ‘my brother’ > Ni *zonax* || PCh *?*zónah*
- (339) PM *?*óφo?*(^{?-ts}) ‘pigeon’ > Mk *ofo?*(^{-l}) || Ni *óφo* (^{-s}) || PCh *?*óhwo?*(^{?-s})
- (340) PM *?*úl?áh*, *?*úl?á-ts* ‘dove’ > Ni *ukl?á*(^{-s}) || PCh *?*úl?áh*, *?*úl?á-s*
- (341) PM *?*Vlá?ah*, *?*Vlá?a-ts* ‘lesser grison’ > Mk *ile* || Ni *aklá?a*(^{-s}) || PCh *?*elá?ah*, *?*elá?a-s* [?] ~ *?*alá?ah*, *?*alá?a-s* || PW *?*ilá?ah*

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable. The correspondence in (342) seems somewhat irregular.

- (342) PM *?*ji?ixátaχ*, *?*ji?ixáta-ts* ‘ocelot’ > Mk *i?ixataχ*, *i?ixate-ts* || Ni *jixátax*, *jixáta-s*
- (343) PM *?*a?nqo?k* ‘paralytic’ > Mk *onqok* || Ni *a?nko?k*
- (344) PM *?*áte*([?])*k* ~ *?*átä*([?])*k* ‘cebilo, vinal’ > PCh *?*átek* || PW *?*áteq*
- (345) PM *?*at'e*([?])(*t*)*s* ~ *?*at'ä*([?])(*t*)*s* ‘aloja drink’ > PCh *?*at'és* || PW *?*hat'és*
- (346) PM *?*atsXa*(?), *?*atsXá-l* ‘dorado’ > PCh *?*asá?*(^{?-l}) || PW *?*atsha*(?), *?*atshá-l^h*
- (347) PM *?*åfte*^l ‘orphan’ > Mk *afti*^l || Ni *åfte*^l*k*
- (348) PM *?*åthajex* ~ *?*åthäjex* ‘molle fruit’ > Mk *athejex* || Ni *åtxajex*
- (349) PM *?*omhatäk* ~ *?*omhätäk* ‘queen palm fruit’ > Mk *omhetek* || Ni *omxatats*
- (350) PM *?*utsi*(*h*) (^{?-l}) ‘eel’ > Mk *utsi* (^{-l}) || Ni *utsi* (^{-k})

In (351), PM *?*?* occurs between vowels at a root–suffix boundary. This was preserved in Maká; note that intervocalic glottal stops must be flanked by identical vowels in that language due to translaryngeal harmony (Gerzenstein 1994: 62). Nivaçle has eliminated the second vowel altogether. In Chorote and Wichí, one finds hiatus-filling approximants in place of PM *?*?*, as in Ijw [*ti*]pójí, Mj [*ta*]pówe, PW [*t*]pójex (since different hiatus-filling approximants are found in different Chorote varieties, we assume that the glide insertion occurred there independently and reconstruct a vowel sequence for Proto-Chorote).

- (351) PM **[t]pó?-ex* ‘to be full’ > Mk *[to]po?-ox* || Ni *[to]po?-x* || PCh **[t[?]]pó-eh* || PW **[t]pó-jeχ*

PM *?*?* is clearly contrastive at the left edge of stems which are compatible with prefixes. After a prefix that ends in a consonant, the stem-initial glottal stop surfaces as glottalization on that consonant, something that does not occur in vowel-initial stems. For example, underlying vowel-initial stems such as

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PM *-áse? ‘daughter’ and *ʔ-initial stems such as *-ʔúlu ‘urine’ behave differently when they combine with the third-person prefix *-t-: compare PM *-táse? ‘her/his daughter’ and *-t'úlu ‘her/his urine’. The distinction is systematically maintained in all contemporary Mataguayan languages.

- (352) PM *[t]’á’t **‘to ask’** > Ni [t]’a’t || PCh *[t]’át || PW *[t]’át
- (353) PM *-ʔaqhu’ts ~ *-ʔaqhú’ts **‘knee’** > Mk -aqhu’ts || Ni -(ʔa)kxu’s || PCh *-ʔaqús
- (354) PM *-ʔáX₂₃te(?) (*-j^h) **‘female breast’** > Ni -ʔaxte (-j) || PCh *-ʔáhate? (*-j^h) || PW *-t-’áte (*-j^h)
- (355) PM *ʔá’jtex, *ʔá’jte-ts **‘to hurt’** > Mk aʔtaχ, aʔti-ts || Ni ʔá’jtex ~ ʔá’βtex || PCh *ʔájʔtah-APPL, *-ʔájʔte-s-APPL || PW *ʔájtaχ, *ʔájte-s
- (356) PM *[t]’ás **‘to step’** > Ni [t]’ás || PCh *[t]’ás || PW *[t]’ás-APPL
- (357) PM *-ʔåx (*-íts) **‘skin, bark’** > Mk -ʔax (-its) || Ni -ʔåx (-is) || PCh *-ʔåh, *-ʔåh-és || PW *-t-’åχ, *-t-’åh-és
- (358) PM *[t]’ä(?)k **‘to eat.INTR’** > Mk [t]’ek || PW *[t]’eq
- (359) PM *-ʔäsxá’n, *-ʔäsxán-its **‘meat’** > Mk -ʔese’n, -ʔesen-its || Ni -(ʔa)sxa’n, -(ʔa)sxan-is || PCh *-ʔisá’n, *-ʔisán-is || PW *-t-’isa’n, *-t-’isán-is
- (360) PM *-[j]éjxåts-han **‘to teach’** > Mk [j]ixats<hen> || Ni [j]ejxats-xan / -ʔejxats-xan || PCh *-[j]éjåhås<an>
- (361) PM *-ʔeł ~ *-ʔéł **‘other’** > Ni -ʔeł || PW *-ʔeł ~ *-ʔéł
- (362) PM *-ʔí (*-l) **‘liquid, juice’** > Mk 3 t-’i? (-l) || Ni -ʔi? (-k) || PCh *-ʔí? (*-l) || PW *-t-’í (*-l^h)
- (363) PM *-[j]im **‘to dry out’** > Mk [j]im || Ni [j]im || PCh *-[j]ím-APPL || PW *-[j]im
- (364) PM *ʔis **‘good’** > Ni ʔis || PCh *ʔís || PW *ʔis
- (365) PM *-[j]om **‘to be extinguished’** > Mk [j]om || PCh *-[j]óm-APPL || PW *-[j]om
- (366) PM *-[j]o **‘to be ripe’** > PCh *-[j]ó-ʔe? || PW *-[j]o
- (367) PM *-ʔo’t ~ *-ʔó’t **‘chest’** > Ni -ʔo’t || PCh *-ʔót
- (368) PM *-ʔúł **‘to urinate’** > Mk uł / -ʔuł || Ni [j]uł / -ʔuł || PCh *[t]’úł || PW *[t]’úł
- (369) PM *-ʔúlu(?) **‘urine’** > Ni -ʔułu || PCh *-ʔúhlu? || PW *-t-’úłu

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable.

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- (370) PM *-ʔaɬá(?) ‘fat’ > PCh *-ʔahláʔ || PW *-t-’aɬá(?)
- (371) PM *-ʔa(?)q ‘rope, cord’ > PCh *-ʔák || PW *-t-’aq
- (372) PM *[t]’at’o ‘to yawn’ > Mk [t]ot’o-kij || Ni [t]’at’o
- (373) PM *-[n]åɸé(?)t ~ *-[n]åɸä(?)t ‘to be ashamed’ > PCh *-[n]åhwéł || PW *-<n>åxʷéł
? ~ *-<n>åxʷéłh
- (374) PM *-ʔä(?)l, 3 *-[j]i(?)l ‘to die’ > PCh *-[j]á(?)l || PW *-[j]ilh
- (375) PM *-ʔó’thale(?) ~ *-ʔó’thåle(?) ‘heart’ > PCh *-ʔóhtale? ~ *-ʔóhtåle? || PW *-t-’ótle

In (376), the correspondence is irregular: Nivaçle and Chorote point to an underlying vowel-initial stem, whereas Wichí and Maká (if cognate) point to a *ʔ-initial stem.

- (376) PM *[t](?)án ‘to shout’ > Mk (?) [t]’an ‘to win’ || Ni [t]ån || PCh *[t]án || PW *[t]’án

PM *ʔ is also contrastive in the word-final position, where it is best preserved in Maká. In Nivaçle and Wichí, it is usually preserved, but it is deleted in posttonic syllables in both languages (see §7.1.1.8, §9.1.1.14). Note that the loss of word-final PM *ʔ occurred independently in Nivaçle and Wichí, given that in the latter language it was fed by the accentual retraction process (§9.1.3). In Chorote, PM *ʔ was preserved, but the erstwhile contrast between its presence and absence was lost because *ʔ was inserted at the end of *all* words that ended in a vowel or in PCh *j (in fact, Carol 2014a synchronically analyzes all word-final instances of [ʔ] as automatic in the Iyojwa’aja’ variety of Chorote); see §8.1.1.6 for details.

- (377) PM *-áʔ (*-j^h) ‘fruit’ > Mk 3 -t-eʔ (-j) || Ni -aʔ (-j) || PCh 3 *hl-áʔ (*-j^h) || PW *-t-áʔ (*-j^h)
- (378) PM *-á(-j^h)-xiʔ (*-l) ‘mouth’ > Mk -exiʔ (-l) || Ni -aʃi (-k) || PCh (?) *-á<ajʔ> || PW *-t-áj-hi (*-l^h)
- (379) PM *-áseʔ ‘daughter’ > Mk -asiʔ || Ni -áse || PCh *-áseʔ || PW *-t-áse
- (380) PM *fajXoʔ, *fajXó-l / *-fájXoʔ (*-l) ‘coal’ > Ni (-)fajxoʔ(-k) || PCh *hwa(h)jo- || PW *xʷijho(ʔ), *xʷijhó-l^h / *-xʷijho (*-l^h)
- (381) PM *-fáɬʔuʔ (*-ts) ‘son-in-law, brother-in-law’ > Mk -feluʔ(-ts) || Ni -faklʔu(-s) ‘brother’ || PCh *-hwíluʔ ~ -hwéluʔ (*-s) ‘son-in-law’
- (382) PM *(-)håqkeʔ ‘well’ > Mk haqqiʔ ‘river’ || Ni -xåke ‘dry well’ || PCh *-hååkeʔ ‘artificial well’

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- (383) PM **[ji]já?* ‘to drink’ > Mk <*i>ja?* || Ni *[ji]jå?* || PCh **[ni]já?* || PW **[ni]já?*
- (384) PM **ji'lå?*, **ji'lá-j^h* ‘tree’ > Ni *ji'klå?* (-*j*) || PCh **2a'lå?* (*-*j^h*) || PW **ha'lå*, **ha'lá-j^h*
- (385) PM **jit'å?*, **jit'á-l* ‘vulture’ > Ni *jit'å?* (-*k*) || PCh **?at'å?* (*-*l*) || PW **hat'å?* (?)
- (386) PM *-*k'áxe?* (*-*l*) ‘arrow’ > Mk *-qaxi?* (-*l*) || Ni *-k'áxe* || PCh *-*k'áhe?* (*-*l*) || PW *-*k^jáhe?* (*-*l^h*)
- (387) PM *-*ke?* (*-*j^h*) ‘feminine’ > Mk *-ki?* (-*j*) || Ni *-tse* / -*ke* (-*j*) || PCh *-*ke?* (*-*j^h*) || PW *-*k^je?* (*-*j^h*)
- (388) PM *-*kilá?* (*-*wot*) ‘elder brother’ > Ni *-tsekla?* / *tsikla-* (-*βot*) || PCh *-*kilá?* (*-*wot*) || PW *-*k^jila*
- (389) PM *-*kitá?* (*-*wot*) ‘elder sister’ > Ni *-tfita?* (-*βot*) || PCh *-*kitá?* (*-*wot*) || PW *-*k^jita*
- (390) PM *-*k'ínxå?* ~ *-*k'ínxå?* (*-*wot*) ‘younger sister’ > Mk *-k'inxå?* ~ *-k'inxå?* || Ni *-tfínxå?* (-*βot*) || PCh *-*k'ihnå?* (*-*wot*) || PW *-*k^jínhå*
- (391) PM *-*lå?*, *-*lå-j^h* ‘domestic animal’ > Ni *-klå?* (-*j*) || PCh *-*lå<hwah>* || PW *-*lå?*, *-*lå-j^h*
- (392) PM *-*(-)lå?*, *-*(-)lå-ts* ‘louse’ > Mk *-<ij>le?* (-*ts*) || Ni *-la?* (-*s*) || PCh *-*hlå?* (*-*s*) || PW **la?*
- (393) PM *-*nX₂₃atå?* ‘nasal mucus’ > Ni *-nxatå?* || PCh *-*hnát<ijah-PL>*
- (394) PM **n-xåte?* (*-*l*) ~ **n-xáti?* ‘dream, sleepiness’ > Mk *-nixati?* (-*l*) || Ni *nxåte* (-*k*) || PCh **?ihnáti?* || PW **naháti*
- (395) PM **njánxte?* ‘tapeti rabbit, cavy’ > Mk *nijaxti?* || Ni *nånxate* || PCh **nåhåte?* || PW **nånte*
- (396) PM *-*ó?* (*-*j^h*) ‘seed’ > Mk 3 *ł-o?* (-*j*) || PCh *-*ó?* || PW *-*ł-ó?* (*-*j^h*)
- (397) PM *-*pe?*, *-*pé-l* ‘fat’ > Ni *-<a>pe?* (-*k*) || PCh *-*pé?* (*-*l*) || PW *-*pe?*
- (398) PM *-*pxúse?* (*-*j^h*) ‘beard’ > Mk *-<a>pxusi?* (-*j*) || Ni *-påse* (-*j*) || PCh *-*púse?* (*-*j^h*) || PW *-*påse* (*-*j^h*)
- (399) PM *-*qalå?* (*-*j^h*) ‘leg’ > Ni *-kaklå?* (-*j*) || PCh *-*qa'lå?* ~ *-*qå'lå?* (*-*j^h*) || PW *-*qålå* (*-*j^h*)
- (400) PM *-*tåmte?* (*-*ts*) ‘daughter-in-law’ > Ni *-tåmte<?e>* (-*s*) || PCh *-*tåmte?* (*-*s*)
- (401) PM *-*tåtse?* (*-*j^h*) ‘eyelash’ > Mk *-tetsi?* (-*j*) || Ni *-tåtse* (-*j*) || PCh *-*tåse?* (*-*j^h*)
- (402) PM *-*te?*, *-*té-j^h* ‘eye’ > Mk *-t<o?* (-*j*) || PCh *-*ta-té?* (*-*j^h*) || PW *-*t(a)-te?* (*-*j^h*)

2 *Consonants*

- (403) PM *-t(á)ko?(*-l) ‘**face**’ > Mk -t_{ko}<*kek*> || Ni -tako?(-k) || PCh *-tóko?(*-l) || PW *-ták^jo (*-l^h)
- (404) PM *-t(á)ko-se? (*-j^h) ‘**eyebrow**’ > Mk -t_{ko}-si? (*-j) || PCh *-tóko-se? (*-j^h) || PW *-ták^jo-se (*-j^h)
- (405) PM *-t’íle? (*-j^h) ‘**rheum**’ > Mk -t’ili?(-j) || Ni -t’íkle (-j) || PCh *-t’íle-
- (406) PM *t’isá? ~ t’isá? (*-l) ‘**cream-backed woodpecker** (*Campephilus leucopogon*)’ > Mk t’isa?(-l) || Ni t’isá?(-k) || PCh *t’isá?(-l)
- (407) PM *-wa? ‘**plural (demonstratives)**’ > Mk -we? || Ni -βa? || PCh *-wá?
- (408) PM *wije? ‘**caraguatá** (*Bromelia serra*)’ > Ni βije? ~ jije? || PCh *wijé? || PW *wuje(?)
- (409) PM *-wó? (*-ts) ‘**expert**’ > Mk -wo?(-ts) || Ni -βo?(-s) || PCh *-wó? (*-s) || PW *-wó? (*-s)
- (410) PM *-wli? ~ *-wli?, *-wli-ts ‘**rib**’ > Mk -weti?(-ts) || Ni -βli / -βli?(-s) || PCh *-hli<s>
- (411) PM *xéjá? (*-l) ‘**bat**’ > Mk xaja?(-l) || Ni sejá (-k) || PCh *<?a>héja? (*-l)
- (412) PM *-xä’n(e?) ‘**verbal plural (suffix)**’ > Ni -fa’ne? / -xa’ne? || PCh *-he’n(e?) || PW *-he’n
- (413) PM *?áxa? ‘**stork**’ > Mk exet^jmaguari stock’ || PCh *?áha?jabiru’
- (414) PM *?éja? (*-l) ‘**mosquito**’ > Mk ije?(-l) || Ni jija? || PCh *?éja? (*-l)
- (415) PM *?óφo? (*-ts) ‘**pigeon**’ > Mk ofo?(-l) || Ni ?óφo (-s) || PCh *?óhwo? (*-s)

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable.

- (416) PM *φánha? ~ *φánha? (*-j^h) ‘**locust**’ > Mk <e>fenhe?(-j) || Ni φanxa (-j)
- (417) PM *(-)jipku? (*-l) ‘**hunger**’ > Mk (-)jipku?(-l) || Ni jipku? / -jipku (-k)
- (418) PM *[ji]ká? ‘**to be torn**’ > PCh *[?i]ká? || PW *[?i]ká?
- (419) PM *k’uhate-nha? ‘**pacu fish**’ > Mk <i>k’uheti-nhe?(-j) || Ni k’unxate<nxa>(-j)
- (420) PM *-tí’wte? ‘**heart**’ > Mk -titi? || Ni -ti’βte
- (421) PM *-qá?tu(?) ‘**yellow**’ > PCh *-qá?tu? || PW *qá?tu
- (422) PM *siló?tåφV ~ *siwó?tåφe ‘**Caatinga puffbird**’ > PCh *siló?tåhwV? || PW *siwótåx^we

2.1 Plain onsets and codas

- (423) PM *-xéle? ‘dirt’ > Mk -xili? || Ni -sek̪le

In some cases, word-final glottal stops in Maká and Nivačle appear not to reconstruct to Proto-Mataguayan, as evidenced by the Lower Bermejeño Wichí cognates (where no glottal stop is found). We suggest that Maká and Nivačle underwent ?-epenthesis in roots of the shape (C)V (see §6.1.7, §7.1.1.9).

- (424) PM *-e, *-é-l ‘thorn’ > Mk 3 t-i? || Ni -e?(-k) || PCh 3 *hl-é? (*-l) || PW *-t-e
- (425) PM *[ji]må ‘to sleep’ > Mk [i]ma? || Ni [ji]må? || PCh *?[i]må? || PW *?[i]må
- (426) PM *-ó (*-l) ‘penis’ > Ni -o?(-k) || PCh *-ó? (*-l) || PW *-t-ó (*-l^h)
- (427) PM *-wó (*-ts) ‘worm’ > Ni -βo?(-s) || PCh *-wó? (*-s) || PW *-wó (*-s)
- (428) PM *-w(t)s’é (*-l) ‘belly’ > Ni -βts’e (-k) || PCh *-ts’é? (*-l) || PW *-ts’é (*-l^h)
- (429) PM *-xa, *-xá-l ‘price’ > Ni -fa?(-k) || PW *-ha, -há-l^h
- (430) PM *-ʔi (*-l) ‘liquid, juice’ > Mk 3 t-i? (-l) || Ni -i?(-k) || PCh *-ʔi? (*-l) || PW *-t-’i (*-l^h)

2.1.7 PM *ϕ

PM *ϕ is preserved as a bilabial fricative only in Nivačle, at least in the Chishamne Lhavos dialect.³ In other languages, its reflexes are Mk *f*, PCh *hw (in onsets) or *m (in codas), and PW *x^w. Note the irregular reflexes in Wichí in two examples: *w in (447) and *p in (461) (unless it turns out to be the regular outcome of the preglottalized coda *²ϕ, see §2.3).

- (431) PM *-äϕ, *-ϕä-ts ‘wing’ > Mk 3 t-ef, t-e-f-e-ts || Ni -aϕ, -<a>ϕa-s || PCh *-hw<é-s> || PW *-t-ex^w
- (432) PM *-ϕah, *-ϕa-ts ‘companion’ > Mk -fe (-ts) || Ni -ϕa (-s) || PCh *-hwah, *-hwa-s || PW *x^wah, *-x^wa-s
- (433) PM *ϕajXo?, *ϕajXó-l / *-ϕájXo? (*-l) ‘coal’ > Ni (-)ϕajxo?(-k) || PCh *hwa(h)jo- || PW *x^wijho(?), *x^wijhó-l^h / *-x^wíjho (*-l^h)
- (434) PM *-ϕá-’mat ‘disease’ > Mk <eq>fe-’met || Ni -ϕa-’mat || PCh *-hwá-’mat
- (435) PM *-ϕapá(?) ‘shoulder’ > PCh *-hwopó? || PW *-x^wápo
- (436) PM *-ϕapá-ke? ‘shoulder blade’ > Ni -ϕápá-ke || PCh *-hwopó-ke?

³Campbell et al. (2020: 29, 81) state emphatically that this consonant is articulated as bilabial and not labiodental, at least in their data. In Gutiérrez’s (2015b) work, [ϕ] is said to be an allophone of /f/. An anonymous reviewer reports that the labiodental fricative is now the most extended realization in Nivačle, according to their field data.

2 Consonants

- (437) PM **ɸa*́*t* ~ **ɸá*́*t* ‘fire’ > Mk *fe*́*t* || PCh **hwát*
- (438) PM **ɸátsu*(*χ*, **ɸátshu-ts* ‘centipede’ > Ni *ɸatsux*, *ɸatsxu-s* || PCh *(*h*)*wásuh*, *(*h*)*wásu-s* || PW **xwátsuxw*
- (439) PM *[*ji*]*ɸá*́*x* ‘to cut down’ > Mk *fex-inet-kiʔax*’ || Ni [*ji*]*ɸa*́*f* || PCh *[*ʔi*]*hwáh-APPL* || PW *[*ʔi*]*xwáχ*
- (440) PM **ɸaʔáj* ‘algarrobo fruit (*Prosopis alba*)’ > Ni *ɸaʔaj* || PCh **hwaʔáj?* || PW **xwáʔáj*́*h*
- (441) PM **ɸaʔáj-u*́*k*, **ɸaʔáj-ku-j*́*h* ‘algarrobo tree (*Prosopis alba*)’ > Ni *ɸaʔaj-*<j>*uk* || PCh **hwaʔáj-uk*, **hwaʔáj-ku-j*́*h* || PW **xwáʔáj-uk*, **xwáʔá-k*́*u-j*́*h*
- (442) PM *-*ɸájí*́*x* ‘right’ > Mk -*fejí*́*x*‘left’ || Ni -*ɸají*́*f* || PCh *-*hwíjáh*
- (443) PM *[*ji*]*ɸál* ‘to tell’ > Mk *n(i)-fel-im* || Ni *n(i)-ɸak* / *n(i)-ɸakl* || PCh *[*ʔi*]*hwél* || PW *[*ʔi*]*xwél* / *[*ʔi*]*xwél*
- (444) PM *-*ɸálits* ‘daughter-in-law, sister-in-law’ > Mk -*felits* || Ni -*ɸaklís* <*?a*>‘sister-in-law’ || PCh *-*hwélis*‘daughter-in-law’
- (445) PM *-*ɸál?u*?(*-*ts*) ‘son-in-law, brother-in-law’ > Mk -*felu*?(-*ts*) || Ni -*ɸakl?**u*(-*s*)‘brother’ || PCh *-*hwílu*? ~ -*hwélu*?(*-*s*)‘son-in-law’
- (446) PM **ɸä*́*x* ~ **ɸä*́*x* ‘field’ > Ni *ɸa*́*f* || PCh **hwéh*
- (447) PM *[*ji*]*ɸä*́*jå* ? ~ **ɸä*́*jå* ‘to fly’ > Ni [*ji*]*ɸä*́*jå* || PCh *[*ʔi*]*hwé*́*jå*? || PW **xwé*́*jå* ? ~ **w-* ? ~ **i-*
- (448) PM *(-)*ɸełek* ~ *-*éte*- ~ *-*ełé*- ‘mortar’ > Mk (-)*fitlik* || Ni -*ɸełets* || PCh *(-)*hwVhlek* || PW **xwéłeq*
- (449) PM *(-)*ɸétä*́*ts* ‘root’ > Mk *fitets* || Ni -*ɸeta*́*s* || PCh *-*hwétus* || PW *(-)*xwétes*
- (450) PM *[*ji*]*ɸi*́*j* ~ *[*ji*]*ɸi*́*j* ‘not to be afraid’ > Ni [*ji*]*ɸi*́*j* || PCh *[*ʔi*]*hwíj?* || PW *[*ʔi*]*xwíj-eh*
- (451) PM **ɸi*́*ját* ‘cold weather, south wind’ > Ni *ɸi*́*jat* || PCh **hwi*́*jét* || PW **xwíj*́*jét*
- (452) PM *[*ji*]*ɸi*́*k* ~ *[*ji*]*ɸi*́*k* ‘to hide’ > Ni [*ji*]*ɸi*́*f* || PCh *[*ʔi*]*hwík*
- (453) PM **ɸínä*(*χ*) ‘crab’ > Ni *ɸinax* || PCh **hwíneh*
- (454) PM **ɸis-kat* ‘palm grove (*Copernicia alba*)’ > Mk *fis-ket* || Ni *ɸis-tsat*
- (455) PM **ɸi*́*s* ‘leech’ > Ni *ɸi*́*s* || PW **xwís*
- (456) PM *-*ɸu*́*t* ~ *-*ɸú*́*t*, *-*ɸtú-ts* ‘flatulence’ > Mk -*ftu-ts* || Ni -*ɸu*́*t*, -*ɸtu-ts* || PCh *-*hwút*

2.1 Plain onsets and codas

- (457) PM *-kíphah, *kípha-ts ‘neighbor’ > Mk -kife(-ts) || Ni -tfípha(-s) || PCh *-kíhwah, *-kíhwa-
- (458) PM *-k’älphah ‘spouse’ > Ni -tf’akpha || PCh *-k’élhwah || PW *-k^jéx^wah
- (459) PM *[ni]-táphiä(‘)l-APPL ‘to know, to be acquainted’ > Ni [ni]táphiäkl-APPL || PCh *[?i]táh wel-APPL || PW *-táx^wel-APPL/ *-táx^wnh-APPL
- (460) PM *tip ~ *típ ‘to spend’ > Ni tip || PCh *[?i]tíM
- (461) PM *ti^jph ‘to suck breast’ > Mk tu^jf/-tu^jf || Ni ti^jph || PCh *[?i]tíM || PW *tip
- (462) PM *tsópha(?) ‘fruit of a shrub (*Lycium americanum*)’ > PCh *sóhwa? || PW *tsóx^wa(?)
- (463) PM *tsópha-taχ ‘fruit of a shrub (*Lycium americanum*)’ > Mk tsofe-taχ || Ni tsoφ-tax
- (464) PM *tsópha-ta-(ju)^k ‘shrub (*Lycium americanum*)’ > Mk tsofe-te-k || Ni tsoφ-ta-juk || PW *tsóx^wa-t-uk^w
- (465) PM *ʔaɸu ~ *ʔaɸú ‘woman’ > Mk eɸu || PCh *yahwú?
- (466) PM *ʔóɸo?(*-ts) ‘pigeon’ > Mk ofo?(-l) || Ni ʔóɸo (-s) || PCh *ʔóhwo?(*-s)

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable.

- (467) PM *[j]áɸti(‘)t ‘to spin’ > Mk [j]afti(‘)t || Ni [j]áɸti^t
- (468) PM *ɸánha? ~ *ɸánha?(*-j^h) ‘locust’ > Mk <e>fenhe?(-j) || Ni ɸanxa (-j)
- (469) PM *[?i]ɸá(t)s^{un} ‘to spit’ > PCh *[?i]hwáts^{un}-APPL || PW *[?i]x^wáts^{un}
- (470) PM *ɸaxi(‘)j ~ *ɸäxi(‘)j ‘green ameiva’ > Mk fexij || Ni ɸasij
- (471) PM *ɸílå(‘)X₁₂ ‘pocote (*Solanum sp.*)’ > PCh *hwílåh || PW *x^wílåχ
- (472) PM *-ɸílan ‘to dream’ > PCh *[?i]hwíhlan || PW *[t]x^wílan
- (473) PM *-ɸítä(‘)k ‘dream’ > PCh *-hwíhlek || PW *-x^wíteq
- (474) PM *ɸinåk, *ɸinhå-j^h ‘tobacco’ > Mk finak, finha-j || Ni ɸinåk, ɸinxå-j
- (475) PM *-ɸom ‘to throw, to push’ > PCh *[?i]hwóm-ah || PW *[t]x^wom
- (476) PM *siló?tåɸV [?] ~ *siwó?tåɸe ‘Caatinga puffbird’ > PCh *siló?tåhwV? || PW *siwótåx^we
- (477) PM *stáɸe(?) ‘Chaco chachalaca’ > PCh *?stáhwe? || PW *?istáx^we
- (478) PM *waɸ ~ *wäɸ ‘to be tired, to die’ > Mk [ji]wef || Ni βaɸ

2 Consonants

- (479) PM *[?][n]åphé(?)t ~ *[?][n]åphă(?)t ‘**to be ashamed**’ > PCh *[?][n]åhwé[?]t || PW *[?]<n>åx^wé[?]t
[?] ~ *[?]<n>åx^wél^h

- (480) PM *?åphé[?]t ‘**orphan**’ > Mk afti[?]l || Ni ?åphé[?]k

2.1.8 PM *t

PM *t is preserved as t in all daughter languages except Chorote, where it unpacks to PCh *hl in onsets (its allophone in codas is represented as PCh *t in this book, with the realizations in the contemporary varieties including [ll] alongside [t]).

- (481) PM *[j]áp’ä(?)t ~ *[j]áph’ä(?)t ‘**to burn**’ > Ni [j]ap’at || PCh *[j]áp’et || PW *[j]áp’et
- (482) PM *(-)fetek ~ *-éte- ~ *-eté- ‘**mortar**’ > Mk (-)fitik || Ni -fetets || PCh *(-)hwVhlek || PW *x^wéteq
- (483) PM *-já[?]t ‘**breath**’ > Ni -ja[?]t || PCh *-já[?]t || PW *-já[?]t
- (484) PM *kétlχa-ju[?]k, *kétlχa-jku-j^h ‘**red quebracho**’ > Mk keté-jku- || Ni tsełxa-juk, tsełxa-ku-j || PCh *kéhla-juk / *kéhla-jku- || PW *k^jét-juk^w, *k^jét-k^ju-j^h
- (485) PM *[ji]kú[?]t ‘**to answer**’ > Mk [j]<e>ku[?]t || Ni [ji]ku[?]t || PCh *[?i]kúhl-APPL || PW *[ni]k^jút
- (486) PM *(-)lká(?)t ‘**nasal mucus, cold**’ > Mk -leke(?)t || PCh *ké[?]t || PW *k^jé[?]t-tax, *k^jé[?]t-ta-s
- (487) PM *ta? ‘**this.F (within one’s hands’ reach)**’ > Ni ta? || PCh *hla?ta
- (488) PM *(-)ta?, *(-)lá-ts ‘**louse**’ > Mk -<ij>le?(-ts) || Ni -ta?(-s) || PCh *-hlá?(*-s) || PW *ta?
- (489) PM *[ji]lá[?]m ‘**to defecate**’ > Mk <i>ta[?]m || Ni [ji]lá[?]m || PCh *[?i]hlá[?]m || PW *[t]<a>lá[?]m
- (490) PM *[ji]lá[?]n ‘**to light fire**’ > Mk [ni]han-APPL || Ni [ji]lá[?]n || PCh *[?i]hlán-APPL || PW *[?i]hlán-APPL
- (491) PM *let ‘**white snail**’ > Ni let || PW *let
- (492) PM *(-)lé(?)t ‘**firewood**’ > Mk tit<u?> || PCh *-<?a>hlét ~ *-<?å>hlét || PW *-tét
- (493) PM *-li[?]k ~ *-lí[?]k, *-lí-j^h ‘**thread**’ > Ni -li[?]tʃ, -li-j<is> || PCh *-hlík, *-hlí-j^h
- (494) PM *-tu[?]k, *-tú-j^h ‘**yica bag, load**’ > Mk -tu[?]k, -tu-j || Ni -tu[?]k || PCh *-hlúk, *-hlúj-... || PW *-tuk^w, *-tú-j<is>

2.1 Plain onsets and codas

- (495) PM **túm?a* 'day' > Ni *tum?a-* || PCh **hlúma?*
- (496) PM **tútsX₂₃a*(?) (*-*kek*) 'girl' > Ni *tutsxa* (-*jetf*) || PCh **hlúsa?* (*-*kek*) || PW **tútsha*
- (497) PM *[?]*nálu(h)*, *[?]*nálu-ts* 'day, world' > Mk *nelu*(-*ts*) || Ni *nalu*(-*s*) || PCh *[?]*náhl<ikis>* ~ **náhl<ikes>* 'midday'
- (498) PM **péla(?)j*, **péłaj-its* 'rain' > Mk *piłej*(-*its*) || PCh **péhlaj?* || PW **péłaj^h*, **péłaj-is*
- (499) PM **tåł* 'to sprout' > Mk *ta*[?]*t* || Ni *tå*[?]*t* || PCh **tåł* || PW **tåł*
- (500) PM **tiłå*[?]*x* 'to carry on one's shoulders' > Mk *tiło*[?]*x* / -*iliło*[?]*x* || Ni *tiłå*[?]*x* || PCh **[?i]tihlåh* || PW **tiłåx*
- (501) PM *-*ti*[?]*t* 'to spin, to sew' > Mk *[ji]tit* || Ni *ti*[?]*t* || PCh **[j]<á>tit*
- (502) PM **[j]úłå*(?)χ 'to be tired' > Mk *-ułå*(?)χ 'breath' || Ni *[j]ułåx* || PCh **[j]úhlåh*
- (503) PM *[?]*wánXåłåχ*, *[?]*wánXåłå-ts* 'rhea' > Mk *waałax* || Ni *βánxåłåx*, *βánxåłå-s* || PCh *[?]*wáñhlåh*, *[?]*wáñhlå-s* || PW **wá*[?]*ndåχ*, **wá*[?]*ndå-s*
- (504) PM *-*włi?* ~ *-*włi?*, *-*włi-ts* 'rib' > Mk -*weli?*(-*ts*) || Ni -*βłi* / -*βłi?*(-*s*) || PCh *-*hlí*_s
- (505) PM *-*wV[?]t* ~ *-*wV[?]t* 'to climb' > Mk *we*[?]*t* || Ni *βå*[?]*t* || PCh **[?i]wúł* || PW **[t]wut* ~ **[t]wút*
- (506) PM **[t]á*[?]*t* 'to ask' > Ni *[t]a*[?]*t* || PCh **[t]áł* || PW **[t]áł*
- (507) PM **?álu*(?) 'iguana' > Ni *?ału*(-*s*) || PCh **?áhlu?*(*-*s*) || PW **?áłu*
- (508) PM *-*żet* ~ *-*żét* 'other' > Ni -*żet* || PW *-*żet* ~ *-*żét*
- (509) PM *-*żuł* 'to urinate' > Mk *uł* / -*żuł* || Ni *[j]uł* / -*żuł* || PCh **[t]úł* || PW **[t]úł*
- (510) PM *-*żułu*(?) 'urine' > Ni -*żułu* || PCh *-*żuhlu?* || PW *-*t-żułu*
- (511) PM **?uwáłe*(?)χ ~ **C'uwáłe*(?)χ 'puma' > Ni <xum>*p'uβałex* || PCh **k'uwáhlah* || PW **?owáłax* ~ **C'owáłax*

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable.

- (512) PM **[n]a*[?]*t* ~ **[n]ä*[?]*t* 'to burn' > Mk *[n]e*[?]*t-xu?* || Ni *[ji]<n>-a*[?]*t*
- (513) PM **[j]ałfti*(?)*t* 'to spin' > Mk *[j]afti*(?)*t* || Ni *[j]ałfti**t*

2 Consonants

- (514) PM *-phi^lan ‘to dream’ > PCh *[ʔi]hwíhlan || PW *[t]x^wílan
- (515) PM *-phi^lä(?)k ‘dream’ > PCh *-hwihlek || PW *-x^wíteq
- (516) PM *[ji]kåla[?]t ‘to fry’ > Mk [j]<a>kale[?]t || Ni [ji]kaklåt / -kaklå[?]t
- (517) PM *-ti[?]wte? ‘heart’ > Mk -titi? || Ni -ti[?]βte
- (518) PM *tsémlå(?)k ~ *tsám^lå(?)k ‘silk floss tree’ > PCh *sémlåk || PW *tsémlåk^w
- (519) PM *[?]wé[?]t=a? ‘one’ > Mk <e>wi[?]t-e? || Ni βé[?]t<a> / -βé[?]t<a>
- (520) PM *-a^lå(?) ‘fat’ > PCh *-ahlå? || PW *-t-’a^lå(?)
- (521) PM *[?][n]åφé(?)t ~ *[?][n]åφä(?)t ‘to be ashamed’ > PCh *[?][n]åhwé^l || PW *[?]<n>åx^wé^l
[?] ~ *[?]<n>åx^wél^h

2.1.9 PM *s

PM *s is a stable phoneme: it is preserved in all daughter languages as s. Note the irregular loss of PM *s in Wichí in (522) and in Nivaâle in (548)–(549).

- (522) PM *-áni’s ‘stinger’ > Mk 3 t-ani’s || Ni 3 t-ånis || PCh 3 *hl-ånis || PW (?) 3 *t-åni
- (523) PM *-á’s ‘son’ > Mk -a’s || Ni -å’s || PCh *-ås || PW *-t-ås
- (524) PM *-áse? ‘daughter’ > Mk -asi? || Ni -åse || PCh *-áse? || PW *-t-åse
- (525) PM *phi^s-kat ‘palm grove (*Copernicia alba*)’ > Mk fis-ket || Ni φis-tsat
- (526) PM *phi^s ‘leech’ > Ni phi^s || PW *x^wis
- (527) PM *jiju’s ~ *jijú’s ‘wax’ > Ni jiju’s || PCh *ʔijús
- (528) PM *{j/?}is{a/å/e}χ ~ *{j/?}is{å/á/é}χ ‘sand’ > Mk isaχ || PCh *ʔisáh ~ *ʔisáh
- (529) PM *-kå’s, *-kås-él ‘tail’ > Ni -kå’s, -kås-ek || PCh *-kås || PW *-k^jås, *-k^jås-el^h
- (530) PM *[ji]k’äsaχ ~ *[ji]k’äseχ ‘to divide’ > Mk [j]<a>k’esaχ || PCh *[ʔi]k’ésah || PW *{hi}k’^jésaχ
- (531) PM *-pås(-e[?]t) ‘lip’ > Mk -pas || Ni -pås<e[?]t> || PCh *-pås<at> ~ *-pås<åt> || PW *-pås<et>
- (532) PM *-pxúse?(*-j^h) ‘beard’ > Mk -<a>pxusi?(-j) || Ni -påse(-j) || PCh *-púse?(*-j^h) || PW *-påse (*-j^h)
- (533) PM *sát’^a(?)^(t)s ‘parakeet’ > Ni sat’as || PCh *sát’as || PW *sát’as
- (534) PM *-såq’ålh, *-såq’ål-its ‘soul, spirit’ > Mk (?) -si[?]nq’al(-its) || Ni -såk’åkl<it> || PCh *-såq’ålh, *-såq’ål-is

2.1 Plain onsets and codas

- (535) PM *-så[?]t 'vein' > Mk -<?a>sa[?]t || Ni -så[?]t || PCh *-såt- || PW *-såt
- (536) PM *[ji]selán 'to spank' > Mk [j]<eq>silán 'to spank' || PCh *[?i]selán 'to store'; *[?i]selán-eh 'to prepare'
- (537) PM *(-)skä[?]t 'mesh' > Ni -stfa[?]t || PW *sik^jet
- (538) PM *sténi(?) 'white quebracho' > Mk sitin-u[?]k || PCh *?sténi? || PW *?isté?nih
- (539) PM *stwú[?]n, *stwún-its 'king vulture' > Ni staþu[?]n, staþun-is || PCh *?stúu[?]n, *?stúun-is || PW *?istíwin
- (540) PM *-su(?), *-sú-l 'vagina' > Mk -su?(-l) || Ni -su?(-k) || PCh *-<í>su?(*-l) || PW *-su(?)
- (541) PM *s[?]wúla[?]χ, *s[?]wúla-ts 'anteater' > Ni s[?]þuklax, sþukla-s || PCh *s[?]þúlah, *s[?]þúla-s || PW *súlaχ
- (542) PM *[ji]s[?]wun ~ *[ji]s[?]wún 'to like, to love' > Mk [ji]su?un || Ni [ji]s[?]þun || PCh *[?i]s[?]þún
- (543) PM *tis 'to invite, to pay' > Mk tis-ix / -tis-ix || Ni tis || PCh *[?i]tís || PW *tis
- (544) PM *-t(á)ko-se?(*-j^h) 'eyebrow' > Mk -tko-si?(*-j) || PCh *-tóko-se?(*-j^h) || PW *-ták^jo-se(*-j^h)
- (545) PM *tós (*-its) 'snake' > Ni tos (-is) || PCh *tós (*-is)
- (546) PM *túsu(?) (t)s 'lesser yellowlegs' > Ni tusus || PCh *túsus || PW *túsus
- (547) PM *t'iså? ~ t'iså? (*-l) 'cream-backed woodpecker (*Campephilus leuco-pogon*)' > Mk t'isa?(-l) || Ni t'iså? (-k) || PCh *t'iså? (-l)
- (548) PM *wósitseχ 'black algarrobo fruit (*Prosopis nigra*)' > Mk ositsaχ || Ni βaitse || PW *wósotsaχ
- (549) PM *wósits-u[?]k 'black algarrobo tree (*Prosopis nigra*)' > Mk osits-u[?]k || Ni βaitse-juk || PCh *wósis-uk || PW *wósots-uk^w
- (550) PM *[?]wóså(?)q ~ *[?]wóså(?)k 'butterfly' > Ni þosåk || PCh *[?]wósåk
- (551) PM *[t]ås 'to step' > Ni [t]ås || PCh *[t]ås || PW *[t]ås-APPL
- (552) PM *?is 'good' > Ni ?is || PCh *?íz || PW *?is
- (553) PM *?åsk'åla(?)χ 'widower' > Ni ?åstf'aklax || PCh *?åsk'élah
- (554) PM *-?åsχa[?]n, *-?åsχán-its 'meat' > Mk -?ese[?]n, -?esen-its || Ni -(?a)sxa[?]n, -(?a)sxan-is || PCh *-?isá[?]n, *-?isán-is || PW *-t-?isa[?]n, *-t-?isán-is

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaclé, Chorote and Wichí), whose PM age is thus questionable.

2 Consonants

- (555) PM **[t]qási(?)t/-qasí(?)t* ‘to stand’ > PCh **[t^o]qásit* || PW **[t]qásit*; IMP **qasít*
- (556) PM *-sa²x ~ *-sä²x ‘leaf’ > Mk 3 *te-se²x* || Ni -sa²ʃ
- (557) PM **sålå(?)l*, **sålål-its* ‘middle-sized cicada’ > Mk *sala(?)l*, *salal-its* || Ni *såkł<åkl>åk(-is)*
- (558) PM **sija(?)χ*, **sijaχ-is* ‘fish (sp.)’ > Mk *sija(?)χ*, *sijaχ-its* || Ni *sijåx (-is)*
- (559) PM **siló?tåɸV* [?] ~ **siwó?tåɸe* ‘Caatinga puffbird’ > PCh **siló?tåhwV?* || PW **siwótåx^we*
- (560) PM **spú(?)p* ‘dove’ > PCh **s^opúp* || PW **spúp*
- (561) PM **stá-²q* ‘toothpick cactus (*Stetsonia coryne*)’ > PCh **?stá-k* || PW **?istá-q*
- (562) PM **stáɸe(?)* ‘Chaco chachalaca’ > PCh **?stáɸwe?* || PW **?istáx^we*
- (563) PM **(?)wå²s* ‘sky’ > Mk *wa²s* || Ni *βå²s*
- (564) PM **(?)wåse?* ‘cloud’ > Mk *wasi?* || Ni *βåse?*
- (565) PM **wósak'V(?)t* ‘red-crested cardinal’ > PCh **wós^ok'at* || PW **wósak^jit* [?] ~ **wósak^jut*
- (566) PM *-*X₁₃úsek* ~ *-*X₁₃úsäk* ‘temperance’ > PCh *-*húsek* || PW *-*húseq*
- (567) PM **?at'e(?)t(s)* ~ **?at'ä(?)t(s)* ‘aloja drink’ > PCh **?at'és* || PW **hat'és*

2.1.10 PM *x

PM *x is preserved as a velar fricative in Maká, whereas in other languages it has suffered a split or a merger. In Nivaclé, it palatalizes to ʃ before or after non-back vowels (PM *i, *e, *ä, *a > Ni i, e, a), except when preceded or followed by a back vowel, possibly with an intervening [+grave] consonant (see §7.1.1.3 for more details). In Chorote, it yields PCh *h except when it follows the vowel *u, in which case it is reflected as PCh */hw/. In Wichí, PM *x always changes to PW *h in the onset position, whereas in codas it is reflected as PW *χ (except after the vowel *u, in which case it yields PW *x^w). The following examples show the development of PM *x in the onset position, where it is reflected as Mk x, Ni x or ʃ, PCh *h, PW *h. The Chorote and Wichí reflexes in (578)–(580) may turn out to be regular if one recognizes the regularity of deletion of *x in word-initial unaccented syllables.

- (568) PM *-á(-j^h)-xi?(*-l) ‘mouth’ > Mk *-exi?(-l)* || Ni *-aʃi (-k)* || PCh (?) *-á<aj?> || PW *-t-áj-hi (*-l^h)
- (569) PM **jixå(?)* ~ **jixá(?)* ‘to be true’ > Mk *ixa* || Ni *jixå?* || PCh **?ihá<wet>*

2.1 Plain onsets and codas

- (570) PM *-k'áxe? (*-l) ‘arrow’ > Mk -qaxi? (-l) || Ni -k'áxe || PCh *-k'áhe? (*-l) || PW *-k^jáhe (*-l^h)
- (571) PM *-xa, *-xá-l ‘price’ > Ni -fa? (-k) || PW *-ha, -há-l^h
- (572) PM *(X₁₃on-)xa^χ, *(X₁₃on-)xáh-aj^h ‘night’ > Mk <na>xa^χ || Ni <xon>fa^χ, <xon>fa^χ-aj || PCh *-a>h<n>áh ~ *-a>h<n>áh || PW *-a>h<n>áh, *-a>h<n>áh-aj^h
- (573) PM *-xäjk'u(?) (*-l) ‘egg’ > Ni -sajk'u(-k) || PCh 3 *hl-éjk'u? (*-l) || PW *-l-ík^ju (*-l^h)
- (574) PM *-xäte^k, *-xäthe-^jh ‘head’ > Ni -sate^tf, -satxe-s || PCh *-hétek, *-héhte-^jh || PW *-t-éteq, *-t-éthe-^jh
- (575) PM *xélâ-ju^k ‘tree (sp.)’ > Ni feklâ-juk || PCh *hél-ek || PW *hél-ek^w
- (576) PM *-xäⁿ(e?) ‘verbal plural (suffix)’ > Ni -faⁿe? / -xaⁿe? || PCh *-heⁿ(e?) || PW *-heⁿ
- (577) PM *-xij^h ‘recipient’ > Mk -xij || Ni -sij / -xij || PW *-híh
- (578) PM *xunxátaχ ‘tusca fruit’ > Mk xunxetaχ || Ni xunfatax || PCh *?ihnatáh || PW *xnhátaχ
- (579) PM *xunxáta-(ju)^k ‘tusca tree’ > Mk xunxete-^k || Ni xunfata-juk || PCh *?ihnatá-k || PW *xnháte-q
- (580) PM *xunxáta-kat ‘tusca grove’ > Mk xunxete-ket || Ni xunfata-tfat || PCh *?ihnatá-kat
- (581) PM *xu(?)p ‘grass’ > Mk xup<el> || PCh *húp || PW *hup
- (582) PM *?áxa? ‘stork’ > Mk exet[?]maguari stock’ || PCh *?áha?jabiru’

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaclé, Chorote and Wichí), whose PM age is thus questionable.

- (583) PM *phaxi(?)j ~ *phäxi(?)j ‘green ameiva’ > Mk fexij || Ni φafij
- (584) PM *ji?ixátaχ, *ji?ixáta-ts ‘ocelot’ > Mk i?ixataχ, i?ixate-ts || Ni jixátax, jixáta-s
- (585) PM *-xéle? ‘dirt’ > Mk -xili? || Ni -sekle
- (586) PM *xoxaw-u^k ~ *xoxi-ju^k, *-ku-j ‘palo cruz (*Tabebuia nodosa*)’ > Mk xoxew-u^k, xoxew-kw-i || Ni xoxi-juk, xoxi-ku-j

The following examples show the development of PM *x in the coda position, where it is reflected as Mk x; Ni x or f; PCh *h, but *hw after *u (603); PW *χ, but *x^w after *u, as in (591), (603). Note that in (596) the suffixless form has not been preserved in Chorote and Wichí, and the velar fricative evolves there as detailed in §2.4.

2 Consonants

- (587) PM **[j]ékfa'x* ‘to bite’ > Mk *[j]ikfe'x* || PCh **[j]ókwah* || PW **[j]ókʷaχ*
- (588) PM **[ji]phá'x* ‘to cut down’ > Mk *fex-inet-kiʔax* || Ni *[ji]pha'ʃ* || PCh **[?i]hwáh-APPL* || PW **[?i]xʷáχ*
- (589) PM *-*phájí'x* ‘right’ > Mk *-feji'x* ‘left’ || Ni *-phaji'ʃ* || PCh *-*hwíjah*
- (590) PM **phä'x* ~ **phä'x* ‘field’ > Ni *phä'ʃ* || PCh **hwéh*
- (591) PM *-*phxúx*, *-*phxú-ts* ‘finger’ > Mk *-fux* || Ni *-phxux*, *-phxu-s* ‘toe’ || PCh *-*hwu-ké?* || PW *-*xʷúxʷ*, *-*xʷú-s*
- (592) PM *-*k'ínix*, *-*k'ínxi-ts* ‘younger brother’ > Mk *-k'ínix* || Ni *-tfinif* || PCh *-*k'ínih*, *-*k'ihni-s* || PW *-*k'íniχ*, *-*k'ínhis*
- (593) PM **[ji]lé'x* ‘to wash’ > Mk *[ji]lix-u?* ‘to clean’ || Ni *[ji]kłe'ʃ* || PCh **[?i]léh* || PW **[?i]léχ*
- (594) PM *(-)*lútse'x*, *(-)*lútsxe-ts* ‘bow’ > Ni *klutsef* / -*klutse'ʃ*, (-)*klutsfe-s* || PCh *(-)*lúseh* (*-es) || PW *(-)*lútseχ*, *(-)*lútse-s*
- (595) PM *-*li'x*, *-*lix-ájʰ* ‘language, word’ > Mk *-'lix<e?>* || Ni *-'kli'ʃ*, *-'kliʃ-ajʰ* || PCh *-*lih*, *-*lih-ájʰ*
- (596) PM *-*na'x* ~ *-*ná'x* / *-*nxa-* ~ *-*nxá-* ‘nose’ > Mk *-ne'x* / *-nxe-* || Ni *-na'ʃ*, *-nfa-s* || PCh *-*hná<tVwoh>* || PW *-*nh<us>*
- (597) PM *-*nji'x* ‘smell’ > Mk *-nji'x* || Ni *-ni'ʃ* || PCh *-*níh* || PW *-*níχ*
- (598) PM *(-)*náji'x*, *(-)*nájx-ajʰ* ‘path’ > Ni *náji'ʃ*, (-)*nájʃ-aj* / -*náji'ʃ* || PCh *(-)*nájih*, *(-)*náhj-ajʰ* || PW *(-)*nájiχ*, *(-)*nájh-ajʰ*
- (599) PM **táxχan* ‘to thunder’ > Mk *texen* || Ni *taʃxen* || PW **t'áχan*
- (600) PM *-*táwā'x*, *-*táwxā-ts* ‘(abdominal) cavity’ > Mk *-tawe'x*, *-tawxe-ts* || Ni *-tāβa'ʃ*, *-tāβxa-s* || PCh *-*tóweh* || PW *-*tóweχ*
- (601) PM **tiłå'x* ‘to carry on one’s shoulders’ > Mk *tiło'x* / *-tiło'x* || Ni *tiłå'x* || PCh **[?i]tíhlåh* || PW **tiłåχ*
- (602) PM **ti'x* ‘to dig’ > Mk *ti(?)x-APPL* / *-ti(?)x-APPL* || Ni *ti'ʃ* || PCh **[?i]tíh-ij?* || PW **tiχ*
- (603) PM **tux* ‘to eat.TR’ > Mk *tux* / *-lux* || Ni *tux* || PCh **[?i]túɻ* || PW **tuxʷ*
- (604) PM *-*t'ox* ~ *-*t'óx* ‘aunt’ > Ni *-t'ox* || PCh *-*<i>t'óh* || PW *-<*wi>t'óχ*
- (605) PM *-*wā'x*, *-*w(ā)x-ájʰ* ‘burrow; anus’ > Ni *-βa'ʃ*, *-βaf-ajʰ* || PCh *-*wéh* || PW *-*wéχ*, *-wh-ájʰ*
- (606) PM *-*?åx* (*-*íts*) ‘skin, bark’ > Mk *-?ax* (-*its*) || Ni *-?åx* (-*is*) || PCh *-*?åh*, *-*?åh-és* || PW *-*t-?åχ*, *-*t-?åh-és*

2.1 Plain onsets and codas

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable.

- (607) PM *-ata(?)x ~ *-ä- ‘food’ > Mk -ete(?)x || Ni -ataf
- (608) PM *kowä’x / *-kówä’x ‘hole’ > PCh *kowéh / *-kóweh || PW *k^jowex / *-k^jóweχ
- (609) PM *-sa’x ~ *-sä’x ‘leaf’ > Mk 3 te-se’x || Ni -sa’ʃ
- (610) PM *[ji]t’ex ‘to say’ > Mk [ji]t’ix || Ni [ji]t’eʃ
- (611) PM *[?]wá(?)x, *[?]wáx-aj^h ‘stagnant water’ > PCh *hl-^{<a>} [?]wáh (*-aj^h) || PW *[?]wáχ, *[?]wáh-aj^h

2.1.11 PM *χ

PM *χ occurs predominantly in the coda position, though it can resyllabify as an onset if a *χ-final stem takes a vowel-initial suffix, as in (626), (631), (632); it also occurs in consonant clusters. It is consistently preserved as a uvular fricative only in Maká, where it still contrasts with the velar fricative x. In other languages, its reflexes are Ni x, PCh *h (but *hw in onsets after a rounded vowel), and PW *h (in onsets), *χ (in codas), or *x^w (in onsets or codas after a rounded vowel). Note that PW *χ does not contrast with a velar fricative, unlike in Maká.

- (612) PM *[j]áte(?)χ ‘to be fat’ > Ni [j]átex || PCh *[j]átaħ || PW *[j]átaχ
- (613) PM *n-åχ ‘to end up’ > Mk n-aχ || Ni n-åx || PCh *^{<n>}óhw-APPL || PW *^{<n>}ox^w
- (614) PM *φátsu(?)χ, *φátshu-ts ‘centipede’ > Ni φatsux, φatsxu-s || PCh *(h)wásuh, *(h)wásu-s || PW *x^wátsux^w
- (615) PM *φínä(?)χ ‘crab’ > Ni φinax || PCh *hwíneh
- (616) PM *φkéna(?)χ ‘north wind, north’ > Ni φtfenax || PCh *hw^wkénah
- (617) PM *φtsána(?)χ ‘suncho (*Baccharis sp.*)’ > Ni φtsáanax || PCh *sánah || PW *x^witsáanax
- (618) PM *{j/ʔ}is{a/å/e}χ ~ *{j/ʔ}is{á/é}χ ‘sand’ > Mk isa’χ || PCh *ʔisáh ~ *ʔisáh
- (619) PM *[ji]ka’χ [?] ~ *[ji]kå’χ ‘to take away’ > Mk [j]<e>ka’χ || Ni [ji]tsa’x || PW *[ji]k^jåχ
- (620) PM *[ji]k’ása’χ ~ *[ji]k’áse’χ ‘to divide’ > Mk [j]<a>k’esa’χ || PCh *[ʔi]k’ésah || PW *[hi]k^jésax

2 Consonants

- (621) PM **k'ú(t)sta*([?])χ, **k'ú(t)sta-ts* ‘barn owl’ > Ni (?) *k'ustax*, *k'usta-s* ‘mockingbird’
 || PCh **k'ústah*, **k'ústa-s* || PW **k'ústaχ*
- (622) PM **(-)k'útsa*[?]χ, **(-)k'útsha-ts* ‘old’ > Mk *k'utsa*[?]χ, *k'utshe-ts* || Ni *k'utsa*[?]x,
k'utsxa-s || PCh *-*k'úsah*, *-*k'úsa-s* || PW *-*k'útsaχ*
- (623) PM *[*?a*]lóχ ‘many.sg’ > Ni <*?a*>*kllox* || PCh *[*?a*]’lóh
- (624) PM **pátse*([?])χ ‘fast, quick’ > Ni *pátsex* || PCh **(-)pásah*
- (625) PM **påttséχ* ‘jabiru’ > Ni *pátsex* || PCh **påtsáh* || PW **påtsáχ*
- (626) PM **pätóχ* ‘to be deep’ > Ni [*?a*]patox || PCh *-*pítohw*<*ij?*> || PW **pitóx*^w
- (627) PM **pitéχ*, **pité-ts* ‘long’ > Ni *pitex*, *pite-s* || PW **pítáχ*, **pité-s*
- (628) PM **s'wúla*[?]χ, **s'wúla-ts* ‘anteater’ > Ni *s'βuklax*, *sβukla-s* || PCh **s'ʔúlah*,
 **s'ʔúla-s* || PW **súlaχ*
- (629) PM *-*taχ*, *-*ta-ts* ‘pseudo-’ > Mk -*taχ*, -*te-ts* || Ni -*tax*, -*ta-s* || PCh *-*tah*,
 *-*ta-s* || PW *-*taχ*, *-*ta-s*
- (630) PM **tijáχ* ‘to shoot, to throw’ > Mk *tija*[?]χ / -*tija*[?]χ || Ni *tijá*[?]x || PCh *[*?i*]tíjáh
 || PW **tijáχ*
- (631) PM **tóχ-APPL*, **tó-ts-APPL* ‘far’ > Mk -*toχ-ij*, *to-ts-ij* || Ni *tox-APPL* || PCh **tóh(w)-APPL*,
 **tó-ts-APPL* || PW **tóx*^w-*ejh*
- (632) PM **tséχ-APPL* ‘full (river)’ > Ni *tsex-APPL* || PCh *-*sáh* || PW **tsáχ-APPL*
- (633) PM **tsópha-tax* ‘fruit of a shrub (*Lycium americanum*)’ > Mk *tsofe-tax* ||
 Ni *tsof-tax*
- (634) PM *[*j*]ú[?]lå([?])χ ‘to be tired’ > Mk -*ułta*([?])χ ‘breath’ || Ni [*j*]ułåx || PCh *[*j*]úhlåh
- (635) PM **wV[?]χ*, **wV-ts* ‘large, fat’ > Ni -*βå*[?]x || PCh **wúh*, **wú-s* || PW **wúx*^w,
 **wú-s*
- (636) PM **wátå*([?])χ ‘palo flojo fruit’ > Ni *βåtåx* || PW **wátrox*^w
- (637) PM **wósitseχ* ‘black algarrobo fruit (*Prosopis nigra*)’ > Mk *ositsaχ* || Ni *βaitsex*
 || PW **wósotsaχ*
- (638) PM **wánXåłåχ*, **wánXåłå-ts* ‘rhea’ > Mk *waalax* || Ni *βánxåłax*, *βánxåłå-s*
 || PCh **wánhlåh*, **wánhlå-s* || PW **wá'nlåχ*, **wá'nlå-s*
- (639) PM *(*X₁₃on-*)*xa*[?]χ, *(*X₁₃on-*)*xáh-ajh* ‘night’ > Mk <*na*>*xa*[?]χ || Ni <*xon*>*fa*[?]x,
 <*xon*>*fa*[?]x-*aj* || PCh *<*?a*>*h*<*n*>*áh* ~ *<*?a*>*h*<*n*>*áh* || PW *<*hon*>*aχ*, *<*hon*>*áh-ajh*
- (640) PM **xunxátaχ* ‘tusca fruit’ > Mk *xunxetaχ* || Ni *xunxataχ* || PCh **?ihnátah*
 || PW **xhátaχ*

2.1 Plain onsets and codas

- (641) PM *(ʔa)X₁₃útsa(?)χ, *(ʔa)X₁₃útsha-ts ‘crested caracara’ > Ni xutsax, xutsxa-s || PCh *(ʔa)húsah, *(ʔa)húsa-s || PW *ʔahútsaχ, *ʔahútsha-s
- (642) PM *ʔáp'a(?)χ ~ *ʔáɸ'a(?)χ ‘jararaca’ > Ni ʔap'ax || PCh *ʔáp'ah
- (643) PM *ʔatu'χ ~ *ʔatú'χ ‘snake (sp.)’ > Ni ʔatu'x || PCh *ʔatúh
- (644) PM *ʔáwu(C)tsex ‘peccary’ > Ni ʔaβuktsex ~ ʔaβoktsex || PCh *ʔáwusah || PW *ʔáwutsaχ
- (645) PM *ʔaX₁₃áje(?)χ ‘mistol fruit’ > Ni ʔaxájex || PCh *ʔahájah || PW *ʔahájaχ
- (646) PM *ʔá'jteχ, *ʔá'jte-ts ‘to hurt’ > Mk aʔtax, aʔti-ts || Ni ʔá'jtex ~ ʔá'βtex || PCh *ʔájʔtah-APPL, *-ʔájʔte-s-APPL || PW *ʔájtaχ, *ʔájte-s
- (647) PM *ʔá'lá-taχ, *ʔá'lá-ta-s ‘Argentine boa’ > Ni ʔá'klá-tax, ʔá'klá-ta-s || PCh *ʔá'lá<ta> ~ *ʔá'lá<ta>-s ~ *ʔá'lá<ta>-s || PW (?) *lá<ta>-s
- (648) PM *ʔá'l(V)tse(?)χ, *ʔá'l(V)tse-ts ‘cháguar (*Deinacanthus urbanianum*)’ > Ni ʔáktsex, ʔáktse-s || PCh *ʔá'l²sah, *ʔá'l²se-s || PW *ʔáletsaχ
- (649) PM *ʔánhajex ‘wild bean (*Capparis retusa*)’ > Mk anhejaχ || Ni ʔánxajex || PCh *ʔóhnajah || PW *ʔánhjaχ
- (650) PM *ʔásk'ála(?)χ ‘widower’ > Ni ʔástf'aklax || PCh *ʔásk'élah
- (651) PM *ʔítá(?)χ, *ʔítá-ts ‘fire’ > Ni ʔítax, ʔítá-s || PCh *ʔítáh, *ʔítá-s || PW *ʔítáχ, *ʔítá-s
- (652) PM *ʔóna(?)χ ‘my brother’ > Ni ʔonax || PCh *ʔónah
- (653) PM *ʔuwáṭe(?)χ ~ *C'uwáṭe(?)χ ‘puma’ > Ni <xum>p'uβatex || PCh *k'uwáhlah || PW *ʔowáṭax ~ *C'owáṭaχ

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable.

- (654) PM *jiʔixáṭaχ, *jiʔixáṭa-ts ‘ocelot’ > Mk iʔixataχ, iʔixate-ts || Ni jixáṭax, jixáṭa-s
- (655) PM *[wa]kuma'χ ‘to run’ > Mk [we]kuma'χ || Ni [βa]kuma'x
- (656) PM *sijá(?)χ, *sijáχ-is ‘fish (sp.)’ > Mk sija(?)χ, sijáχ-its || Ni sijáx (-is)
- (657) PM *(-)tútse(?)χ ‘smoke’ > PCh *(-)túsah || PW *(-)tútsaχ
- (658) PM *tux-APPL ‘to burn (vi.)’ > Mk tux-xem, tux-e? || Ni tux-a'm, tux-ej
- (659) PM *(?)wána'χ, *(?)wánha-ts ‘piranha’ > Mk wana'χ, wanhe-ts || Ni βánanax, βánnxa-s

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- (660) PM **ʔåthajexχ* ~ **ʔåthäjexχ* ‘molle fruit’ > Mk *athejax* || Ni *ʔåtxajex*

As we will see in §5.2.2, in some cases stem-final PM *χ may be deleted or alternate with PM *h.

2.1.12 PM *h

PM *h does not occur very frequently in onsets, and it contrasts only marginally with PM *χ in that position (recall that PM *χ typically occurs in codas except at root–suffix boundaries). In onsets, it is reflected as h in all daughter languages except Nivaclé, where x is found (Nivaclé has no h in its inventory). Word-initially it is apparently reflected as zero in Chorote and Wichí (662), but in the distal [–visible] [+firsthand] demonstrative it is exceptionally preserved in Chorote as PCh *h (661).

- (661) PM *h- ‘that (outside the speaker’s sight)’ > Mk *h-* || Ni *xa?* || PCh **há?* ~ **há?*
- (662) PM **ha-* ‘1SG.ACT’ > Mk *he-* / *ha-* / *ho-* || Ni *xa-* || PCh **?a-* || PW **?a-*
- (663) PM *(-)*háqke?* ‘well’ > Mk *haqqi?* ‘river’ || Ni *-xáke?* ‘dry well’ || PCh *-*háåke?* ‘artificial well’
- (664) PM **tsåhåq* (*-its) ‘chajá bird’ > Mk *tsahaq* (-its) || PCh **såhåk*, **såhåq-es* ~ **såhåq-is* || PW **tsåhåq*

The very same correspondence is observed in an etymology with a limited distribution (Maká and Nivaclé), whose PM age is thus questionable.

- (665) PM **him* (*-its) ‘coati’ > Mk *him* (-its) || Ni *xim* (-is)

By contrast, word-finally in codas PM *h clearly contrasts with PM *χ. It is lost altogether in Maká and Nivaclé in that position, but is usually preserved as *h in Proto-Chorote and Proto-Wichí (in the only example of a monosyllabic root, given in (670), it is reflected as a so-called **unstable** *h* in Chorote). Note that all contemporary Chorote and Wichí dialects except ’Weenhayek have lost word-final *h in some or all environments, but *h is clearly reconstructible to Proto-Chorote and Proto-Wichí based on evidence internal to Chorote and Wichí, respectively.

- (666) PM *-*phah*, *-*pha-ts* ‘companion’ > Mk *-fe* (-ts) || Ni *-pha* (-s) || PCh *-*hwah*, *-*hwa-s* || PW *-*xʷah*, *-*xʷa-s*

2.1 Plain onsets and codas

- (667) PM *-kíphah, *kípha-ts ‘neighbor’ > Mk -kife(-ts) || Ni -tʃípha(-s) || PCh *-kíhwah, *-kíhwa-s
- (668) PM *-k’älphah ‘spouse’ > Ni -tʃ’akpha || PCh *-k’élhwah || PW *-k^jéx^wah
- (669) PM *láp’ih ~ *láɸ’ih ‘snail’ > Ni kláp’i || PCh *láp’ih
- (670) PM *máh ‘go!’ > Mk ma || Ni må || PCh *máh || PW *máh
- (671) PM *núʔuh, *núʔu-ts ‘dog’ > Ni núʔu (-s) || PCh *núʔuh, *núʔu-s
- (672) PM *pútah ‘tapeti rabbit’ > Ni puta || PCh *púteh
- (673) PM *X₂₃wé’lah, *X₂₃wé’la-ts ‘moon’ > Ni xiβe’la (-s) || PCh *wé’lah, *wé’la-s || PW *wé’lah
- (674) PM *ʔánitih ‘wasp (sp.)’ > Ni ʔániti || PCh *ʔánitih
- (675) PM *ʔúlʔåh, *ʔúlʔå-ts ‘dove’ > Ni ʔułłʔå (-s) || PCh *ʔúlʔåh, *ʔúlʔå-s
- (676) PM *ʔVláʔah, *ʔVláʔa-ts ‘lesser grison’ > Mk ile || Ni ʔakláʔa (-s) || PCh *ʔeláʔah, *ʔeláʔa-s ~ *ʔaláʔah, *ʔaláʔa-s || PW *ʔiláʔah

The very same correspondence is observed in etymologies with a limited distribution (Chorote and Wichí), whose PM age is thus questionable.

- (677) PM *ká’lah, *ká’la-ts ‘lizard’ > PCh *ká’lah, *ká’la-s || PW *k^já’lah, *k^já’la-s
- (678) PM *pá’jih ‘frog (*Leptodactylus* sp.)’ > PCh *pá’jih || PW *pá’jih
- (679) PM *Xmáwoh ‘fox’ > PCh *máwo-tah || PW *máwoh

An additional quirk comes from the fact that in Wichí word-final *h is lost if the onset of the syllable in question is a glottalized stop or affricate (as well as in one unclear exception shown in (683), where the loss of *h may have something to do with the sequence *-m?-). In this case only Chorote, of all Mataguayan languages, preserves any trace of PM *h.

- (680) PM *k’ék’eh ‘monk parakeet’ > Ni tʃ’etʃ’e || PCh *kék’eh || PW *k^jék’j’e
- (681) PM *ts’áts’ih, *ts’áts’i-l ‘rufous hornero’ > Mk ts’its’i (-l) || Ni ts’ats’i (-k) || PCh *sát’ih || PW *táts’i
- (682) PM *wóp’ih ~ *wóɸ’ih ~ *móp’ih ~ *móɸ’ih ‘white egret’ > PCh *wóp’ih || PW *móp’i
- (683) PM *ʔámʔåh, *ʔámʔå-ts ‘rat’ > Ni ʔamʔå (-s) || PCh *ʔámʔah ~ *ʔámʔåh, *ʔámʔa-s ~ *ʔámʔå-s || PW *ʔáma

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2.1.13 PM *w

PM *w is preserved as a distinct segment in all Mataguayan languages. In Ni-vaâle, its reflex is often articulated as bilabial ([β]), but [w] is also a possible realization (see §7.1.1.1 for details); in this book we consistently represent the phoneme in question as Ni β. The distribution of PM *w is defective: it is the only consonant that is hardly ever reconstructed in the coda position in Proto-Mataguayan.⁴ Some examples follow; note the irregular reflexes in Nivaâle (in dialects other than Chishamnee Lhavos) and Wichí in (696) as well as the irregular loss of PM *w in Maká in (701)–(702).

- (684) PM *-áwå(?) ‘flower’ > Ni -aβå || PCh 3 *hl-áwo? || PW *-t-áwo
- (685) PM *néwo(?)k ‘wild manioc’ > Ni noβok || PCh (?) *n^owák || PW *néwok^w
- (686) PM *-tåwä[’]x, *-tåwxä-ts ‘(abdominal) cavity’ > Mk -tawe[’]x, -tawxe-ts || Ni -tåβa[’]s, -tåβxa-s || PCh *-tóweh || PW *-tóweχ
- (687) PM *téwo(?)k ~ *téwå(?)k ‘river’ > Ni toβok ~ toβåk || PCh *téwok ~ *téwåk || PW *téwok^w
- (688) PM *-uwa ‘termite house’ > Ni -uβa || PW *-t->uwa
- (689) PM *-wa? ‘plural (demonstratives)’ > Mk -we? || Ni -βa? || PCh *-wá?
- (690) PM *wák’-a-ju[’]k, *wák’-a-jku-j^h ‘guayacán’ > Mk wek’-e-ju[’]k, wek’-e-jkw-i || PCh *wák’-a-juk, *wák’-a-jku-j^h || PW *wák^j-a-juk^w, *wák^j-a-k^ju-j^h
- (691) PM *wátå(?)χ ‘palo flojo fruit’ > Ni βåtåx || PW *wátox^w
- (692) PM *wáth(å-j)u[’]k ‘palo flojo tree’ > Ni βåtxå-juk || PCh *wáht-<uk>
- (693) PM *-wå[’]k ‘bad mood’ > Mk -wak || Ni -βå[’]k || PCh *-wák || PW *-wåk^w
- (694) PM *wák ‘all’ > Mk we:k || Ni -βat[’]s || PCh *-wek || PW *-weq
- (695) PM *-wå[’]x, *-w(ä)x-áj^h ‘burrow; anus’ > Ni -βa[’]s, -βaf-aj^h || PCh *-wéh || PW *-wéχ, -wh-áj^h
- (696) PM *wije? ‘caraguatá (*Bromelia serra*)’ > Ni βije? ~ jije? || PCh *wijé? || PW *-wuje(?)
- (697) PM *[ji]wó ‘to do’ > Mk wo?-oj || Ni βo?-oj > || PCh *[?i]wó / *-wó || PW *[?i]wó-
- (698) PM *-wó (*-ts) ‘worm’ > Ni -βo?(-s) || PCh *-wó?(*-s) || PW *-wó (*-s)

⁴The possible exceptions to this generalization include PM *[t]k’áw-APPL ‘to hold in one’s arms, to hug’ and *-ä[’]w-APPL ‘to be’, but these are typically followed by applicative suffixes. Word-internally, clusters such as *wts’ or *wt are securely reconstructed in Proto-Mataguayan, but it is not clear whether they were necessarily heterosyllabic.

2.1 Plain onsets and codas

- (699) PM **[ji]wo*[?]*m* ‘**to throw**’ > Mk *[i]wu*[?]*m* || PCh **[?i]wóm-APPL* || PW **[?i]wo*[?]*m*
- (700) PM **wósak*’*V*([?])*t* ‘**red-crested cardinal**’ > PCh **wós*[?]*k’at* || PW **wósak*[?]*it*
 \sim **wósak*[?]*ut*
- (701) PM **wósitseχ* ‘**black algarrobo fruit (*Prosopis nigra*)**’ > Mk *ositsaχ* || Ni *βaitseχ*
 || PW **wósotsaχ*
- (702) PM **wósits-u*[?]*k* ‘**black algarrobo tree (*Prosopis nigra*)**’ > Mk *osits-u*[?]*k* ||
 Ni *βaitse-juk* || PCh **wósis-uk* || PW **wósots-uk*^w
- (703) PM *-*wó?*([?]-*ts*) ‘**expert**’ > Mk *-wo?*([?]-*ts*) || Ni *-βo?*([?]-*s*) || PCh *-*wó?*([?]-*s*) ||
 PW *-*wó?*([?]-*s*)
- (704) PM **wVχ*, **wV-ts* ‘**large, fat**’ > Ni *-βå’x* || PCh **wúh*, **wú-s* || PW **wúx*^w,
 **wú-s*
- (705) PM **xnáwá’p* ‘**spring**’ > Mk *xinawa’p* || Ni *snaβåp* ~ *snaβåp* || PCh **náwop*
 || PW **xnáwop*
- (706) PM **X₂₃wé’lah*, **X₂₃wé’la-ts* ‘**moon**’ > Ni *xiβe’la*([?]-*s*) || PCh **wé’lah*, **wé’la-s*
 || PW **xwé’lah*
- (707) PM **?áwu(C)tseχ* ‘**peccary**’ > Ni *?aβuktsex* ~ *?aβoktsex* || PCh **?áwusah* ||
 PW **?áwutsaχ*
- (708) PM **?uwále*([?])*χ* ~ **C’uwále*([?])*χ* ‘**puma**’ > Ni <*xum>p’uβatex* || PCh **k’uwáhlah*
 || PW **?owátlax* ~ **C’owátlax*

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaâle, Chorote and Wichí), whose PM age is thus questionable.

- (709) PM **kowä’x* / *-*kówä’x* ‘**hole**’ > PCh **kowéh* / *-*kóweh* || PW **kjowex* /
 *-*kjóweχ*
- (710) PM *(-)*nawan* ~ *-ä- ‘**hook**’ > Mk *newen* || Ni *-naβan*
- (711) PM **qatsíwo*([?]) ‘**limpkin**’ > PCh **qasiwo* <*oh*> || PW **qatsíwo*
- (712) PM **wapen* ~ **wäpen* ‘**to be ashamed**’ > Mk *wepin* || Ni *βapen*
- (713) PM **waɸ* ~ **wäɸ* ‘**to be tired, to die**’ > Mk *[ji]wef* || Ni *βaɸ*
- (714) PM *([?])*wawo(h)*([?]-*l*) ‘**maned wolf**’ > Mk *wowo*([?]-*l*) || Ni *βaɸo*([?]-*k*)
- (715) PM *([?])*wánaχ*, *([?])*wánha-ts* ‘**piranha**’ > Mk *wanaχ*, *wanhe-ts* || Ni *βåanax*,
βånxas
- (716) PM *([?])*wå’s* ‘**sky**’ > Mk *wa’s* || Ni *βå’s*

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- (717) PM *(?)*wåse?* ‘cloud’ > Mk *wasi?* || Ni *βåse?*
- (718) PM **wóna?*(?) ‘bala wasp honey; hat’ > PCh **wóna?* || PW **wó’nah*
- (719) PM *[*ji*]*wún* ‘to burn (vt.)’ > PCh *[*ji*]*wún* || PW *[*ji*]*wún*
- (720) PM *(?)*wut* ‘a bushy leguminous plant’ > Mk *wut* || Ni *βut*
- (721) PM **Xmáwoh* ‘fox’ > PCh **máwo-tah* || PW **máwoh*

2.1.14 PM **l*

PM **l* is preserved as a distinct segment in all Mataguayan languages except Nivaclé, where it yields *k̪l* (§7.1.1.2) or – in the coda position – *k* (§7.1.1.4). In Wichí, it changes to PW **l^h* word-finally (§9.1.1.13). Some examples follow; note the irregular glottalized reflexes in Chorote in (744) and (747).

- (722) PM *-á*pil* ‘to return thither’ > Mk [w]apil || Ni [β]apek || PCh *[j]á*pil* || PW *[j]á*pil^h*
- (723) PM *-(é)*l* ‘**PL**’ > Mk -*l* || Ni -(é)*k* || PCh *-(é)*l* || PW *-(é)*l^h*
- (724) PM *-é*le*(?) ~ *-á*le*(?) (*-j^h) ‘inhabitant, inner’ > PCh *-é*le*?(*-j^h)‘inhabitant, intestine’ || PW *-t-é*le* (*-j^h)
- (725) PM *[*ji*]φá*l* ‘to tell’ > Mk *n(i)-fel-im* || Ni *n(i)-fak* / *n(i)-fakl̪-* || PCh *[?i]hwél || PW *[?i]xʷé*l^h* / *[?i]xʷé*l-*
- (726) PM *-φá*lits* ‘daughter-in-law, sister-in-law’ > Mk -*felits* || Ni -*fakl̪is* <?a> ‘sister-in-law’ || PCh *-hwélis‘daughter-in-law’
- (727) PM *-φá*l?u*?(*-ts) ‘son-in-law, brother-in-law’ > Mk -*felu?*(-ts) || Ni -*fakl̪?u*(-s)‘brother’ || PCh *-hwílu? ~ -hwélu?(*-s)‘son-in-law’
- (728) PM *-kilá?(*-wot) ‘elder brother’ > Ni -*tsekla?* / *tsikla*-(-βot) || PCh *-kilá?(*-wot) || PW *-k^jíla
- (729) PM **kula*’j ~ **kulá*’j ‘sun’ > Ni <xum>*kuklā*’j || PCh **kuláj?*
- (730) PM *[*ji*]lå’j ‘to withstand’ > Ni [*ji*]klå’j || PCh *[*ji*]láj-eh || PW *[*ji*]låj
- (731) PM *[*ji*]láñ ‘to kill’ > Mk [*ji*]lan || Ni [*ji*]klåñ || PCh *[?i]láñ || PW *[?i]láñ
- (732) PM *lá̄p’ih ~ *lá̄φ’ih ‘snail’ > Ni klåp’i || PCh *lá̄p’ih
- (733) PM *[*ji*]låt ~ *[*ji*]låt ? ~ *[*ji*]let ~ *[*ji*]lét ‘to flee’ > Mk <i>lat ? <i>lit || Ni [*ji*]klåt || PCh *-<[j]í>lt<an> ~ [?i]<’jí>lt<an> || PW *[?i]lét<han>
- (734) PM *-lå?, *-lá-j^h ‘domestic animal’ > Ni -klå? (-j) || PCh *-lá<hwah> || PW *-lå?, *-lá-j^h

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- (735) PM **lātseni*(?) 'chañar fruit' > PCh **lētseni*? || PW **lētse*?*nih*
- (736) PM **lātsen-u*?*k* 'chañar plant' > Mk <*xu*>*letsin-u*?*k* || PCh **lēseni*-*k* || PW **lētsen-uk*^w
- (737) PM *[*ji*]selān 'to spank' > Mk [*j*]<*eq*>*silan*'to spank' || PCh *[*?i*]selān'to store'; *[*?i*]selān-*eh*'to prepare'
- (738) PM *-*lēts* 'offspring' > Mk -*lits* || Ni -*kles* || PCh *-*lēs* || PW *-*lēs*
- (739) PM *[*ji*]lē?x 'to wash' > Mk [*ji*]*lix-u*?*x*'to clean' || Ni [*ji*]*kle*?*f* || PCh *[*?i*]lēh || PW *[*?i*]lēχ
- (740) PM **lim* ~ **lím* 'white' > Ni *klim* || PCh **lím*-
- (741) PM *(-)lo(?) ~ *(-)ló(?) 'ashes' > Mk *lo*? || PCh *-*ló*?
- (742) PM **lo*?*p* ~ **ló*?*p*, **lop-íts* ~ **lóp-its* 'winter' > Mk *lo*?*p*, *lop-its* || Ni *klo*?*p*, *klop-is* || PCh **lóp* || PW **lop* ~ **lóp*
- (743) PM **lóta-(ju)*?*k* 'tree for making bows' > Ni *klotat*?*f* || PCh **lóta-juk* || PW **lóte*?*q*
- (744) PM *[*?a*]lōχ, *[*?a*]ló-*ts* 'many' > Mk <*o*>*lo*?*ts* || Ni <*?a*>*klox* || PCh *[*?a*]lóh || PW **?a*ló-*s*
- (745) PM *(-)lútse?x, *(-)lútsxe-*ts* 'bow' > Ni *klutse*?/ -*klutse*?*f*, (-)*klutsse*-*s* || PCh *(-)lúseh (*-es) || PW *(-)lútseχ, *(-)lútse-*s*
- (746) PM *[*t*]píl 'to return hither' > Mk [*t(e)*]*pil* || Ni [*t(a)*]*pik* ~ [*t(a)*]*pek* || PW *[*t*]píl^h
- (747) PM *-*qalá*? (*-*j^h*) 'leg' > Ni -*kaklá*? (-*j*) || PCh *-*qa*?*lá*? ~ *-*qå*?*lá*? (*-*j^h*) || PW *-*qálá* (*-*j^h*)
- (748) PM **sláqha*(?)*j*, **sláqhaj-its* 'wild cat' > Ni *sklákxaj* ~ *sklákxaj*(-*is*) || PCh **s*?*låhqaj*? ~ **s*?*låhqåj*? (*-*is*) || PW **silåqhåj*
- (749) PM **s*?*wúla*?χ, **s*?*wúla*-*ts* 'anteater' > Ni *s*?*βuklax*, *sβuklā-s* || PCh **s*?*úlah*, **s*?*úla-s* || PW **súla*χ
- (750) PM *[*ni*]-*táφä*(?)*l-APPL* 'to know, to be acquainted' > Ni [*ni*]*tåφakl-APPL* || PCh *[*?i*]*tåhwel-APPL* || PW *-*tåx^wel-APPL*/ *-*tåx^wnh-APPL*
- (751) PM **tlú*?*k* 'blind' > Ni *taklú*?*k* || PCh **t^oluk* || PW **tiluk*^w
- (752) PM *-*t'ile*? (*-*j^h*) 'rheum' > Mk -*t'ili*?(-*j*) || Ni -*t'iklē*(-*j*) || PCh *-*t'ile*-
- (753) PM **wåle*?*k* 'to walk' > Mk -<*i*>*welki*-*met*'to limp' || Ni *βaklē*?*f* || PCh *[*?i*]*wélek* || PW **weleq*
- (754) PM **xélå-ju*?*k* 'tree (sp.)' > Ni *seklå-juk* || PCh **hél-ek* || PW **hél-ek*^w
- (755) PM *(-)X₂₃*pél* 'shadow' > Ni *xpek* || PCh *-*pél* || PW **hpél*^h / *-*hpel*^h

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- (756) PM **?áł(V)tse(?)χ*, **?áł(V)tse-ts* ‘cháguar (*Deinacanthus urbanianum*)’ > Ni *?áktsex, ?áktse-s* || PCh **?áł'sah*, **?áł'se-s* || PW **?áletsax*
- (757) PM **?ásk'ála(?)χ* ‘widower’ > Ni *?ástf'áklax* || PCh **?ásk'élah*
- (758) PM **?éle(?)* ‘parrot’ > Ni *?eklē* || PCh **?éle?* || PW **?éle*
- (759) PM **?úl?åh, ?úl?å-ts* ‘dove’ > Ni *?ukl?å(-s)* || PCh **?úl?åh, ?úl?å-s*
- (760) PM **?Vlá?ah, ?Vlá?a-ts* ‘lesser grison’ > Mk *ile* || Ni *?aklá?a(-s)* || PCh **?elá?ah, ?elá?a-s* ~ **?alá?ah, ?alá?a-s* || PW **?ilá?ah*

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable.

- (761) PM *-á'l ‘light, brightness’ > PCh 3 **hl-á'l* || PW *-*tl-álh*
- (762) PM **phiłā(?)X₁₂* ‘pocote (*Solanum sp.*)’ > PCh **hwílåh* || PW **xʷílåχ*
- (763) PM **[ji]kála'ł* ‘to fry’ > Mk *[j]<a>kale'ł* || Ni *[ji]kaklåłt / -kaklå'ł*
- (764) PM **kó'l* ‘locust’ > PCh **kó'l* || PW **kjólh*
- (765) PM *-*k'åló(?)* (*-ts) ‘cheek’ > PCh *-*k'åló(?)* (*-s) || PW *-*kj'álo* (*-s)
- (766) PM **lama(h) ~ läma(h)* (*-m) ‘to be smooth’ > Mk *le:me, leme-m* || Ni *kłama<m>*
- (767) PM **[ji]lá(?)t* ‘to feel’ > PCh **[?i]låt-ej^h* || PW **[?i]låt*
- (768) PM **låttsiki-ju'k* ‘willow’ > Mk *lattsiki-ju'k* || Ni *kłåtsiki-juk*
- (769) PM **ma'la'l ~ -ä-* ‘agile’ > Mk *me'le'l* ‘to move’ || Ni *maklå'k*
- (770) PM **púle(?)* (*-ts) ‘sky, cloud’ > PCh **púle?* (*-s) || PW **púle* (*-s ~ *-*łajis*)
- (771) PM *-*qátsile(?)* (*-j^h) ‘guts’ > PCh *-*qásile-j^h* || PW *-*qásle-j^h*
- (772) PM **såłå(?)l, såłål-its* ‘middle-sized cicada’ > Mk *sala(?)l, salal-its* || Ni *såłł<åkl>åk(-is)*
- (773) PM *-*wóle(?)* ‘leaf, hair, feather’ > PCh *-*wóle?* || PW *-*wole*
- (774) PM *-*xéle?* ‘dirt’ > Mk *-xili?* || Ni *-sekłē*
- (775) PM **?åfte'l* ‘orphan’ > Mk *afti'l* || Ni *?åfte'k*
- (776) PM *-*?å(?)l, 3 *'[j]i(?)l* ‘to die’ > PCh **[j]å(?)l* || PW **[j]il^h*
- (777) PM **[j]óp'ale(?)* ‘to hiccup’ > Ni *[j]op'aklē / -op'aklē* ‘to choke’ || PCh **[j]óp'ale?* || PW **[j]óp'le*
- (778) PM *-*?ó'thale(?) ~ -?ó'thåle(?)* ‘heart’ > PCh *-*?óhtale?* ~ *-*?óhtåle?* || PW *-*t-ótle*

2.1 Plain onsets and codas

2.1.15 PM *j

PM *j is a stable phoneme: it is preserved in all daughter languages as j (except in the sequence PM *ji, on which see below). In (783) and (801), Wichí shows an irregular reflex (PW *j^h) word-finally, possibly due to analogy with the plural suffix PW *-(a)j^h. Also note the irregular glottalized reflex in Chorote in (787).

- (779) PM *-aje'k ~ *-ajé'k 'honey comb' > Ni -aje'tf || PCh *-q-ájek
- (780) PM *n-ájin 'to go first' > Mk [wa]<th>ajin || Ni n-ájin || PCh *[ʔi]<n>ájin
- (781) PM *-áj'j, *-áj-is 'yica bag' > Ni -a'j, -aj-is || PCh *-éj?(*-is) || PW *-t-éj(*-is)
- (782) PM *-éj(*-its) 'name' > Mk -ij(-its) || Ni -ej(-is) || PCh *-éj?(*-is) || PW *-t-éj(*-is)
- (783) PM *φaʔáj 'algarrobo fruit (*Prosopis alba*)' > Ni φaʔaj || PCh *hwaʔáj? || PW *xʷaʔáj^h
- (784) PM *-φáji'x 'right' > Mk -feji'x'left' || Ni -φaji'ʃ || PCh *-hwíjah
- (785) PM *[ji]φi'j ~ *[ji]φi'j 'not to be afraid' > Ni [ji]φi'j || PCh *[ʔi]hwíj? || PW *[ʔi]'xʷíj-eh
- (786) PM *-játl 'breath' > Ni -jatl || PCh *-játl || PW *-játl
- (787) PM *[ji]já? 'to drink' > Mk <i>ja? || Ni [ji]já? || PCh *[ʔi]já? || PW *[ʔi]já?
- (788) PM *jijá'ts 'dew' > Mk ije'ts || Ni jija's || PCh *ʔijés-tah || PW *ʔijás
- (789) PM *jiju's ~ *jijú's 'wax' > Ni jiju's || PCh *ʔijús
- (790) PM *-(j)uk, *-(j)ku-j^h 'tree (suffix)' > Mk -(j)uk, -(j)kw-i || Ni -(j)uk, -ku-j || PCh *-(j)uk, *-(j)ku-j^h || PW *-(j)uk^w, *-k^ju-j^h
- (791) PM *-ko(?)j (*-áj^h) 'hand, arm' > Mk -koj (-ej) || PCh *-kój?, *-koj-áj^h
- (792) PM *kula'j ~ *kulá'j 'sun' > Ni <xum>kuklá'j || PCh *kuláj?
- (793) PM *k'uj ~ *k'új 'cold' > Mk k'wi / k'uj- || Ni k'uj || PCh *k'új?
- (794) PM *k'ú(t)sta(?)χ, *k'ú(t)sta-ts 'barn owl' > Ni (?) k'ustax, k'usta-s 'mockingbird' || PCh *k'ústah, *k'ústa-s || PW *k^jústaχ
- (795) PM *lājX₂₃VnåX₁₃å 'Azara's night monkey' > Ni klajxenåxå || PCh *lémjanåhå-ke?
- (796) PM *mijó(*-l) 'savannah hawk' > Mk mijo(-l) || Ni mijo(-k) || PCh *mijó?(*-l) || PW *mijóh
- (797) PM *(-)níják, *(-)níjhå-j^h 'rope, cord' > Mk (-)nijak, (-)níjha-j || Ni -níják, -níjxå-j || PCh *níják, *níjhå-j^h || PW *níják^w, *níjhå-j^h
- (798) PM *(-)náji'x, *(-)nájx-aj^h 'path' > Ni náji'ʃ, (-)nájf-aj / -náji'ʃ || PCh *(-)nájih, *(-)náhj-aj^h || PW *(-)nájiχ, *(-)nájh-aj^h

2 *Consonants*

- (799) PM **[t]páj* ‘to be bitter’ > Ni *[t'a]páj* || PCh **páhj-i?* || PW **[t]páj*
- (800) PM **[ji]péj-a?* ‘to hear’ > Mk *[ji]pi'j-e?* || Ni *[ji]pe'j-a* || PCh **[?i]pé'j-a?*
- (801) PM **péla*(*)j*, **péta* *-its* ‘rain’ > Mk *pitaj* (*-its*) || PCh **péhlaj?* || PW **péta*^h, **péta*^h *-is*
- (802) PM *-*qéj*(*-its*) ‘costume’ > Ni *-kej* (*-is*) || PCh *-*qéj?*(*-is*) || PW *-*qéj*(*-is*)
- (803) PM **sláqha*(*)j*, **sláqhaj* *-its* ‘wild cat’ > Ni *sklákxaj* ~ *sklákxaj* (*-is*) || PCh **s'lähqa*j? ~ **s'lähqa*j? (*-is*) || PW **siláqhaj*
- (804) PM **tijåχ* ‘to shoot, to throw’ > Mk *tijaχ* / *-tijaχ* || Ni *tijåx* || PCh **[?i]tíjåh* || PW **tijåχ*
- (805) PM *-*t'ij* ~ *-*t'íj* ‘to move’ > Ni *[βa]t'ij* || PCh **[?i]t'ij?*
- (806) PM **wije?* ‘caraguatá (*Bromelia serra*)’ > Ni *βije?* ~ *jije?* || PCh **wijé?* || PW **wuje?*
- (807) PM **xéjå?*(*-l*) ‘bat’ > Mk *xaja?*(*-l*) || Ni *sejå* (*-k*) || PCh **<?a>héja?*(*-l*)
- (808) PM **qaqåje'k* ‘wild honey’ > Ni *qaqåjetʃ* || PW **qaqåjeq*
- (809) PM **2aX₁₃áje*(*)χ* ‘mistol fruit’ > Ni *2axåjex* || PCh **2ahájah* || PW **2ahájaχ*
- (810) PM **2aX₁₃áj-uk*, **2aX₁₃áj-ku-j^h* ‘mistol tree’ > Ni *2axåj-uk*, *2axåj-ku-j* || PCh **2aháj-uk*, **2aháj-ku-j^h* || PW **2aháj-uk^w*
- (811) PM **2ánhajeχ* ‘wild bean (*Capparis retusa*)’ > Mk *anhejaχ* || Ni *2ånxajex* || PCh **2ohnajah* || PW **2ánhjaχ*
- (812) PM **2éja?*(*-l*) ‘mosquito’ > Mk *ije?*(*-l*) || Ni *jija?* || PCh **2éja?*(*-l*)

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaclé, Chorote and Wichí), whose PM age is thus questionable.

- (813) PM **[j]åtsi*(*)j* ‘to spill’ > Mk *[j]atsij-xu?* || Ni *[j]åtsij*
- (814) PM **φaxi*(*)j* ~ **φäxi*(*)j* ‘green ameiva’ > Mk *fexij* || Ni *φafij*
- (815) PM *-*kéjå?*(f.), *-*kéjåts* (m.), *-*ké(j)tså-ts* (pl.) ‘grandchild’ > PCh *-*kéjå?*, *-*kéjås*, *-*kétsås* || PW *-*k'éjå*, *-*k'éjås*, *-*k'étsås*
- (816) PM **[t]k'ij* ‘to spit’ > Mk *[te]k'ij* || Ni *[t]<'a>k'ij*
- (817) PM **sija*(*)χ*, **sijåχ-is* ‘fish (*sp.*)’ > Mk *sija*(*)χ*, *sijåχ* *-its* || Ni *sijåx* (*-is*)
- (818) PM **ti'j* ‘to weave’ > Mk *tij* / *-tij* || Ni *ti'j*
- (819) PM **t'åj* ‘to sound, to have voice’ > Mk *t'aj* || Ni *t'åj*

2.1 Plain onsets and codas

- (820) PM **[ji]tså(?)j* ‘to spill’ > PCh **[?i]sáj?* || PW **[?i]tsåj*
 (821) PM *-*wu(?)j* ‘clothes, blanket’ > PCh *-*wúj?* || PW *-*wuj*
 (822) PM **?åthajex* ~ **?åthäjex* ‘molle fruit’ > Mk *athejaχ* || Ni *?åtxajex*

In the sequence PM **ji*, all languages show some tendency for eliminating the palatal approximant. It is most consistently preserved in Nivañe, though even there *ji* varies with *i* depending on the dialect and on the speech rate (see §7.2.2). In Maká, it yields either *ji* or *i*, with no clear distribution. In Chorote, it is consistently reflected as PCh **?i* (or as **?ja* before **q*). In Wichí, it is usually reflected as PW **?i* (or PW **hi* before a glottalized consonant due to a general glottal dissimilation rule, §9.1.1.8), but is retained as PW **ji* when followed by a uvular or glottal consonant, as evident from alternations in the third-person prefix (Nercesian 2014: 241–242).

- (823) PM **jijá'ts* ‘dew’ > Mk *ije'ts* || Ni *jija's* || PCh **?ijés-tah* || PW **?ijás*
 (824) PM **jiju's* ~ **jijú's* ‘wax’ > Ni *jiju's* || PCh **?ijús*
 (825) PM **jinå't*, **jinåt-its* ‘water’ > Ni *jinå't*, *jinåt-is* || PCh **?i'nåt* (*-es) || PW **?inåt* (*-es)
 (826) PM **ji'no*, **ji'nó-l* ‘man’ > PCh **?i'nó?* (*-l) || PW **hi'no*, **hi'nó-l^h*
 (827) PM *(-)*jipku?* (*-l) ‘hunger’ > Mk (-)*jipku?* (-l) || Ni *jipku?* / -*jipku* (-k)
 (828) PM **jixå(?)* ~ **jixå(?)* ‘to be true’ > Mk *ixa* || Ni *jixå?* || PCh **?ihå<wet>*
 (829) PM **ji?ixåtax*, **ji?ixåta-ts* ‘ocelot’ > Mk *i?ixataχ*, *i?ixate-ts* || Ni *jixåtax*, *jixåta-s*

When followed by a glottalized consonant and a low vowel (PM **a* or **å*, but not **ü*), PM **ji* evolved to **?i* > **?a* in Chorote, and to **?i* > **?a* > **ha* in Wichí.

- (830) PM **ji'jå* X_{12} ‘jaguar’ > Ni *ji'jå'x* || PCh **?a'jåh* || PW **ha'jåχ*
 (831) PM **ji'lå?*, **ji'lå-j^h* ‘tree’ > Ni *ji'klå?* (-j) || PCh **?a'lå?* (*-j^h) || PW **ha'lå*, **ha'lå-j^h*
 (832) PM **jit'å?*, **jit'å-l* ‘vulture’ > Ni *jit'å?* (-k) || PCh **?at'å?* (*-l) || PW **hat'å?* (?)

2.1.16 PM **m*

PM **m* is a stable phoneme: it is preserved in all daughter languages as *m*. Note the irregular loss of PM **m* in Wichí in §847.

- (833) PM **n-åm* ‘to arrive’ > Mk *n-am* || Ni *n-am* || PCh **n-åm* || PW **<n>åm*

2 *Consonants*

- (834) PM *-ám̥e(?)t / -ám̥te- ‘word’ > PCh *-ám̥t- || PW *-ám̥et, -ám̥te-s
- (835) PM *[t]kú[?]m-APPL ‘to grab; to work’ > Mk [te]ku[?]m-APPL || Ni [t'a]ku[?]m-APPL || PCh *[?i]kúm-APPL || PW *[t]k^jú(?)m-APPL
- (836) PM *lim ~ *lím ‘white’ > Ni k̄lim || PCh *lím-
- (837) PM *[ji]lá[?]m ‘to defecate’ > Mk <i>lá[?]m || Ni [ji]lå[?]m || PCh *[?i]hlá[?]m || PW *[t]<’a>lá[?]m
- (838) PM *lúm?a ‘day’ > Ni lúm?a- || PCh *hlúma?
- (839) PM *ma ‘interrogative particle’ > Mk me || PCh *ma
- (840) PM *[ji]må ‘to sleep’ > Mk [i]ma? || Ni [ji]må? || PCh *[?i]må? || PW *[?i]må
- (841) PM *måh ‘go!’ > Mk ma || Ni må || PCh *må^h || PW *måh
- (842) PM *-må[?]k, *-mhå[?]j^h ‘powder, flour’ > Ni -må[?]k, -mxå[?]j || PCh *-måk || PW *-mók^w, *-mhó[?]j^h
- (843) PM *mät ‘hither, nearby’ > Mk met‘nearby’ || PCh *mét‘hither’
- (844) PM *me(?) ~ *mé(?) ‘otter’ > Mk mi? || Ni me? || PCh *mé?
- (845) PM *mijó(-l) ‘savannah hawk’ > Mk mijo(-l) || Ni mijo(-k) || PCh *mijó?(-l) || PW *mijóh
- (846) PM *-muk, *-mhu-j^h ‘feces’ > Mk -<i>muk, -<i>mhu-j || Ni (-)<sa>muk, (-)<sa>mxu-j || PCh *-<’já>muk || PW *-<’já>muk^w, *-<’já>mhu-j^h
- (847) PM *phå[?]m ‘up’ > Mk -pha[?]m || PCh *p[?]hå[?]m || PW *-phå / *phåm-
- (848) PM *-támte?(-ts) ‘daughter-in-law’ > Ni -támte<?e>(-s) || PCh *-támte?(-s)
- (849) PM *tim ‘to swallow’ > Mk tim-xu? / -lim-xu? || Ni tim || PCh *[?i]tím || PW *tim
- (850) PM *?ám[?]åh, *?ám[?]å-ts ‘rat’ > Ni ?am[?]å (-s) || PCh *?ám[?]ah ~ *?ám[?]åh, *?ám[?]å-s ~ *?ám[?]å-s || PW *?áma
- (851) PM *?[j]im ‘to dry out’ > Mk [j]im || Ni [j]im || PCh *?[j]ím-APPL || PW *?[j]im
- (852) PM *?[j]om ‘to be extinguished’ > Mk [j]om || PCh *?[j]óm-APPL || PW *?[j]om

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable.

- (853) PM *-phom ‘to throw, to push’ > PCh *[?i]hwóm-ah || PW *[t]x^wom
- (854) PM *him (*-its) ‘coati’ > Mk him (-its) || Ni xim (-is)

2.1 Plain onsets and codas

- (855) PM **[wa]kumaχ* ‘to run’ > Mk *[we]kumaχ* || Ni *[βa]kumaχ*
- (856) PM **lama(h)* ~ **läma(h)*(*-m) ‘to be smooth’ > Mk *le:me, leme-m* || Ni *klama<m>*
- (857) PM **ma'la'l* ~ *-ä- ‘agile’ > Mk *me'le'l* ‘to move’ || Ni *makla'k*
- (858) PM **púm* ‘drum’ > PCh **púm* || PW **púm*
- (859) PM *-tämä(‘)k ~ *-tämä(‘)k, *-témh-aj^h ~ *-tämh-aj^h ‘bile’ > PCh *-témek, *-téhm-aj^h || PW *-témeq, *-témh-aj^h
- (860) PM **tsémłå(‘)k* ~ **tsämlå(‘)k* ‘silk floss tree’ > PCh **sémhłåk* || PW **tsémłåk^w*
- (861) PM **Xmáwoh* ‘fox’ > PCh **máwo-tah* || PW **máwoh*

2.1.17 PM **n*

PM **n* is a stable phoneme: it is preserved in all daughter languages as *n*, except that in Wichí the word-final sequence *-*nV* changes to *-*nVh*, as in (878), (896), (897), (924), (928) (see §9.1.1.12). An irregular glottalized reflex of PM **n* in other environments is occasionally found in Chorote, as in (870) and (903), and Wichí (864).

- (862) PM **n-åjin* ‘to go first’ > Mk *[wa]<th>ajin* || Ni *n-åjin* || PCh **[ʔi]<n>åjin*
- (863) PM **[t](')án* ‘to shout’ > Mk (?) *[t]'an* ‘to win’ || Ni *[t]án* || PCh **[t]án* || PW **[t]án*
- (864) PM *-áni’s ‘stinger’ > Mk 3 *t-ani’s* || Ni 3 *t-ånis* || PCh 3 **hl-ånis* || PW (?) 3 **t-åni*
- (865) PM **[j]án* ‘to put’ > Mk *[j]en-APPL* || Ni *[j]an* || PCh **[j]én* || PW **[j]én*
- (866) PM **[ji]φxän-* ~ **[ji]φxän-* ‘to kill a bird’ > Ni *[ji]φxan-APPL* || PCh **<?a>hwén-(n)ah* ‘bird’ || PW **<?a>x^wén-k^ebird*
- (867) PM **φínä(‘)χ* ‘crab’ > Ni *φinax* || PCh **hwíneh*
- (868) PM **φkéna(‘)χ* ‘north wind, north’ > Ni *φtfenax* || PCh **hw^wkénah*
- (869) PM **φtsåna(‘)χ* ‘suncho (*Baccharis sp.*)’ > Ni *φtsåanax* || PCh **sånah* || PW **x^witsånaχ*
- (870) PM **jinå't*, **jinåt-its* ‘water’ > Ni *jinå't*, *jinåt-is* || PCh **?i'nåt* (*-es) || PW **?inåt* (*-es)
- (871) PM *-kán (*-its) ‘testicle’ > Ni *-kåñ-fij* || PCh *-kán<is> || PW *-k^ján<is>
- (872) PM **[ji]kén* ‘to send’ > Mk *[j]<u>kin* || Ni *[ji]tſen* || PCh **[ʔi]kén* || PW **[ʔi]k^jén*
- (873) PM *-kun ~ *-kún ‘to eat.INTR’ > Ni <*tsak>kun* || PCh **[t^o]<?já>kun*
- (874) PM **[ji]k'än* ‘to stretch out’ > Ni *[ji]tſ'an* || PCh **[ʔi]k'én-APPL* || PW **[hi]k^jén*

2 Consonants

- (875) PM *-k'íni_x, *-k'íni_x-ts 'younger brother' > Mk -k'inix || Ni -tʃinif || PCh *-k'íni_h, *-k'íhni-s || PW *-k^jíniχ, *-k^jínihi-s
- (876) PM *k'utX₂₃á'n, *k'utX₂₃án-its 'thorn' > Ni k'utxa'n, k'utxan-is || PCh *k'utá'n, *k'után-is || PW *k^juthá'n, *k^juthán-is
- (877) PM *[ji]lán 'to kill' > Mk [ji]lan || Ni [ji]klán || PCh *[?i]lán || PW *[?i]lán
- (878) PM *látseni(?) 'chañar fruit' > PCh *létseni? || PW *létse'nih
- (879) PM *látsen-u'k 'chañar plant' > Mk <xu>letsin-u'k || PCh *létseni-k || PW *létsen-uk^w
- (880) PM *[ji]lXón 'to roast' > Ni [ji]kxon || PCh *[?i]hlón || PW *[t]nhón
- (881) PM *lájX₂₃VnåX₁₃å 'Azara's night monkey' > Ni kłaj xenåxå || PCh *lēhjanåhå-ke?
- (882) PM *[ji]tán 'to light fire' > Mk [ni]tan-APPL || Ni [ji]tán || PCh *[?i]hlán-APPL || PW *[?i]tán-APPL
- (883) PM *n- 'this (outside one's hands' reach)' > Mk n- || PCh *ná? || PW *=nah'this (within one's hands' reach)' / (?)*n<ih>'this (outside one's hands' reach, vertical)'
- (884) PM *-náj^h 'to bathe' > Ni [βa]naj || PCh *[?i]náj-APPL || PW *[?i]náj^h
- (885) PM *-na[?]x ~ *-ná[?]x / *-nxa- ~ *-nxá- 'nose' > Mk -ne[?]x / -nxe- || Ni -na[?], -nfa-s || PCh *-hná<tVwoh> || PW *-nh<us>
- (886) PM *-nå(?) ~ *-ná(?) (*-wot) 'father' > Ni nå-βot'parents' || PCh *-nå?, *-ná-wot
- (887) PM *néwo(?)k 'wild manioc' > Ni noβok || PCh (?) *n[?]wák || PW *néwok^w
- (888) PM *(-)niják, *(-)níjhå-j^h 'rope, cord' > Mk (-)nijak, (-)níjha-j || Ni -niják, -níjxå-j || PCh *níják, *níjhå-j^h || PW *níják^w, *níjhå-j^h
- (889) PM *-nji[?]x 'smell' > Mk -nji[?]x || Ni -ni[?]f || PCh *-níh || PW *-niχ
- (890) PM *(-)nú(?) (*-ts) 'bone' > Mk -nu (-ts) || Ni -nu?(?) (-s) || PW *nú(?)
- (891) PM *[ji]nxi[?]wän 'to smell' > Mk [ji]nxi[?]wen || PCh *[?i]hni[?]wen
- (892) PM *nálu(h), *nálu-ts 'day, world' > Mk neṭu(-ts) || Ni naṭu(-s) || PCh *náhl<ikis> ~ náhl<ikes> 'midday'
- (893) PM *[ji]pónit-ex 'to fill' > Mk [j]<o>pon-het-ix || Ni [ji]pont-eʃ || PCh *[?i]pónit-eh || PW *[?i]tá-ponit-eχ
- (894) PM *[t]qáñhan 'to fish with a hook' > Mk [ta]<qa>qanhen || PCh *[t^o]qáñhan || PW *[t]qáñhan
- (895) PM *[ji]selán 'to spank' > Mk [j]<eq>silan 'to spank' || PCh *[?i]selán 'to store'; *[?i]selán-eh 'to prepare'

2.1 Plain onsets and codas

- (896) PM *sténi(?) 'white quebracho' > Mk *sitin-u'k* || PCh *?sténi? || PW *?isté?nih
- (897) PM *stwú'n, *stwún-its 'king vulture' > Ni *staβu'n, staβun-is* || PCh *?stúu'n, *?stúun-is || PW *?istíwin
- (898) PM *[ji]s'wun ~ *[ji]s'wún 'to like, to love' > Mk [ji]su?un || Ni [ji]s'βun || PCh *[?i]s'?ún
- (899) PM *tänük (*-its) 'feline' > Mk *tenuk(-its)* || Ni *tanuk(-is)* || PCh *tinük (*-is)
- (900) PM *táxχan 'to thunder' > Mk *texen* || Ni *tafxen* || PW *t'áχan
- (901) PM *t'ún 'hard' > Mk *t'un* || Ni *t'un* || PCh *t'ún || PW *t'ún
- (902) PM *tsänú'k 'duraznillo trees' > Ni *tsanu'k* || PCh *sinük || PW *tsinük^w
- (903) PM *wátshan ~ *wátsχan 'to be healthy, alive' > Ni *βatsxan* || PCh *wása'n || PW *wátshan
- (904) PM *[ji]wän 'to see' > Mk [ji]wen || Ni [ji]βan || PCh *[?i]wén || PW *[hi]wén
- (905) PM *xnáwå'p 'spring' > Mk *xinawa'p* || Ni *snaβåp ~ snåβåp* || PCh *náwop || PW *náwop
- (906) PM *(X₁₃on-)xa'χ, *(X₁₃on-)xáh-aj^h 'night' > Mk <na>xa'χ || Ni <xon>fa'x, <xon>fa'x-aj || PCh *<a>h<n>áh ~ *<?å>h<n>áh || PW *<hon>aχ, *<hon>áh-aj^h
- (907) PM *?ánhajex 'wild bean (*Capparis retusa*)' > Mk *anhejaχ* || Ni ?ánxajex || PCh *?óhnajah || PW *?ánhjaχ
- (908) PM *?ánitih 'wasp (sp.)' > Ni ?ániti || PCh *?ánitih
- (909) PM *-?äsχa'n, *-?äsχán-its 'meat' > Mk -?ese'n, -?esen-its || Ni -(?a)sxa'n, -(?a)sxan-is || PCh *-?isá'n, *-?isán-is || PW *-t-'isa'n, *-t-'isán-is
- (910) PM *[j]éjxåts-han 'to teach' > Mk [j]ixats<hen> || Ni [j]ejxats-xan / -?ejxats-xan || PCh *-[j]éjåhås<an>
- (911) PM *?óna(?)χ 'my brother' > Ni ?onax || PCh *?ónah

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaclé, Chorote and Wichí), whose PM age is thus questionable.

- (912) PM *[?i]phá(t)s'un 'to spit' > PCh *[?i]hwáts'un-APPL || PW *[?i]xwáts'un
- (913) PM *-phiłan 'to dream' > PCh *[?i]hwíhlan || PW *[t]xwíłan
- (914) PM *phiñák, *phiñå-j^h 'tobacco' > Mk *finak, finha-j* || Ni *phiñák, phiñå-j*
- (915) PM *-kVnt(?)... 'kidney' > PCh *-kánt'ijaa? || PW *-k'óntowaj
- (916) PM *[t]k'an ~ *[t]k'än 'to obey' > Mk [te]k'en 'to respect' || Ni [t(a)]t'än

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- (917) PM **(-)nawan* ~ **-ä-* ‘hook’ > Mk *newen* || Ni *-naβan*
- (918) PM **níltsa(’)X₁₂*, **níltsX₁₃a-ts* ‘white-lipped peccary’ > PCh **<?ih>nílsah*, **<?ih>nílsa-s* || PW **nítsaχ*, **nítsha-s*
- (919) PM **[?i]pén* ~ **[?i]pán* ‘to cook’ > PCh **[?i]pén* || PW **[?i]pén*
- (920) PM **kpéna(’)X₁₂* ~ **kpána(’)X₁₂*, **kpénX₁₃a-ts* ~ **kpánX₁₃a-ts* ‘orphan’ > PCh **kpénah*, **kpéhna-s* || PW **k^jpénaχ*, **k^jpénha-s*
- (921) PM **tana(h)* ~ **täna(h)* ‘standing, vertical’ > Mk *te:ne*, *tene-m* || Ni *tana*
- (922) PM **tátsna(’)X₁₂* ~ **tátsne(’)χ* ‘toad’ > PCh **tásVnah* || PW **tátnaχ*
- (923) PM **tkéna(’)X₁₂* ~ **tkána(’)X₁₂*, **tkénX₁₃a-ts* ~ **tkánX₁₃a-ts* ‘precipice; hill, mountain’ > PCh **t^okénah*, **t^okéhna-s* || PW **tk^jénax*, **tk^jéhna-s*
- (924) PM **tsóna(?)* ‘red brocket’ > PCh **tsóna?* || PW **tsó’nah*
- (925) PM **wapen* ~ **wäpen* ‘to be ashamed’ > Mk *wepin* || Ni *βapen*
- (926) PM **(’)wána’χ*, **(’)wánha-ts* ‘piranha’ > Mk *wana’χ*, *wanhe-ts* || Ni *βåanax*, *βånxa-s*
- (927) PM **wkína(’)X₁₂*, **wkínX₁₃a-ts* ‘metal’ > PCh **w^okínah*, **w^okína-s* || PW **k^jínaχ*, **k^jína-ha-s*
- (928) PM **wóna(?)* ‘bala wasp honey; hat’ > PCh **wóna?* || PW **wó’nah*
- (929) PM **[ji]wún* ‘to burn (vt.)’ > PCh **[?i]wún* || PW **[?i]wún*
- (930) PM **[ji]X₁₃án-ex* ‘to know’ > PCh **<[j]a>hán-eh* || PW **[ji]hán-eχ*
- (931) PM **?a’nqo’k* ‘paralytic’ > Mk *onqok* || Ni *?a’nko’k*

2.1.18 Underdifferentiated consonants

Since some pairs of PM consonants suffered similar mergers in the daughter languages, it is at times impossible to ascertain whether a given cognate set contained one or another consonant in Proto-Mataguayan. For example, the fricatives PM **x*, **χ*, and **h* are most consistently distinguished in Maká, and when a Maká cognate is absent two or three alternatives must be reconstructed. We use the symbols **X₁₂* for ‘PM **x* or **χ*’; **X₁₃* for ‘PM **x* or **h*’; **X₂₃* for ‘PM **χ* or **h*’, and **X* for ‘PM **x*, **χ*, or **h*’.

The following examples illustrate the reconstruction of PM **X₁₂* (for ‘**x* or **χ*’) in codas. Note that PM **x* and **χ* merge in codas in Nivaclé, Chorote, and Wichí (except in palatalizing environments in Nivaclé, after the vowel **u* in Chorote, and after the vowel **o* in Wichí).

2.1 Plain onsets and codas

- (932) PM **ɸílå*(?)*X₁₂* ‘pocote (*Solanum sp.*)’ > PCh **hwílåh* || PW **xʷílåχ*
- (933) PM **k*(?)*utsá*(?)*X₁₂* ~ **k*(?)*utsé*(?)χ ‘cháguar (*Bromelia hieronymi*)’ > PCh **k’usáh* || PW **k’utsáχ*
- (934) PM **kú*’*X₁₂* ‘sweat’ > Ni -’*β-ku’x* || PW **k’úxʷ*
- (935) PM **níltsa*(?)*X₁₂*, **níltsX₁₃a-ts* ‘white-lipped peccary’ > PCh **<?ih>nílsah*, **<?ih>nílsa-s* || PW **nítsaχ*, **nítsha-s*
- (936) PM **kpéna*(?)*X₁₂* ~ **kpána*(?)*X₁₂*, **kpénX₁₃a-ts* ~ **kpánX₁₃a-ts* ‘orphan’ > PCh **kpénah*, **kpéhna-s* || PW **k’pénaχ*, **k’péhna-s*
- (937) PM *-*q’á*(?)*X₁₂* ‘tongue’ > PCh *-*q’áh* || PW *-*q’áχ* ‘mouth’
- (938) PM **tátsna*(?)*X₁₂* ~ **tátsne*(?)χ ‘toad’ > PCh **tásVnah* || PW **tátnaχ*
- (939) PM **tkéna*(?)*X₁₂* ~ **tkána*(?)*X₁₂*, **tkénX₁₃a-ts* ~ **tkánX₁₃a-ts* ‘precipice; hill, mountain’ > PCh **t’kénah*, **t’kéhna-s* || PW **tk’énaχ*, **tk’éhna-s*
- (940) PM **wkína*(?)*X₁₂*, **wkínX₁₃a-ts* ‘metal’ > PCh **w’kínah*, **w’kína-s* || PW **k’ínaχ*, **k’ína-ha-ts*
- (941) PM **ji’jå*’*X₁₂* ‘jaguar’ > Ni *ji’jå’x* || PCh **?a’jåh* || PW **ha’jåχ*

The following examples illustrate the reconstruction of PM **X₁₃* (for “**x* or **h*”) in onsets. Note that PM **x* and **h* merge in onsets in Chorote, Wichí, and – in non-palatalizing environments – in Nivaclé.

- (942) PM **låjX₂₃VnåX₁₃å* ‘Azara’s night monkey’ > Ni *klajxenåxå* || PCh **lémjanåhå-ke?*
- (943) PM **[ji]X₁₃án-ex* ‘to know’ > PCh **<[j]a>hán-eh* || PW **[ji]hán-eχ*
- (944) PM **[ji]X₁₃o(?)* ~ **[ji]X₁₃ó(?)* ‘to go’ > Ni *[ji]xo?* || PCh **[i]hó?* || PW **[ji]ho(?)* ~ **[ji]hó(?)*
- (945) PM **X₁₃ó’k* ‘palo santo (*Bulnesia sarmientoi*)’ > Ni *xo’k* || PCh **hók* || PW **hókʷ*
- (946) PM **X₁₃on-xa’χ*, **X₁₃on-xáh-aj^h* ‘night’ > Ni *<xon>sa’x*, *<xon>sa’x-aj* || PW **<hon>aχ*, **<hon>áh-aj^h*
- (947) PM **X₁₃ó’t* ‘sandy place’ > Ni *xo’t* || PCh **hót* || PW **hót*
- (948) PM *-*X₁₃u’k*, *-*X₁₃ú-j^h* ‘firewood’ > Ni *-xu’k*, *-xu-j* || PCh **(?ítåh)-huk* || PW **hukʷ*, **hú-j<is>*
- (949) PM *-*X₁₃úsek* ~ *-*X₁₃úsäk* ‘temperance’ > PCh *-*húsek* || PW *-*húseq*
- (950) PM **[ji]X₁₃út* ‘to push’ > Ni *[ji]xut* || PCh **[?i]hút* || PW **[ji]hút*

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- (951) PM *(ʔa)X₁₃útsa(?)χ, *(ʔa)X₁₃útsha-ts ‘crested caracara’ > Ni xutsax, xutsxa-s
 || PCh *(ʔa)húsah, *(ʔa)húsa-s || PW *ʔahútsaχ, *ʔahútsha-s
- (952) PM *ʔaX₁₃áje(?)χ ‘mistol fruit’ > Ni ʔaxájex || PCh *ʔahájah || PW *ʔahájaχ
- (953) PM *ʔaX₁₃áj-*u*’k, *ʔaX₁₃áj-*ku*-*j*ʰ ‘mistol tree’ > Ni ʔaxáj-uk, ʔaxáj-*ku*-*j* ||
 PCh *ʔaháj-uk, *ʔaháj-*ku*-*j*ʰ || PW *ʔaháj-uk^w

The following examples illustrate the reconstruction of PM *X₂₃ (for “*χ or *h”).

- (954) PM *^wläjX₂₃VnåX₁₃å ‘Azara’s night monkey’ > Ni klajxenåxå || PCh *^wlēhjanåhå-ke?
- (955) PM *tútsX₂₃a(?) (*-jek) ‘girl’ > Ni tutsxa (-jetf) || PCh *hlúsa? (*-jek) ||
 PW *tútsha
- (956) PM *...X₂₃a^wt (*-its) ‘earth’ > Ni <kots>xa^wt, <kots>xat-is || PCh *<ʔa>h<n>át
 ~ *<ʔå>h<n>át (*-es) || PW *<hon>hat, *<hon>hát-es

Finally, in some cases it is impossible to choose between PM *k and *q. This happens when the consonant in question occurs in the coda position following PM *å, and diagnostic cognates in Maká and Wichí are lacking.

- (957) PM *^wwóså(?)q ~ *^wwóså(?)k ‘butterfly’ > Ni βosåk || PCh *^wwósåk

2.2 Glottalized onsets

All Mataguayan languages have a series of glottalized stops, and at least Chorote and Wichí have a series of glottalized sonorants (Gutiérrez & Nercesian 2021). These are usually granted phonemic status in synchronic descriptions (for a dissenting view, see Claesson 1994; the issue is further discussed in §2.2.4), and their occurrence is restricted to onsets. In addition, Nivaclé has sequences of the type “? + sonorant” at the surface, which are usually analyzed as consonant clusters; however, these sequences display phonotactic properties typical of phonemes, such as the possibility to occur at the left edge of a morpheme, as in /-ʔβan/ ‘to see’, or after a consonant, as in /-sʔβun/ ‘to like, to love’ (Gutiérrez forthcoming). In our notation, we symbolize such sequences as preglottalized sonorants (e.g. Ni -’βan ‘to see’, -s’βun ‘to like, to love’).

Across the Mataguayan language family, glottalized stops are typically articulated as ejective plosives or affricates. Chorote is an exception, where glottalized stops surface as preglottalized after stressed syllables (Carol 2014a: 80–81). In addition, in some Wichí dialects glottalized stops have been described as implosive

2.2 Glottalized onsets

(§9.2.1.6). By contrast, glottalized sonorants typically surface as preglottalized in the onset position in the contemporary Mataguayan languages. This is in agreement with the cross-linguistic timing tendency identified by Gordon & Ladefoged (2001: 394–396), among others, whereby prevocalic glottalized sonorants tend to realize their nonmodal phonation early in the consonant in order to enhance the acoustic cues associated with the consonant-to-vowel transition.

For Proto-Mataguayan, we reconstruct a series of glottalized stops (PM **p*', **t*', **ts*', **k*', **q*') and a series of glottalized sonorants (PM *²*w*, *²*l*, *²*j*, *²*m*, *²*n*), in addition to a series of glottalized fricatives (at least PM **ɸ*', **t*', **s*'). As we will see, there is ample evidence that some of these segments result from a combination of a plain (non-glottalized) consonant and a glottal stop.

2.2.1 Glottalized stops

Glottalized stops are preserved in all daughter languages, where their reflexes are typically realized as ejective (less frequently as preglottalized or implosive) stops. Other than for the [constricted glottis] feature, they evolve just like their plain counterparts. In just one cognate set, Mk *q* shows up instead of the expected **k*' (961). When two consecutive syllables have glottalized stops as their onsets, Chorote and Wichí deglottalize the onset of the first syllable, as in (959) and – with further irregularities regarding the place of articulation – (984).⁵

- (958) PM **jit'*āʔ?, **jit'*āʔ-*l* ‘vulture’ > Ni *jit'*āʔ(-*k*) || PCh **?at'*āʔ(-*l*) || PW **hat'*āʔ(?)
- (959) PM **k'*é²*k'eh* ‘monk parakeet’ > Ni *tf'*et²*e* || PCh **kék'eh* || PW **k'*é²*k'eh*
- (960) PM **k'*alxó(*-*ts*) ‘armadillo (sp.)’ > Mk *k'*olo²*x* || Ni *k'*akxo(-*s*) || PCh **k'*ihlóʔ(*-*s*) || PW **k'*anhóh
- (961) PM *-*k'*áxe?(*-*l*) ‘arrow’ > Mk -*qaxi?*(-*l*) || Ni -*k'*áxe || PCh *-*k'*áhe?(*-*l*) || PW *-*k'*áhe(*-*l*^b)
- (962) PM *-*k'*äl²*fah* ‘spouse’ > Ni -*tf'*ak²*pha* || PCh *-*k'*élhwah || PW *-*k'*éx²*ah*
- (963) PM **[ji]k'*án ‘to stretch out’ > Ni *[ji]tf'*an || PCh **[?i]k'*én-APPL || PW **[hi]k'*én
- (964) PM **[ji]k'*ásaχ~**[ji]k'*áseχ ‘to divide’ > Mk *[j]< a >k'*esaχ || PCh **[?i]k'*ésah || PW **[hi]k'*ésaχ
- (965) PM *-*k'*ínix, *-*k'*íxi-*ts* ‘younger brother’ > Mk -*k'*ínix || Ni -*tf'*inif || PCh *-*k'*ính_i, *-*k'*íhni-s || PW *-*k'*íniχ, *-*k'*ính_i-s

⁵We owe this observation to an anonymous reviewer, who questioned our earlier attempt to account for this sound correspondence by positing irregular sound changes.

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- (966) PM **-k'ínxå?* ~ **-k'ínxå?* (*-wot) ‘**younger sister**’ > Mk *-k'inχa?* ~ *-k'inxa?* || Ni *-tʃ'inxå* (-βot) || PCh **-k'i hnå?* (*-wot) || PW **-k'ínhå*
- (967) PM **-k'o*, **-k'ó-l* ‘**bottom**’ > Ni *-k'o?* (-k) || PCh **-k'ó?* || PW **-k'ó*, **-k'ó-l^h*
- (968) PM **-k'u*, **-k'ú-l* ‘**horn, club**’ > Mk *-k'u?* (-l) || Ni *-k'u?* (-k) || PCh **-k'ú?* (*-l) || PW **-k'j'u*, **-k'j'ú-l^h*
- (969) PM **k'uj* ~ **k'új* ‘**cold**’ > Mk *k'wi* / *k'uj-* || Ni *k'uj* || PCh **k'új?*
- (970) PM **k'utX₂₃á-n*, **k'utX₂₃án-its* ‘**thorn**’ > Ni *k'utxa* [?]*n*, *k'utxan-is* || PCh **k'utá* [?]*n*, **k'után-is* || PW **k'j'uthá* [?]*n*, **k'j'uthán-is*
- (971) PM **(-)k'útsaχ*, **(-)k'útscha-ts* ‘**old**’ > Mk *k'utsaχ*, *k'utshe-ts* || Ni *k'utsaχ*, *k'utsxa-s* || PCh **-k'úsah*, **-k'úsa-s* || PW **-k'j'útsaχ*
- (972) PM **ŋk'a* ‘**new**’ > Mk *i'ŋk'a* || Ni *nitf'a* || PCh **ŋk'á?* || PW **nek^ja* ~ **nék^ja* ~ **nek^je* ~ **nék^je*
- (973) PM **[ji]p'o?* ~ **[ji]f'o?* ~ **[ji]p'ó?* ~ **[ji]f'ó?* ~ **[ji]p'ó?* ‘**to cover**’ > Ni *[ji]p'o* || PCh **[?i]p'ó-APPL* || PW **[hi]p'ó-APPL*
- (974) PM **-p'o-t* ‘**lid**’ > Mk *-p'ot<o?* > || Ni *-p'o-t* || PCh **-p'ót* || PW **-p'ot*
- (975) PM **sát'a?* (*t*)s ‘**parakeet**’ > Ni *sat'as* || PCh **sát'as* || PW **sát'as*
- (976) PM **-sáq'ål^h*, **-sáq'ål-its* ‘**soul, spirit**’ > Mk (?) *-si'nq'al* (-its) || Ni *-såk'åkl<it>* || PCh **-sáq'ål^h*, **-sáq'ål-is*
- (977) PM **(-)tak'o(h)* ~ **(-)täk'o(h)* ‘**kind of utensil**’ > Mk *tok'o* || Ni *-tak'o-tax*
- (978) PM **-t'é-l* ‘**tears**’ > Mk *-t'i-l* || Ni *-t'e<kl>-is* || PCh **-t'é<l>-is*
- (979) PM **-t'ij* ~ **-t'ij* ‘**to move**’ > Ni *[βa]t'ij* || PCh **[?i]t'ij?*
- (980) PM **-t'íle?* (*-j^h) ‘**rheum**’ > Mk *-t'ili?* (-j) || Ni *-t'iklē* (-j) || PCh **-t'íle-*
- (981) PM **t'iså?* ~ *t'iså?* (*-l) ‘**cream-backed woodpecker (Campephilus leuco-pogon)**’ > Mk *t'isa?* (-l) || Ni *t'iså?* (-k) || PCh **t'iså?* (-l)
- (982) PM **-t'ox* ~ **-t'óx* ‘**aunt**’ > Ni *-t'ox* || PCh **-<i>t'óh* || PW **-<wi>t'ox*
- (983) PM **t'ún* ‘**hard**’ > Mk *t'un* || Ni *t'un* || PCh **t'ún* || PW **t'ún*
- (984) PM **ts'áts'ih*, **ts'áts'i-l* ‘**rufous hornero**’ > Mk *ts'its'i* (-l) || Ni *ts'ats'i* (-k) || PCh **sát'ih* || PW **táts'i*
- (985) PM **wák'a-ju'k*, **wák'a-jku-j^h* ‘**guayacán**’ > Mk *wek'e-ju'k*, *wek'e-jkw-i* || PCh **wák'a-juk*, **wák'a-jku-j^h* || PW **wák'j'a-juk^w*, **wák'j'a-k^ju-j^h*
- (986) PM **-xäjk'u?* (*-l) ‘**egg**’ > Ni *-sajk'u* (-k) || PCh 3 **hl-éjk'u?* (*-l) || PW **-t'ík'j'u* (*-l^h)
- (987) PM **?åsk'äla?* (*χ*) ‘**widower**’ > Ni *?åstf'aklax* || PCh **?åsk'élah*

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The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable.

- (988) PM *-k’aló(?) (*-ts) ‘cheek’ > PCh *-k’aló? (*-s) || PW *-k^j’álo (*-s)
- (989) PM *[t]k’an ~ *[t]k’än ‘to obey’ > Mk [te]k’en ‘to respect’ || Ni [t(a)]t’an
- (990) PM *[t]k’ij ‘to spit’ > Mk [te]k’ij || Ni [t]<’a>k’ij
- (991) PM *-k’óX₂₃te(?) (*-j^h) ‘ear’ > PCh *-k’óote? (*-j^h) || PW *-k^j’óte (*-j^h)
- (992) PM *k’unhate-nha? ‘pacu fish’ > Mk <i>k’unheti-nhe?(-j) || Ni k’unxate<nxa>(-j)
- (993) PM *-pák’o ‘heel’ > PCh *-pók’o? || PW *-pák’o
- (994) PM *-q’á(?)X₁₂ ‘tongue’ > PCh *-q’áh || PW *-q’áχ ‘mouth’
- (995) PM *t’åj ‘to sound, to have voice’ > Mk t’aj || Ni t’åj
- (996) PM *[ji]t’ex ‘to say’ > Mk [ji]t’ix || Ni [ji]t’ef
- (997) PM *wósak’V(?)t ‘red-crested cardinal’ > PCh *wós^gk’at || PW *wósak’it
? ~ *wósak’ut
- (998) PM *?at’e(?) (t)s ~ *?at’ä(?) (t)s ‘aloja drink’ > PCh *?at’és || PW *hat’és
- (999) PM *[t]’at’o ‘to yawn’ > Mk [t]ot’o-kij || Ni [t]’at’o
- (1000) PM *-[j]óp’ale(?) ‘to hiccup’ > Ni [j]op’aklē / -?op’aklē ‘to choke’ || PCh *-[j]óp’ale? || PW *-[j]óp’le

2.2.2 Glottalized sonorants

Glottalized sonorants are best preserved in Chorote and Wichí; in Maká and Nivaçle, they surface as sequences of the type “? + sonorant” (’C in our notation) except word-initially, where they merge with the respective plain sonorants.

Some examples follow; note that in Wichí the glottalization irregularly migrated to another sonorant in (1016) and disappeared completely in (1026) (if the word belongs to the cognate set in question at all).

- (1001) PM *[ji]phä’jå ~ *phä’jå ‘to fly’ > Ni [ji]phä’jå || PCh *[?i]hwé’jå? || PW *x^we’jå
? ~ *w- ~ *-i-
- (1002) PM *phi’ját ‘cold weather, south wind’ > Ni phi’jat || PCh *hwi’jét || PW *x^wi’jét
- (1003) PM *ji’jå X₁₂ ‘jaguar’ > Ni ji’jå’x || PCh *?a’jåh || PW *ha’jåχ

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- (1004) PM **ji*⁹låʔ, **ji*⁹lå-*j*⁹ ‘**tree**’ > Ni *ji*⁹klåʔ(-*j*) || PCh **ja*⁹låʔ(*-*j*⁹) || PW **ha*⁹lå, **ha*⁹lå-*j*⁹
- (1005) PM **låjX*₂₃*VnåX*₁₃å ‘**Azara’s night monkey**’ > Ni *klajxenåxå* || PCh **låhjanåhå-ke*?
- (1006) PM *-⁹li⁹x, *-⁹lix-áj⁹ ‘**language, word**’ > Mk -⁹lix<*e*?> || Ni -⁹kli⁹ʃ, -⁹kliʃ-aj || PCh *-⁹lih, *-⁹lih-áj⁹
- (1007) PM *-⁹mat ‘**negative quality, physical defect**’ > Mk -⁹met || Ni -⁹mat || PCh *-⁹mat
- (1008) PM *⁹mók (*-its) ‘**zorzar bird (*Turdus sp.*)**’ > Mk *mok* (-its) || Ni *mok* (-is) || PCh *⁹mók (*-is)
- (1009) PM **[ji]nxí*⁹wän ‘**to smell**’ > Mk *[ji]nxí*⁹wen || PCh **[?i]hni*⁹wen
- (1010) PM *⁹na? ‘**this.M (within one’s hands’ reach)**’ > Mk *ha-*⁹ne? || Ni *na?* || PCh *⁹ná?
- (1011) PM *⁹nálu(h), *⁹nálu-ts ‘**day, world**’ > Mk *nelu* (-ts) || Ni *nału* (-s) || PCh *⁹náhl<*ikis*> ~ *⁹náhl<*ikes*> ‘**midday**’
- (1012) PM *(-)⁹náji⁹x, *(-)⁹nájx-aj⁹ ‘**path**’ > Ni *náji*⁹ʃ, (-)⁹nájʃ-aj / -⁹náji⁹ʃ || PCh *(-)⁹nájih, *(-)⁹náhj-aj⁹ || PW *(-)⁹nájiχ, *(-)⁹nájh-aj⁹
- (1013) PM **[ji]pé*⁹j-a? ‘**to hear**’ > Mk *[ji]pi*⁹j-e? || Ni *[ji]pe*⁹j-a || PCh **[?i]pé*⁹j-a?
- (1014) PM **[ji]s*⁹wun ~ **[ji]s*⁹wún ‘**to like, to love**’ > Mk *[ji]su?*un || Ni *[ji]s*⁹βun || PCh **[?i]s*⁹?ún
- (1015) PM *⁹wátshan ~ *⁹wátsχan ‘**to be healthy, alive**’ > Ni *βatsxan* || PCh *⁹wása⁹n || PW *⁹wátshan
- (1016) PM *⁹wánXåłåχ, *⁹wánXåłå-ts ‘**rhea**’ > Mk *waałax* || Ni *βánxåłåx, βánxåłå-s* || PCh *⁹wánhlåh, *⁹wánhlå-s || PW *⁹wáñnåłåχ, *⁹wáñnåłå-s
- (1017) PM *⁹wále⁹k ‘**to walk**’ > Mk -<*i*>⁹welki-⁹met ‘**to limp**’ || Ni *βakle*⁹tʃ || PCh **[?i]wélek* || PW *⁹weleq
- (1018) PM **[ji]wán* ‘**to see**’ > Mk *[ji]wen* || Ni *[ji]βan* || PCh **[?i]wén* || PW **[hi]wén*
- (1019) PM *-⁹wát ‘**place**’ > Mk -⁹wet || Ni -⁹bat || PCh *-⁹wét || PW *-⁹wet
- (1020) PM *-⁹wti? ~ *-⁹wti?, *-⁹wti-ts ‘**rib**’ > Mk -⁹weti?(-ts) || Ni -⁹βti / -⁹βti?(-s) || PCh *-⁹hlí<*s*>
- (1021) PM *-⁹wo, *-⁹wó-l ‘**neck**’ > Mk -⁹wo<*nxe*?> || Ni -⁹βo?(-k) || PCh *-⁹wó?(*-l) || PW *-⁹wo, *-⁹wó-l⁹
- (1022) PM *(-)⁹wo⁹j ‘**blood**’ > Ni *βo⁹j / -⁹βoj-ej* || PCh *(-)⁹wój-is || PW *⁹woj-ís / *-⁹wój-is

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- (1023) PM *[?]wóså(?)q ~ *[?]wóså(?)k ‘butterfly’ > Ni βosåk || PCh *[?]wósåk
- (1024) PM *-[?]wV[?]t ~ *-[?]wV[?]t ‘to climb’ > Mk we[?]t || Ni βå[?]t || PCh *[i][?]wút || PW *[t][?]wut ~ *[t][?]wút
- (1025) PM *-xää[?]n(e?) ‘verbal plural (suffix)’ > Ni -fa[?]ne?/-xa[?]ne? || PCh *-he[?]n(e?) || PW *-he[?]n
- (1026) PM *?å[?]lå-taχ, *?å[?]lå-ta-s ‘Argentine boa’ > Ni ?å[?]kłå-tax, ?å[?]kłå-ta-s || PCh *?å[?]lå<ta-> ~ *?å[?]lå<ta->, *?å[?]lå<ta->-s ~ *?å[?]lå<ta->-s || PW (?) *lá<taχ>

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable.

- (1027) PM *ká[?]lah, *ká[?]la-ts ‘lizard’ > PCh *ká[?]lah, *ká[?]la-s || PW *ká[?]lah, *ká[?]la-s
- (1028) PM *-tí[?]wte? ‘heart’ > Mk -titi? || Ni -ti[?]βte
- (1029) PM *pá[?]jih ‘frog (*Leptodactylus sp.*)’ > PCh *pá[?]jih || PW *pá[?]jih
- (1030) PM *[?]wá(?)x, *[?]wáx-aj^h ‘stagnant water’ > PCh *hl-<a>[?]wáh (*-aj^h) || PW *[?]wáχ, *[?]wáh-aj^h
- (1031) PM *[?]wé[?]t=a? ‘one’ > Mk <e>wi[?]t-e? || Ni βé[?]t<a> / -βé[?]t<a>
- (1032) PM *-[?]wóle(?) ‘leaf, hair, feather’ > PCh *-[?]wóle? || PW *-[?]wole
- (1033) PM *-[?]wu(?)j ‘clothes, blanket’ > PCh *-[?]wúj? || PW *-[?]wuj

2.2.3 Glottalized fricatives

Synchronously, phonemic glottalized fricatives are not attested in any Mataguayan language. In Maká, Gerzenstein (1994: 46, 67-8) documents sequences of a fricative and a glottal stop, of which at least Mk f? and s? may occur within a morpheme: *lefref* ‘ant’, *s?otot* ‘tailless’. Other possible combinations are Mk t?, which occurs at morpheme boundaries only (as in t-?i? ‘its liquid, its juice’), and the exceedingly rare Mk x?. At least Mk f? and s? correspond to glottalized stops p' and ts', respectively, in other Mataguayan languages; in this book we tentatively treat them as single segments and transcribe them as Mk f', s' in our notation. We suggest that they go back to PM *φ’, *s’ (possibly articulated as ejective fricatives), which remained fricatives in Maká but merged with PM *p’, *ts’ as (*)p’, (*)ts’ in all other languages.

- (1034) PM *(-)φ’elxVtséχ, *(-)φ’elxVtsé-ts ‘poor’ > Mk -f’ilxetsaχ, -f’ilxetsi-ts || PCh *p’ilusáh, *p’ihlusé-s || PW *p’elítsaχ, *p’elítse-s

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- (1035) PM **-ɸ'i*(?) 'foot' > Mk *-f'i?* || Ni *-p'i-k'o*'heel'
 (1036) PM **(-)ɸ'ok* ~ **(-)ɸ'ók* (*-its) 'arrow' > Mk *(-)f'ok* (-its) || Ni *(-)p'ok* (-is)
 (1037) PM **s'ám* (*-its) 'frog sp.' > Mk *s'am-s'am* (-its) || PCh **ts'ám* (*-its)

There is extra evidence that clearly shows that other Mataguayan languages (that is, Nivaâle, Chorote, and Wichí) have eliminated glottalized fricatives by means of converting them to homorganic glottalized stops. In addition to the sound changes PM **ɸ' > (*p'*, PM **s' > (*ts'*, these languages also underwent the sound change PM **t' > (*t'*. Judging by the non-existence of words with a tautomorphemic *t'* in Maká, the occurrence of PM **t'* must have been restricted to morpheme boundaries in the protolanguage, notably when a **ʔ*-initial stem combines with the third-person prefix **t-*.

- (1038) PM **t'-ałá*(?) 'fat' > PCh **t'-ahlá?* || PW **t'-ałá*(?)
 (1039) PM **t'-a(?)q* 'its rope, its cord' > PCh **t'-ák* || PW **t'-aq*
 (1040) PM **t'-áX₂₃te*(?) (*-j^h) 'her female breast' > Ni *t'-axte*(-j) || PCh **t'-áhate?*(*-j^h) || PW **t'-áte*(*-j^h)
 (1041) PM **t'-åx* 'skin, bark' > Mk *t'-ax* || Ni *t'-åx* || PCh **t'-áh* || PW **t'-åχ*
 (1042) PM **t'-äśχa'n*, **t'-äśχán-its* 'meat' > Mk *t'-ese'n*, *t'-esen-its* || Ni *t'-asxa'n*, *t'-asxan-is* || PCh **t'-isá'n*, **t'-isán-is* || PW **t'-isa'n*, **t'-isán-is*
 (1043) PM **t'-í*(*-l) 'liquid, juice' > Mk *t'-i?*(-l) || Ni *t'-i?*(-k) || PCh **t'-í?*(*-l) || PW **t'-í*(*-l^h)
 (1044) PM **t'-úłu*(?) 'her/his urine' > Ni *t'-ułu* || PCh **t'-úhlu?* || PW **t'-úłu*

The underlying form of the third-person prefix is undoubtedly PM **t-*, as seen in stems that begin with a vowel (or with a consonant other than a glottal stop; see §2.6.1).

- (1045) PM **t-á(-j^h)-xi?*(*-l) 'her/his mouth' > Mk *t-exi?*(-l) || Ni *t-afí*(-k) || PCh (?) **hl-á<aj?>* || PW *t-áj-hi*(*-l^h)
 (1046) PM **t-áwå*(?) 'its flower' > Ni *t-aβå* || PCh **hl-áwo?* || PW **t-áwo*
 (1047) PM **t-áme*(?) / *t-ámte-* 'her/his word' > PCh **hl-ámt-* || PW **t-ámet*, *t-ámte-s*
 (1048) PM **t-áni's* 'its stinger' > Mk *t-aní's* || Ni *t-ánis* || PCh **hl-ánis* || PW (?) **t-á'ni*
 (1049) PM **t-åq* 'its food' > Mk *t-aq* || Ni *t-åk* || PCh **hl-åk* || PW **t-åq*
 (1050) PM **t-å's* 'her/his son' > Mk *t-a's* || Ni *t-å's* || PCh **hl-ås* || PW **t-ås*

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- (1051) PM **t*-áse? 'her/his daughter' > Mk *t*-asi? || Ni *t*-áse || PCh **hl*-áse? || PW **t*-áse
- (1052) PM **t*-á't 'her/his drink' > Ni *t*-á't || PCh **hl*-á't || PW **t*-á't
- (1053) PM **t*-áte(?) (*-j^h) 'her/his jar' > PCh **hl*-áte?(*-j^h) || PW *<^xj>áte (*-j^h)
- (1054) PM **t*-äφ 'its wing' > Mk *t*-ef || Ni *t*-aφ || PW **t*-ex^w
- (1055) PM **t*-áj; 'yica bag' > Ni *t*-a'j || PCh **hl*-éj? || PW **t*-éj
- (1056) PM **t*-e 'its thorn' > Mk *t*-i? || Ni *t*-e? || PCh **hl*-é? || PW **t*-e
- (1057) PM **t*-éj 'her/his name' > Mk *t*-ij || Ni *t*-ej || PCh **hl*-éj? || PW **t*-éj
- (1058) PM **t*-éle(?) ~ **t*-ále(?) (*-j^h) 'its inhabitant, inner' > PCh **hl*-éle?(*-j^h) 'its inhabitant, her/his intestine' || PW **t*-éle (*-j^h)
- (1059) PM **t*-í(t)s'i(?) (*-l) 'resin, sap' > Ni *t*-its'i (-k) || PCh **hl*-íts'i? (*-l) || PW **t*-íts'i
- (1060) PM **t*-ó (*-l) 'his penis' > Ni *t*-o?(-k) || PCh **hl*-ó? (*-l) || PW **t*-ó (*-l^h)
- (1061) PM **t*-ó? (*-j^h) 'its seed' > Mk *t*-o?(-j) || PCh **hl*-ó? || PW **t*-ó? (*-j^h)
- (1062) PM **t*-ú'p, *-úp-its 'its nest' > Mk *t*-up(-its) || Ni *t*-u'p, -up-is || PCh **hl*-úp (*-is) || PW **t*-úp (*-is)

As a result of the sound change PM **t* > (**t*', Nivaçle, Chorote, and Wichí now display a morphophonological rule which converts the underlying sequence /*t*+?/ or /*hl*+?/ into *t*' (rather than *t*, as in Maká). The rule is no longer entirely productive in the contemporary languages. In Nivaçle, the sequence /*t*?/ may occur within a morpheme, as in *snitl?å* 'lizard (*Teius teyou*)'. In Chorote, a combination of /*hl*/ and /?/ at stem-suffix/enclitic boundary results in *h'l*, as in Ijw /táhl+?e/ → *táh*.?le? 'exits from', often pronounced with an intrusive echo vowel (see §8.1.1.3), i.e. [tahá'le?]. In Wichí, *t* and ? suffer no changes at the morpheme boundaries at least in 'Weenhayek, as in *tåt-?úx^w=eh* 'comes from the riverside'.

We have until now seen that Proto-Mataguayan must have had **ɸ* and **s* (occurring within morphemes) and PM **t* (occurring at morpheme boundaries only). The possibility of reconstructing **x*' cannot be ruled out at this time, since *x*' does occur morpheme-internally in Maká; we would expect it to correspond to *k(j)*' in other Mataguayan languages, though no clear cases have been identified thus far.⁶ We have found no evidence for reconstructing a glottalized uvular

⁶In Maká, *x*' has been attested in only one lexeme, *ts'ix'ix* (-its) 'mid-sized bee (gray, stings strongly, makes a hanging nest, produces small amounts of edible honey)' (Gerzenstein 1999: 352).

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fricative $χ$ ’ in Proto-Mataguayan. The glottal fricative (or approximant) h , of course, also lacks a glottalized equivalent.

In the following cognate sets, a cognate in Maká is lacking, and it is therefore impossible to determine whether they should be reconstructed with a glottalized stop or fricative in Proto-Mataguayan.

- (1063) PM $*n-ap'u$ ~ $*n-aɸ'u$ (~ $*-á-$ ~ $*-ú$) ‘to lick’ > Ni $n-ap'u$ || PCh $*[?i]<n>áp'u?$ || PW $*<n>ap'u$ ~ $*<n>áp'u$ ~ $*<n>ap'uh$
- (1064) PM $*[j]áp'ä(?)t$ ~ $*[j]áɸ'ä(?)t$ ‘to burn’ > Ni $[j]ap'at$ || PCh $*[j]áp'et$ || PW $*[j]áp'et$
- (1065) PM $*-i(t)s'i(?)$ ($*-l$) ‘resin, sap’ > Ni $-its'i$ (-k) || PCh 3 $*hl-its'i?$ ($*-l$) || PW $*-l-its'i$
- (1066) PM $*láp'ih$ ~ $*láɸ'ih$ ‘snail’ > Ni $kláp'i$ || PCh $*láp'ih$
- (1067) PM $*-p'o'k$ ~ $*-ɸ'o'k$ ‘fence’ > Ni $-p'o'k$ || PCh $*-p'ók$ || PW $*-p'ok^w$
- (1068) PM $*-w(t)s'é$ ($*-l$) ‘belly’ > Ni $-βts'e$ (-k) || PCh $*-ts'é?$ ($*-l$) || PW $*-ts'é$ ($*-l^h$)
- (1069) PM $*?áp'a(?)χ$ ~ $*?áɸ'a(?)χ$ ‘jararaca’ > Ni $?ap'ax$ || PCh $*?áp'ah$

The same situation is observed in etymologies with a limited distribution (Chorote and Wichí), whose PM age is thus questionable.

- (1070) PM $*[?i]ɸá(t)s'un$ ‘to spit’ > PCh $*[?i]hwáts'un$ -APPL || PW $*[?i]xʷáts'un$
- (1071) PM $*[ji](t)s'u(?)$ ‘to suck’ > PCh $*[?i]ts'ú$ -APPL || PW $*[hi]ts'u(?)$
- (1072) PM $*wóp'ih$ ~ $*wóɸ'ih$ ~ $*móp'ih$ ~ $*móɸ'ih$ ‘white egret’ > PCh $*wóp'ih$ || PW $*móp'i$

2.2.4 Status of glottalized consonants

Kehrein & Golston (2004) show that a contrast between a postglottalized consonant, preglottalized consonant, and a sequence of a consonant and a /?/ (in any order) is impossible within an onset or a coda in any language, suggesting that outputs such as [?m] or [t'] can be modeled in a variety of ways (i.e., by positing glottalized segments, sequences of a modal segment and a /?/, or a prosodic feature [constricted glottis]). Throughout this book, we follow Gerzenstein (1994), Nercesian (2014), Carol (2014a), and Gutiérrez (2015b) in analyzing glottalized onsets as complex segments rather than clusters of the type /C?/ or /?C/. The two-segment analysis, posited by Claesson (1994: 28–30) for ’Weenhayek, considers that glottalized consonants are sequences of underlying plain consonants and /?/.

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This could technically also be applied to Proto-Mataguayan, which otherwise allows complex onsets. A third possibility, following Kehrein & Golston's (2004) reasoning, would be to consider that /?/ and glottalization could be a property of the onset rather than of a given segment; that is, these elements could be associated with a laryngeal node (unordered with respect to the segments) dominated directly by the onset. The choice between these possibilities is a theory-internal one.

Synchronously, in all Mataguayan languages glottalized consonants may result when a plain consonant (stop, sonorant, or even fricative) coalesces with a heteromorphemic glottal stop. This has been described for Nivaclé by Gutiérrez (2015b: 29) and Campbell et al. (2020: 57), who dub the phenomenon in question **secondary glottalization**, for Iyojwa'aja' by Carol (2014a: 78), for 'Weenayek by Claesson (1994: 30), among others. (1073)–(1076) illustrate this for stops.

- (1073) Nivaclé (Gutiérrez 2015b: 29)
x-åk-ʔín [xa'k'in]
1SG.ACT-go_away-IPFV
'I am leaving'
- (1074) Iyojwa'aja' (Carol 2014a: 77–78)
 - a. t-?ú-hat-ah-hen ['t'ohwataha?n]
IMPRS-wake_up-CAUS-IMPRS/1PL-HEN
'someone wakes her/him up'
 - b. i-?wét-?e [?i?wit'e?]
1SG-place-LOC
'at my place'
- (1075) 'Weenayek (Claesson 1994: 30)
?imák-?is-hit?ah [?ima:ğisi'ğah]
thing-good-NEG
'it is insignificant'
- (1076) Lower Bermejeño Wichí (Nercesian 2014: 239)
∅-t-?eq ['t'ek]
3-T-eat
's/he eats'

As for fricatives, the process in question is less productive, but still occurs at the prefix–root boundary (1077)–(1079).

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(1077) Nivaâle (Seelwische 2016: 139)

- a. x-ʔí's [k'iʔis]
1SG.ACT-write
'I write'
- b. t-ʔí's [t'iʔis]
2.ACT-write
'you write'

(1078) Iyojwa'aja' (Carol 2014a: 78, 91)

- a. hl-ʔáh [t'ah]
3.POSS-skin/bark
'its skin/bark'
- b. s-ʔú-hat-hen [ts'ohwateʔn]
1SG.INACT-wake_up-CAUS-HEN
'you/s/he wake(s) me up'
- c. s-ʔahán-eh [ts'a'hane]
1SG.INACT-know-APPL
'I know'
- d. s-ʔåhwéhl [ts'a'hwel]
1SG.INACT-be_ashamed
'I am ashamed'

(1079) 'Weenayek (Claesson 2016: 96)

- a. t-ʔisa'n [t'i'san?]
3.POSS-meat/flesh
'its meat/flesh'

Finally, coalescence of sonorants with a glottal stop has been described for Chorote, and traces of this process are found in Nivaâle and Wichí. Phonetically, an underlying sequence of a sonorant and a glottal stop yields a preglottalized sonorant in Chorote, analyzed as a two-phase segment by Carol (2014a: 81).⁷

(1080) Iyojwa'aja' (Carol 2014a: 77–78)

⁷If one adopts a two-segment analysis for glottalized sonorants, the phenomenon in question should be viewed as an instance of metathesis. Throughout this book, glottalized sonorants are rather analyzed as complex segments.

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- a. n-?ót [?'nɔt]
GNR-chest
'chest (indefinite possessor)'
- b. j-?ál-hen [?'jahle?n]
3.ACT-die-PL
'they died'

In Nivaçle, the absolutizing prefix *t(i)n-* fuses with the stem-initial glottal stop as *ti[?]n-*.

- (1081) Nivaçle (Campbell et al. 2020: 159)

- a. t(i)n-?åx [ti[?]nax]
GNR-skin
'leather strap'

In Wichí, at least the palatal approximant *j* systematically coalesces with a glottal stop in the verbs that take the prefix *j-* (allomorph of *ji-*).

- (1082) Lower Bermejeño Wichí (Nercesian 2014: 237–238)

- a. n-j-?ax-?am [n[?]jax[?]am]
1SG-I-hit-2SG.P
'I hit you'
- b. n-j-?e^h-jen n-^h-os [n[?]je^hjen n[?]los]
1SG-I-urinate-CAUS 1SG-TH-son
'I make my son urinate'

- (1083) 'Weenhayek (Claesson 2016: 124, 128)

- a. Ø-j-?ót [?"jo:t]
3-I-hit-2SG.P
'I hit you'
- b. n(i)-?íl-a [?'ní:la?]
3.NEG.IRR-die-NEG.IRR
'lest s/he die'

In light of these alternations, which were certainly active already in Proto-Mataguayan, one is tempted to ask whether all instances of glottalized consonants in Proto-Mataguayan must be synchronically analyzed as sequences of a

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plain consonant and a glottal stop. The answer is negative at least for combinations of a sonorant and a glottal stop: both PM **l?* and **m?* were licit clusters in Proto-Mataguayan. No examples have been found for PM **n?*, **j?*, or **w?*.

- (1084) PM **-fál?u?(-ts)* ‘son-in-law, brother-in-law’ > Mk *-felu?(-ts)* || Ni *-fakl?u(-s)* ‘brother’
 || PCh **-hwílu?* ~ *-hwélu?(-s)* ‘son-in-law’
- (1085) PM **lúm?a* ‘day’ > Ni *lum?a-* || PCh **hlúma?*
- (1086) PM **?úl?åh, *?úl?å-ts* ‘dove’ > Ni *?ukl?å (-s)* || PCh **?úl?åh, *?úl?å-s*
- (1087) PM **?ám?åh, *?ám?å-ts* ‘rat’ > Ni *?am?å (-s)* || PCh **?ám?ah ~ *?ám?åh, *?ám?a-s ~ *?ám?å-s* || PW **?áma*

Since contrasts such as /l?/ vs. /'l/ are predicted by Kehrein & Golston (2004) to be impossible within a margin (i.e., an onset or a coda), we conclude that PM **l?* and **m?* were heterosyllabic, and that the process transforming sequences of a plain consonant and a glottal stop into glottalized segments was not fully active in Proto-Mataguayan.

2.3 Preglottalized codas

Most complex codas in Proto-Mataguayan are of the type **/?C/*.⁸ (In addition, there is evidence for reconstructing **/jh/* and **/lh/*, for which see §2.4.) We dub **/?C/* codas “preglottalized” and represent them as **'C*. They are best preserved in Maká. In Nivaclé, they are preserved only in stressed syllables; in unstressed syllables, these codas are deglottalized, as discussed in §7.1.1.8. In Wichí, Manjui, and possibly Iyo’awujwa’, the preglottalized codas **'m, *'n, *'l* are preserved word-finally (the latter only in Manjui), whereas other preglottalized codas merge with their plain counterparts.⁹ In Iyojwa’aja’, all preglottalized codas merge with their

⁸In this book, we follow Gutiérrez’s (2016c) analysis of the Nivaclé reflexes of such codas as sequences of the type */?C/*. Alternatively, one could follow Kehrein & Golston’s (2004) idea, whereby glottalization in a coda is represented by means of the feature [constricted glottis] in the laryngeal node dominated directly by the coda. The choice between these possibilities is a theory-internal one.

⁹In Weenhayek, the reflexes of these codas are in fact articulated as postglottalized rather than preglottalized (Claesson 1994: 33–35). This is in line with well-known cross-linguistic tendency of word-final or preconsonantal glottalized sonorants to realize their creak toward the end of the sonorant, attributed by Gordon & Ladefoged (2001: 394–396) to the necessity to enhance the acoustic cues associated with the vowel-to-consonant transition. However, the glottalized sonorant codas are clearly preglottalized rather than postglottalized in Nivaclé and Chorote. In Golston & Kehrein’s (2013) terms, Weenhayek follows the so-called **prosodic pattern**, whereas Nivaclé and Chorote conform to the so-called **onset pattern** of laryngeal timing, both of which are cross-linguistically attested.

2.3 Preglottalized codas

plain counterparts. Already in Proto-Mataguayan, a process exists whereby preglottalized codas are deglottalized when the coda resyllabifies as the onset of the next syllable before certain types of affixes (for example, the plural form of **k'utX₂₃á'n* 'thorn' is reconstructed as **k'utX₂₃án-its*). Other affixes fail to trigger this process, however, as seen in PM **ji-pé'j-a?* 's/he hears'.

The following examples show that preglottalized obstruent codas are preserved as such in Maká and (in stressed syllables) in Nivaâle, but merge with their plain counterparts in all other languages. One possible exception to this generalization is that PM **ϕ* may have regularly yielded PW **p* rather than **x^w*, even though only one example is known (1125). The unexpected loss of preglottalization in Maká is seen in (1094), (1127), and (1133).

- (1088) PM **-aje'k* ~ **-ajé'k* 'honey comb' > Ni *-aje'tf* || PCh **-q-ájek*
- (1089) PM **-á't*, **-á̄t-its* 'drink' > Ni *-á't*, *-á̄t-is* || PCh **-á̄t* (**-es*) || PW **-t-á̄t*
- (1090) PM **-á's* 'son' > Mk *-a's* || Ni *-á's* || PCh **-ás* || PW **-t-ás*
- (1091) PM **φa't* ~ **φá't* 'fire' > Mk *fe't* || PCh **hwát*
- (1092) PM **[ji]φá'x* 'to cut down' > Mk *fex-inet-kiʔax* || Ni *[ji]φa'ʃ* || PCh **[?i]hwáh-APPL* || PW **[?i]x^wáχ*
- (1093) PM **φä'x* ~ **φä'x* 'field' > Ni *φa'ʃ* || PCh **hwéh*
- (1094) PM **(-)φétä'ts* 'root' > Mk *fitets* || Ni *-φeta's* || PCh **-hwétus* || PW **(-)x^wétes*
- (1095) PM **[ji]φi'k* ~ **[ji]φí'k* 'to hide' > Ni *[ji]φi'tʃ* || PCh **[?i]hwík*
- (1096) PM **φi's* 'leech' > Ni *φi's* || PW **x^wis*
- (1097) PM **-φu't* ~ **-φú't*, **-φtú-ts* 'flatulence' > Mk *-ftu-ts* || Ni *-φu't*, *-φtu-ts* || PCh **-hwút*
- (1098) PM **jijá'ts* 'dew' > Mk *ije'ts* || Ni *jija's* || PCh **?ijés-tah* || PW **?ijás*
- (1099) PM **jiju's* ~ **jijú's* 'wax' > Ni *jiju's* || PCh **?ijús*
- (1100) PM **ji'jå'X₁₂* 'jaguar' > Ni *ji'jå'x* || PCh **?a'jáh* || PW **ha'jåχ*
- (1101) PM **jiná't*, **jinát-its* 'water' > Ni *jiná't*, *jinát-is* || PCh **?i'nát* (**-es*) || PW **?inát* (**-es*)
- (1102) PM **{j/ʔ}is{a/á/e}χ* ~ **{j/ʔ}is{á/á/é}χ* 'sand' > Mk *isa'χ* || PCh **?isáh* ~ **?isáh*
- (1103) PM **-kå's*, **-kås-él* 'tail' > Ni *-kå's*, *-kås-ek* || PCh **-kås* || PW **-k^jås*, **-k^jås-el^h*
- (1104) PM **[ji]kå't-APPL* 'to fall' > Ni *[ji]kå't-APPL* || PW **[ni]k^jåt-APPL*

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- (1105) PM **[ji]k'āsaχ* ~ **[ji]k'āseχ* ‘to divide’ > Mk *[j]<a>k'esaχ* || PCh **[?i]k'ésah* || PW **[hi]k^jésaχ*
- (1106) PM **[ji]ku^t* ‘to answer’ > Mk *[j]<e>ku^t* || Ni *[ji]ku^t* || PCh **[?i]kuhl-APPL* || PW **[ni]k^jút*
- (1107) PM **kú^tX₁₂* ‘sweat’ > Ni -*β-ku^tx* || PW **k^júx^w*
- (1108) PM **(-k'útsaχ*, **(-k'útsa-ha-ts* ‘old’ > Mk *k'utsaχ*, *k'utshe-ts* || Ni *k'utsa^tx*, *k'utsxa-s* || PCh **-k'úsah*, **-k'úsa-s* || PW **-k^jútsaχ*
- (1109) PM **[ji]lé^tx* ‘to wash’ > Mk *[ji]lix-u?* ‘to clean’ || Ni *[ji]k^jlé^t* || PCh **[?i]léh* || PW **[?i]léχ*
- (1110) PM **lo^tp* ~ **ló^tp*, **lop-íts* ~ **lóp-its* ‘winter’ > Mk *lo^tp*, *lop-its* || Ni *k^jlo^tp*, *klop-is* || PCh **lóp* || PW **lop* ~ **lóp*
- (1111) PM **-li^tx*, **-lix-áj^h* ‘language, word’ > Mk *-li^tlix<e?* || Ni -*k^jlí^tf*, -*k^jlíf-aj* || PCh **-líh*, **-lih-áj^h*
- (1112) PM **-ti^tk* ~ **-tí^tk*, **-tí-j^h* ‘thread’ > Ni *-ti^ttf*, *-ti-j<is>* || PCh **-hlík*, **-hlí-j^h*
- (1113) PM **-tu^tk*, **-tú-j^h* ‘yica bag, load’ > Mk *-tu^tk*, *-tu-j* || Ni *-tu^tk* || PCh **-hlúk*, **-hlúj-...* || PW **-tuk^w*, **-tú-j<is>*
- (1114) PM **-má^tk*, **-mhá-j^h* ‘powder, flour’ > Ni *-má^tk*, *-mxá-j* || PCh **-mák* || PW **-mók^w*, **-mhó-j^h*
- (1115) PM **-na^tx* ~ **-ná^tx* / **-nxa-* ~ **-nxá-* ‘nose’ > Mk *-ne^tx* / *-nxe-* || Ni *-na^tf*, *-nfa-s* || PCh **-hná<tVwoh>* || PW **-nh<us>*
- (1116) PM **-nji^tx* ‘smell’ > Mk *-nji^tx* || Ni *-ni^tf* || PCh **-níh* || PW **-niχ*
- (1117) PM **-pás-e^t* ‘lip’ > Ni *-pás<e^t* || PCh **-pás<at>* ~ **-pás<åt>* || PW **-pás<et>*
- (1118) PM **-p'o^tk* ~ **-φ'o^tk* ‘fence’ > Ni *-p'o^tk* || PCh **-p'ók* || PW **-p'ok^w*
- (1119) PM **-p'o^tt* ‘lid’ > Mk *-p'ot<o?* || Ni *-p'o^tt* || PCh **-p'ót* || PW **-p'ot*
- (1120) PM **qati^tts*, **qatits-él* ‘star’ > Ni *kati's* || PCh **qatés*, **qates-él* || PW **qates*, **qatéts-el^h*
- (1121) PM **-sá^tt* ‘vein’ > Mk *-sá^tt* || Ni *-sá^tt* || PCh **-såt-* || PW **-såt*
- (1122) PM **(-)skä^tt* ‘mesh’ > Ni *-stfa^tt* || PW **sikjet*
- (1123) PM **tå^tt* ‘to sprout’ > Mk *ta^tt* || Ni *tå^tt* || PCh **tå^tt* || PW **tåt*
- (1124) PM **-tåwä^tx*, **-tåwxä-ts* ‘(abdominal) cavity’ > Mk *-tawe^tx*, *-tawxe-ts* || Ni *-tåβa^tf*, *-tåβxa-s* || PCh **-tóweh* || PW **-tóweχ*
- (1125) PM **ti^tɸ* ‘to suck breast’ > Mk *tu^tf* / *-tu^tf* || Ni *ti^tɸ* || PCh **[?i]tíℳ* || PW **tip*

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- (1126) PM **tijåχ* ‘to shoot, to throw’ > Mk *tijaχ* / -*tijaχ* || Ni *tijåχ* || PCh *[ʔi]tijåh
|| PW **tijaχ*
- (1127) PM *-*ti't* ‘to spin, to sew’ > Mk [ji]tił || Ni *ti't* || PCh *[j]<á>tił
- (1128) PM **tiłåx* ‘to carry on one’s shoulders’ > Mk *tiło'x* / -*tiło'x* || Ni *tiłåx*
|| PCh *[ʔi]tihłåh || PW **tiłåχ*
- (1129) PM **ti'x* ‘to dig’ > Mk *ti(?)x*-APPL / -*ti(?)x*-APPL || Ni *ti'ʃ* || PCh *[ʔi]tih-ij?
|| PW **tiχ*
- (1130) PM **tlú'k* ‘blind’ > Ni *taklú'k* || PCh **tłluk* || PW **tilúk*^w
- (1131) PM *-*txo'k* ~ *-*txó'k*, *-*txóko-wot* ‘uncle’ > Mk -*txo'k* || Ni -*txo'k*,
-*txoko-βot* || PCh *-<i>tók, *-<i>tóko-wot || PW *-<wi>thok^w
- (1132) PM **tsänú'k* ‘duraznillo trees’ > Ni *tsanu'k* || PCh **sinúk* || PW **tsinúk*^w
- (1133) PM *-*ú'p*, *-*úp-its* ‘nest’ > Mk 3 *t-up* (-*its*) || Ni -*u'p*, -*up-is* || PCh *-*úp* (*-*is*)
|| PW *-*t-úp* (*-*is*)
- (1134) PM *-*wå'k* ‘bad mood’ > Mk -*wak* || Ni -*βå'k* || PCh *-*wåk* || PW *-*wåk*^w
- (1135) PM *-*wå'x*, *-*w(ä)z*-*áj^h* ‘burrow; anus’ > Ni -*βa'ʃ*, -*βaf-aj^h* || PCh *-*wéh* ||
PW *-*wéχ*, -*wh-áj^h*
- (1136) PM *-*wäle'k* ‘to walk’ > Mk -<i>’*welki-*-*met*‘to limp’ || Ni *βaklē'tʃ* || PCh *[ʔi]’*wélek*
|| PW *-*weleq*
- (1137) PM *-*wV't* ~ *-*wV't* ‘to climb’ > Mk *we't* || Ni *βå't* || PCh *[ʔi]’*wút* ||
PW *[t]’*wuł* ~ *[t]’*wút*
- (1138) PM *(*X₁₃on-*)*xaχ*, *(*X₁₃on-*)*xáh-aj^h* ‘night’ > Mk <*na*>*xaχ* || Ni <*xon>fa'x*,
<*xon>fa'x-aj* || PCh *-<?a>*h<n>áh* ~ *-<?a>*h<n>áh* || PW *-<*hon>ax*, *-<*hon>áh-aj^h*
- (1139) PM **t-xáte'k* ‘head’ > Ni *t-satetʃ* || PCh **hl-étek* || PW **t-éteq*
- (1140) PM **xnáwå'p* ‘spring’ > Mk *xinawa'p* || Ni *snåβåp* ~ *snåβåp* || PCh **náwop*
|| PW **xnáwop*
- (1141) PM *...*X₂₃a't* (*-*its*) ‘earth’ > Ni <*kots>xa't*, <*kots>xat-is* || PCh *-<?a>*h<n>át*
~ *-<?a>*h<n>át* (*-*es*) || PW *-<*hon>hat*, *-<*hon>hát-es*
- (1142) PM **X₁₃ó'k* ‘palo santo (*Bulnesia sarmientoi*)’ > Ni *xo'k* || PCh **hók* ||
PW **hók*^w
- (1143) PM **X₁₃ó't* ‘sandy place’ > Ni *xo't* || PCh **hót* || PW **hót*
- (1144) PM *-*X₁₃u'k*, *-*X₁₃ú-j^h* ‘firewood’ > Ni -*xu'k*, -*xu-j* || PCh *(*ítåh*)-*huk* ||
PW *-*huk*^w, *-*hú-j<is>*
- (1145) PM *-*aqhu'ts* ~ *-*aqhú'ts* ‘knee’ > Mk -*aqhu'ts* || Ni -(*a*)*kxu's* || PCh *-*aqús*

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- (1146) PM *?*atūχ* ~ *?*atúχ* ‘*snake (sp.)*’ > Ni *atūx* || PCh *?*atúh*

- (1147) PM *-?*o’t* ~ *-?*ó’t* ‘*chest*’ > Ni -?*o’t* || PCh *-?*ót*

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaclé, Chorote and Wichí), whose PM age is thus questionable.

- (1148) PM *[*ji*]kåla’*t* ‘*to fry*’ > Mk [*j*]<*a*>*kale’t* || Ni [*ji*]kaklå^h / -kaklå’*t*
 (1149) PM *kowä’*x* / *-kowä’*x* ‘*hole*’ > PCh *kowéh / *-koweh || PW *k^jowex / *-k^jowex
 (1150) PM *-sa’*x* ~ *-sä’*x* ‘*leaf*’ > Mk 3 *te-se’x* || Ni -sa’*ʃ*
 (1151) PM *?*wé’t=a?* ‘*one*’ > Mk <*e*>*wi’t-e?* || Ni βé’*t*<*a*> / -’βé’*t*<*a*>

PM *?*j* also merges with its plain counterpart (PM **j*) in all languages except Nivaclé in the coda position. Note that PCh *?*j?* is the regular reflex not only of PM **j*, but also of PM **j* word-finally due to the process of ?-epenthesis in Chorote.

- (1152) PM *-ä’*j*, *-äj-is ‘*yica bag*’ > Ni -*a’j*, -*aj-is* || PCh *-éj?(*-is) || PW *-t-éj(*-is)
 (1153) PM *[*ji*]phi’*j* ~ * [*ji*]phi’*j* ‘*not to be afraid*’ > Ni [*ji*]phi’*j* || PCh *?*i*hwíj? || PW *?*i*x^wíj-eh
 (1154) PM *kula’*j* ~ *kulá’*j* ‘*sun*’ > Ni <*xum*>kuklå’*j* || PCh *kulá?
 (1155) PM * [*ji*]lå’*j* ‘*to withstand*’ > Ni [*ji*]klå’*j* || PCh * [*ji*]låj-eh || PW * [*ji*]låj
 (1156) PM *[*t*]på’*j* ‘*to be bitter*’ > Ni [*t’aj*]på’*j* || PCh *påhj-i? || PW *[*t*]påj
 (1157) PM *(-)’wo’*j* ‘*blood*’ > Ni βo’*j* / -’βoj-ej || PCh *(-)’wój-is || PW *’woj-ís / *-’wój-is

The very same correspondence is observed in two etymologies with a limited distribution (Maká and Nivaclé), whose PM age is thus questionable.

- (1158) PM **ti’j* ‘*to weave*’ > Mk *tij* / -*tij* || Ni *ti’j*
 (1159) PM **t’å’j* ‘*to sound, to have voice*’ > Mk *t’aj* || Ni *t’å’j*

By contrast, the examples below show that PM *?*m* and PM *?*n* are preserved as contrastive units not only in Maká and Nivaclé, but also in Chorote and Wichí, at least word-finally. The Wichí reflexes in (1164) and (1165) are irregular: the former shows an irregular loss of the word-final consonant; the latter is deviant in a number of respects and lacks the expected glottalization.

2.4 *CX-clusters (consonant + a guttural fricative)

- (1160) PM *-á'm 'pronominal formative' > PCh *-á'm || PW *-á'm
- (1161) PM *[t]kú'm-APPL 'to grab; to work' > Mk [te]ku'm-APPL || Ni [t'a]ku'm-APPL || PCh *[?i]kúm-APPL || PW *[t]kú(')m-APPL
- (1162) PM *k'utX₂₃á'n, *k'utX₂₃án-its 'thorn' > Ni k'utxa'n, k'utxan-is || PCh *k'utá'n, *k'után-is || PW *k'uthá'n, *k'uthán-is
- (1163) PM *[ji]há'm 'to defecate' > Mk <i>ta'm || Ni [ji]há'm || PCh *[?i]hlá'm || PW *[t]<a>lá'm
- (1164) PM *phá'm 'up' > Mk -pha'm || PCh *p^há'm || PW *-phå / *phám-
- (1165) PM *stwú'n, *stwún-its 'king vulture' > Ni staβu'n, staβun-is || PCh *stúu'n, *stúun-is || PW *istíwin
- (1166) PM *[ji]wo'm 'to throw' > Mk [i]wu'm || PCh *[?i]wóm-APPL || PW *[?i]wo'm
- (1167) PM *-ʔäsχa'n, *-ʔäsχán-its 'meat' > Mk -ʔese'n, -ʔesen-its || Ni -(ʔa)sxa'n, -(ʔa)sxan-is || PCh *-ʔisá'n, *-ʔisán-is || PW *-t-'isa'n, *-t-'isán-is

Finally, PM *^hl is reconstructed in order to account for three cognate sets with a limited distribution (Maká and Nivaclé, Chorote and Wichí), whose PM age is thus questionable. In these cases, the glottalization is preserved in Maká, Nivaclé, and Chorote, but not in Wichí (due to a process that converted word-final PM *l and *^hl into PW *l^h, see §9.1.1.13).

- (1168) PM *-á'l 'light, brightness' > PCh 3 *hl-á'l || PW *-t-á'l^h
- (1169) PM *kó'l 'locust' > PCh *kó'l || PW *kój'l^h
- (1170) PM *ma'la'l ~ *-ä-'agile' > Mk me'le'l 'to move' || Ni maklá'k

2.4 *CX-clusters (consonant + a guttural fricative)

There is ample evidence supporting the reconstruction of consonant clusters of the structure */CX/, where X stands for a velar, uvular, or glottal fricative. Their development is shown in Table 2.3. Note that PM *h is banned after fricatives (§5.2.4). Conversely, PM *χ is only securely reconstructed after fricatives (it may have also occurred after stops and/or sonorants, but the evidence is inconclusive). It is unclear how these clusters were syllabified in Proto-Mataguayan; their reflexes are typically tautosyllabic in Chorote and Wichí, but not in Nivaclé and Maká. We find it more likely that Chorote and Wichí retain the original situation, since */CX/ clusters are particularly common morpheme-initially.

2 *Consonants*

Table 2.3: PM clusters with a guttural fricative as the second element

Proto-Mataguayan	Maká	Nivaçle	Proto-Chorote	Proto-Wichí
*Px	Px	Px / Pʃ	*P	*Ph
(*Pχ)	(Pχ)	(Px)	(*P)	(*Ph)
*Ph	Ph	Px	*hP / *P	*Ph
*Fx	Fx	Fx / Fʃ	*F	*F
*Fχ	F	Fx	*F	*F
*Mx	Mx	Mx / Mʃ	*hM	*Mh
(*Mχ)	(Mχ)	(Mx)	(*hM)	(*Mh)
*Mh	Mh	Mx	*hM	*Mh

P = stop, F = fricative, M = sonorant

The examples below show the evolution of PM clusters with **x* as the second element. These are preserved in Maká and Nivaçle (with PM **x* yielding Niʃ in palatalizing environments, as discussed in §2.1.10 and §7.1.1.3). In Chorote, they yield PCh **hC* if the consonant is a sonorant and PCh **C* otherwise; the vowel epenthesis in (1183) is irregular (see more on the developement of PM **Px* > PCh **P* in §8.1.1.12). In Wichí, they yield PW **Ch* unless the consonant is a fricative, in which case one finds the reflex PW **C*. Note that the reflexes in (1176) in Nivaçle and Wichí are entirely irregular due to contamination with those of PM **-pás(-e't)* ‘lip’; the regular reflexes are found in Maká and Chorote. (1173) shows vowel epenthesis in Maká and Wichí, presumably due to the fact that the consonant cluster occurs word-initially.

- (1171) PM **k'ålroxó* (*-ts) ‘armadillo (sp.)’ > Ni *k'akxo* (-s) || PCh **k'ihló?* (*-s) || PW **k'anhóh*
- (1172) PM **-nxa-* ~ **-nxá-* ‘nose’ > Mk *-nxé-* || Ni *-nfa-* || PCh **-hná< tVwoh>* || PW **-nh<us>*
- (1173) PM **n-xáte?* (*-l) [?] ~ **n-xáti?* ‘dream, sleepiness’ > Mk *-nixati?* (-l) || Ni *nxáte* (-k) || PCh **ihnáti?* || PW **naháti*
- (1174) PM **[ji]nxí'wän* ‘to smell’ > Mk *[ji]nxí'wen* || PCh **[i]hní'wen*
- (1175) PM **(-)nájx-aj^h* ‘paths’ > Ni *(-)nájf-aj* || PCh **(-)náhj-aj^h* || PW **(-)nájh-aj^h*
- (1176) PM **-pxúse?* (*-j^h) ‘beard’ > Mk *-<a>pxusi?* (-j) || Ni *-páse* (-j) || PCh **-púse?* (*-j^h) || PW **-páse* (*-j^h)

2.4 *CX-clusters (consonant + a guttural fricative)

- (1177) PM *-*txo*’k ~ *-*txó*’k, *-*txóko-wot* ‘uncle’ > Mk -*txo*’k || Ni -*txo*’k, -*txoko-βot* || PCh *-*<i>tók*, *-*<i>tóko-wot* || PW *-*<wi>thok*^w
- (1178) PM *-*t-xäjk’u*(*-*l*) ‘egg’ > Ni *t-sajk’u*(-*k*) || PCh *-*hl-éjk’u*(*-*l*) || PW *-*t-íjk’u*(*-*l^b*)
- (1179) PM *-*t-xäte*’k ‘head’ > Ni *t-satetf* || PCh *-*hl-étek* || PW *-*t-éteq*
- (1180) PM *-*xunxátaχ* ‘tusca fruit’ > Mk *xunxetaχ* || Ni *xunfataχ* || PCh *-*ihnátah* || PW *-*nhátaχ*
- (1181) PM *-*xunxáta-(ju)*’k ‘tusca tree’ > Mk *xunxete-’k* || Ni *xunfata-juk* || PCh *-*ihnáta-k* || PW *-*nháte-q*
- (1182) PM *-*xunxáta-kat* ‘tusca grove’ > Mk *xunxete-ket* || Ni *xunfata-tsat* || PCh *-*ihnáta-kat*
- (1183) PM *-*[j]éjxáts-han* ‘to teach’ > Mk *[j]ixats<hen>* || Ni *[j]ejxats-xan* / -*ejxats-xan* || PCh *-*[j]éjåhås<an>*

The following examples show the evolution of PM clusters with *χ as the second element. All clear cases involve a fricative as the first element. In Maká, Chorote, and Wichí, PM *χ is lost after a fricative. In Nivaclé, one finds the reflex Cx. We believe *χ could also occur after other kinds of consonants, as is still the case in Maká, and we predict its reflexes to be as detailed in Table 2.3; however, all putative cases of *Pχ and *Mχ that we have considered allow for alternative reconstructions as well.

- (1184) PM *-*[ji]φχän-* ~ *-*[ji]φχän-* ‘to kill a bird’ > Ni *[ji]φxan-APPL* || PCh *-*<?a>hwén-(n)ah* ‘bird’ || PW *-*<?a>xʷén-kʷe* ‘bird’
- (1185) PM *-*φχúx*, *-*φχú-ts* ‘finger’ > Mk -*fux* || Ni -*φxux*, -*φxu-s* ‘toe’ || PCh *-*hwu-ké?* || PW *-*xʷúx^w*, *-*xʷú-s*
- (1186) PM *-*kéłχa-ju*’k, *-*kéłχa-jku-j^h* ‘red quebracho’ > Mk *kełe-jku-* || Ni *tsełxa-juk*, *tsełxa-ku-j* || PCh *-*kéhla-juk* / *-*kéhla-jku-* || PW *-*k'él-juk^w*, *-*k'él-k'ju-j^h*
- (1187) PM *-*táxχan* ‘to thunder’ > Mk *texen* || Ni *tafxen* || PW *-*t'áχan*
- (1188) PM *-*ʔäsχa-n*, *-*ʔäsχán-its* ‘meat’ > Mk -*ʔese-n*, -*ʔesen-its* || Ni -*(?a)sxa-n*, -*(?a)sxan-is* || PCh *-*ʔisá-n*, *-*ʔisán-is* || PW *-*t-’isa-n*, *-*t-’isán-is*

The examples below show the evolution of PM clusters with *h as the second element. In Maká, PM *h is preserved. In Nivaclé, one finds Cx (except that *wh yields Ni x). In Chorote, such clusters always yield PCh *hC after a stressed vowel except if the consonant in question is PCh *s < PM *ts (phonetically, /s/ in Chorote often does surface as [hs] or [xs], but there is no contrast between /s/ and /hs/). After an unstressed vowel, the reflex is PCh *C (1204), and word-initially one finds an inserted vowel, as in (1190) and (1194). In Wichí, these same

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clusters yield PW **Ch*, with vowel insertion applying word-initially at least in the cluster **kh* (1190).

- (1189) PM **ɸátshu-ts* ‘centipedes’ > Ni *ɸatsxu-s* || PCh *(*h*)*wásu-s*
- (1190) PM **khát* ‘cactus’ > Mk *khat-u’k* || Ni *kxat* || PCh **káhát* || PW **k’áhát*
- (1191) PM *(-)*k’útsha-ts* ‘old.PL’ > Mk *k’utshe-ts* || Ni *k’utsxa-s* || PCh *(-)*k’úsa-s*
- (1192) PM *-*mhá-j^h* ‘powders, flours’ > Ni *mxå-j* || PW *-*mhó-j^h*
- (1193) PM *(-)*níjhå-j^h* ‘ropes, cords’ > Mk *(-)nijha-j* || Ni *-nijxå-j* || PCh **níhjå-j^h* || PW **níjhå-j^h*
- (1194) PM **phå’m* ‘up’ > Mk *-pha’m* || PCh **p’hå’m* || PW *-*phå* / **phåm-*
- (1195) PM *[*t*]*qáhan* ‘to fish with a hook’ > Mk [*ta*]<*qa*>*qanhen* || PCh *[*t^o*]*qáhanan* || PW *[*t*]*qáhan*
- (1196) PM **sláqha(?)j*, **sláqhaj-its* ‘wild cat’ > Ni *ʃklåkxaj* ~ *sklåkxaj* (-is) || PCh **s^olåhqaj?* ~ **s^olåhqåj?* (*-is) || PW **silåqhåj*
- (1197) PM **títhe-j^h* ‘plates’ > Ni *(-)titxe-j* || PCh **tíhte-j^h*
- (1198) PM **wáth(å-j)u’k* ‘palo flojo tree’ > Ni *βåtxå-juk* || PCh **wáht<uk>*
- (1199) PM *-*whá’ja?* ‘spouse’ > Mk *-whe’je?* || Ni *-xa’ja* || PCh *-*hwá’ja?*
- (1200) PM *[*t*]*wha’jå-j* ‘to marry’ > Mk [*te*]*whe’je-j* || Ni [*t*]*xa’ja-j* || PCh *[*t^o*]*hwa’jé-j?* || PW *[*t*]*wháje-j>*
- (1201) PM *[~]*wátshan* ~ *[~]*wátsχan* ‘to be healthy, alive’ > Ni *βatsxan* || PCh *[~]*wásən* || PW *[~]*wátshan*
- (1202) PM *-*xáthe-j^h* ‘heads’ > Ni *-satxe-s* || PCh *-*héhte-j^h* || PW *-*l-éthe-j^h*
- (1203) PM *(*qa*)*X₁₃útsha-ts* ‘crested caracaras’ > Ni *xutsxa-s* || PCh *(*qa*)*húsa-s* || PW **?ahútsha-s*
- (1204) PM *-*aqhu’ts* ~ *-*aqhú’ts* ‘knee’ > Mk *-aqhu’ts* || Ni *(?)kxu’s* || PCh *-*aqús*
- (1205) PM **?ánhajex* ‘wild bean (*Capparis retusa*)’ > Mk *anhejex* || Ni *?ánxajex* || PCh **?óhnajah* || PW **?ánhjaχ*
- (1206) PM *[~][*j*]*éjxåts-han* ‘to teach’ > Mk [*j*]*ixats<hen>* || Ni [*j*]*ejxats-xan* / -*ejxats-xan* || PCh *[~][*j*]*éjåhås<an>*

The same correspondences are observed in etymologies with a limited distribution (Maká and Nivaclé, Chorote and Wichí), whose PM age is thus questionable.

- (1207) PM **ɸánha?* ~ **ɸánha?* (*-*j^h*) ‘locust’ > Mk <*e*>*fenhe?* (-*j*) || Ni *ɸanxa* (-*j*)

2.4 *CX-clusters (consonant + a guttural fricative)

- (1208) PM **k’uhate-nha?* ‘*pacu fish*’ > Mk <*i>k’unheti-nhe?*(-j) || Ni *k’unxate-nxa?*(-j)
- (1209) PM *-témh-aj^h ~ *-tāmh-aj^h ‘*bile.PL*’ > PCh *-téhm-aj^h || PW *-témh-aj^h
- (1210) PM *?āthajeχ ~ *?āthäjeχ ‘*molle fruit*’ > Mk *athejaχ* || Ni ?ātxajex
- (1211) PM *?omhatäk ~ *?omhätäk ‘*queen palm fruit*’ > Mk *omhetek* || Ni ?omxatatf
- (1212) PM *-zó’thale(?) ~ *-zó’thåle(?) ‘*heart*’ > PCh *-zóhtale? ~ *-zóhtåle? || PW *-t-’ótle

In some cases crucial cognates in Maká are either lacking or attested with different consonants in different sources, making it impossible to ascertain which guttural fricative is to be reconstructed to Proto-Mataguayan.

- (1213) PM **φajXo?*, **φajXó-l* / *-φájXo?(*-l) ‘*coal*’ > Ni (-)φajxo?(-k) || PCh **hwa(h)jo-* || PW **xwijho?*(?), **xwijhó-l^h* / *-*xwijho* (*-l^h)
- (1214) PM *-k’ínxå? ~ *-k’ínxå?(*-wot) ‘*younger sister*’ > Mk -k’ínxå? ~ -k’ínxå? || Ni -t’ínxå (-βot) || PCh *-k’íhnå?(*-wot) || PW *-k^j’ínhå
- (1215) PM **k’utX₂₃á-n*, **k’utX₂₃án-its* ‘*thorn*’ > Ni *k’utxa-n*, *k’utxan-is* || PCh **k’utá-n*, **k’után-is* || PW **k^j’uthá-n*, **k^j’uthán-is*
- (1216) PM *[*ji*]lxón ‘*to roast*’ > Ni [*ji*]kxon || PCh *[*ri*]hlón || PW *[*t*]nhón
- (1217) PM **láiX₂₃VnåX₁₃å* ‘*Azara’s night monkey*’ > Ni *klajxenåxå* || PCh **lémjanåhå-ke?*
- (1218) PM **łútsX₂₃a*(?) (*-jek) ‘*girl*’ > Ni ɿutsxa (-jetf) || PCh **hlúsa?*(*-jek) || PW **łútsha*
- (1219) PM *-nX₂₃atå? ‘*nasal mucus*’ > Ni -nxatå? || PCh *-hnát<*ijah-PL*>
- (1220) PM *-nX₂₃aq(?)åt ‘*to snore*’ > Ni [*ta*]nxakåt || PCh *[*ri*]hnåq’åt
- (1221) PM **wánXåłåχ*, **wánXåłå-ts* ‘*rhea*’ > Mk *waałax* || Ni βånxåłåx, βånxåłå-s || PCh **wáñhlåh*, **wáñhlå-s* || PW **wá’ntåχ*, **wá’ntå-s*

The same correspondences are observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable.

- (1222) PM **kójXa(?)t* ‘*to be heavy*’ > PCh **kóhjat-APPL* || PW **k^jójhat*
- (1223) PM **kpénX₁₃a-ts* ~ **kpánX₁₃a-ts* ‘*orphans*’ > PCh **kpéhna-s* || PW **k^jpénha-s*
- (1224) PM *[*ji*]-tXá(?)t ‘*to throw, to put*’ > PCh *[*ri*]tát-APPL || PW *[*ri*]thát
- (1225) PM **?atsXa*(?), **?atsXá-l* ‘*dorado*’ > PCh **?asá?*(*-l) || PW **?atsha*(?), **?atshá-l^h*

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Quite exceptionally for Mataguayan languages, in a handful of morphemes, the clusters **jh* and possibly **lh* are reconstructed in the coda position (word-finally only). For aesthetic reasons, we represent them as **j^h* and **l^h*. The evidence for this comes from Chorote and 'Weenayek. In both lects, /h/ occurs in word-final position, thus bleeding **?-insertion*. However, it does not surface when the morpheme is not word-final, as described by [Claesson \(1994\)](#) and [Carol \(2014a\)](#). For instance, the indirect evidential in Iyo'awujwa' and Manjui surfaces as *-t'ej^h* when it is word-final, but as *-t'ej-* or *-t'ij-* when an enclitic or suffix follows. The phonetic realization of the reflexes of **l^h* does not differ in Chorote and 'Weenayek from that of the reflexes of PM **l*. In Wichí, one finds the reflex **h* rather than **j^h* after the vowel **i* (1230).

- (1226) PM **-(á)j^h* **PL** > Mk *-(e)j* || Ni *-(a)j* || PCh **-(á)j^h* || PW **-(á)j^h*
- (1227) PM **-ej^h* **APPL:DISTAL** > Mk *-ij* || Ni *-ej* || PCh **-ej^h* || PW **-ej^h*
- (1228) PM **-náj^h* **'to bathe'** > Ni *[βa]naj* || PCh **[ʔi]náj-APPL* || PW **[ʔi]náj^h*
- (1229) PM **-sáq'ål^h*, **-sáq'ål-its* **'soul, spirit'** > Mk (?) *-si'nq'al(-its)* || Ni *-såk'åkl<it>* || PCh **-sáq'ål^h*, **-sáq'ål-is*
- (1230) PM **-xíj^h* **'recipient'** > Mk *-xij* || Ni *-fij* / *-xij* || PW **-híh*

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Other types of consonant clusters are reconstructed primarily based on evidence from Nivaçle.

The Proto-Mataguayan sequence **kφ* develops normally in Maká and Nivaçle, but yields Proto-Chorote **kw* (> Ijw *k^j*, I'w/Mj *k*) and Proto-Wichí **kʷ*. The preceding vowel (if there is one) apparently becomes rounded in the latter two languages, though it is unknown whether this is regular, since only one example has been found.

- (1231) PM **[j]ékφa'x* **'to bite'** > Mk *[j]ikfe'x* || PCh **[j]ókwah* || PW **[j]ókʷaχ*
- (1232) PM **-kφe(?)* (**-j^h*) **'ear'** > Mk *-kφf?(-j)* || Ni *-kφe?(-j)* || PW **-(t-)kʷe<j>* / **-(t-)kʷe-* **'arm, hand'**
- (1233) PM **[j]ókφe(?)*(*t*)*s* ~ **[j]ókφä(?)*(*t*)*s* ~ **[j]ékφe(?)*(*t*)*s* ~ **[j]ékφä(?)*(*t*)*s* **'to frighten'** > PCh **[j]ókwes* || PW **[j]ókʷes*

The Proto-Mataguayan sequence **nj* or **?nj* preserves its palatal approximant in Maká (with PM **nj* > Mk *nij* at least word-initially), but loses it in Chorote and Wichí (in the latter language, PM **nj* > PW **xⁿ* at least word-initially).

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- (1234) PM *-nji²x 'smell' > Mk -nji²x || Ni -ni²f || PCh *-níh || PW *-niχ
 (1235) PM *-njánxte? 'tapeti rabbit, cavy' > Mk nijaxti? || Ni nánxate || PCh *-náhåte?
 || PW *-náte

The Proto-Mataguayan onset *st is preserved in Nivaclé. It is resolved by means of *i*-insertion in Maká, whereas in Chorote and Wichí a vowel (PCh *²i, PW *i) is inserted before the cluster (at least word-initially).

- (1236) PM *sténi(?) 'white quebracho' > Mk sitin-u²k || PCh *?sténi? || PW *?isté²nih
 (1237) PM *stwú²n, *stwún-its 'king vulture' > Ni staβu²n, staβun-is || PCh *?stúu²n,
 *?stúun-is || PW *?istíwin
 (1238) PM *stá-²q 'toothpick cactus (*Stetsonia coryne*)' > PCh *?stá-k || PW *?istá-q
 (1239) PM *stáfe(?) 'Chaco chachalaca' > PCh *?stáhwe? || PW *?istáx²e

Most clusters involving two voiceless segments are typically preserved in Nivaclé and Wichí, whereas in Chorote they are resolved by means of vowel insertion (the inserted vowel is PCh *²i, or PCh *i after PCh *k). Note the sound change PM *tsn > PW *tn in Wichí in (1244).

- (1240) PM *ϕkéna(?)χ 'north wind, north' > Ni ϕtſenax || PCh *hw²kénah
 (1241) PM *ktá²nih 'Chaco tortoise' > PCh *kitá²nih || PW *k²tá²nih
 (1242) PM *ktéta(?) ~ *ktäta(?) 'white algarrobo fruit (*Prosopis elata*)' > PCh *kitéta?
 || PW *k²téta
 (1243) PM *spú(?)p 'dove' > PCh *s²púp || PW *spúp
 (1244) PM *tátsna(?)X₁₂ ~ *tátsne(?)χ 'toad' > PCh *tásVnah || PW *tátnaχ
 (1245) PM *tkéna(?)X₁₂ ~ *tkäna(?)X₁₂, *tkénX₁₃a-ts ~ *tkänX₁₃a-ts 'precipice;
 hill, mountain' > PCh *t²kénah, *t²kéhna-s || PW *tk²énay, *tk²énha-s

In one root, a cluster involving two voiceless segments occurs in the beginning of a relational stem in Maká, whereas other languages show a reflex of PM *á between the consonants in question. It is unclear whether a consonant cluster should be reconstructed in this case (assuming vowel insertion in Nivaclé, Chorote, and Wichí) or whether the vowel was already there in Proto-Mataguayan (assuming an irregular syncope in Maká).

- (1246) PM *-t(á)ko?(*-l) 'face' > Mk -tko<jek> || Ni -tako?(-k) || PCh *-tóko?(*-l)
 || PW *-ták²o (*-l²)

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- (1247) PM *-*t*(á)ko-se? (*-j^h) 'eyebrow' > Mk -*tko-si?*(*-j) || PCh *-tóko-se?(*-j^h)
|| PW *-ták^jo-se (*-j^h)

Clusters involving PM **l*, **w*, or *[~]*w* as the first member develop normally in Nivaclé. In Maká, they are resolved by means of *e*-insertion if the cluster occurs stem-initially; in the middle of the stem the sonorant is simply lost (1251). In Chorote, PM **l* as a first member of a consonant cluster is deleted word-initially, but is preserved word-medially; PM *(‘)w, by contrast, is preserved word-initially (with an intrusive PCh *[~]*o* breaking the cluster) but lost word-medially. In Wichí, the first element of the cluster is lost, but a deleted PM **w* can trigger rounding of PM **e* to PW **o* in (1253).

- (1248) PM *-*k*’älφah ‘spouse’ > Ni -*t*’akφa || PCh *-*k*’élhwah || PW *-*k*^j’éx^wah
- (1249) PM *(‘)lkä(?)*t* ‘nasal mucus, cold’ > Mk -*leke*(‘)*t* || PCh *két || PW *k^jét-taχ, *k^jét-ta-s
- (1250) PM *lkéte ‘squash’ > Mk lekiti || PCh *kéte?
- (1251) PM *-*t*í[~]wte? ‘heart’ > Mk -*titi?* || Ni -*t*i[~]βte
- (1252) PM *niltsa(?)*X*₁₂, *nilts*X*₁₃*a-ts* ‘white-lipped peccary’ > PCh *<?ih>nílsah, *<?ih>nílsas- || PW *nítsaχ, *nítsa-s
- (1253) PM *-tséwte(?) (*-j^h) ‘tooth’ > Ni -*tseβte* (-j) || PW *-tsóte (*-j^h)
- (1254) PM *-[~]wtli? ~ *-[~]wtli?, *-[~]wtli-ts ‘rib’ > Mk -[~]we[~]li?(-ts) || Ni -[~]βtli / -βtli?(-s) || PCh *-hlí<s>
- (1255) PM *-w(t)s’é (*-l) ‘belly’ > Ni -*βts’e* (-k) || PCh *-ts’é? (*-l) || PW *-ts’é (*-l^h)
- (1256) PM *wkína(?)*X*₁₂, *wkíns*X*₁₃*a-ts* ‘metal’ > PCh *w[~]kínah, *w[~]kínhas- || PW *k^jínaχ, *k^jínhas-

Only one word is reconstructed with a cluster whose initial element is PM *[~]*j*. In Maká, PM *[~]*jt* yields *?**t* in variation with *t* (Gerzenstein 1999: 130); in Nivaclé, one finds [~]*βt* varying with [~]*jt*; in Chorote, the reflex is [~]*j*?*t*; in Wichí, **jt*.

- (1257) PM *?*á*’jteχ, *?*á*’jte-ts ‘to hurt’ > Mk a?taχ, a?ti-ts || Ni ?*á*’jtex ~ ?*á*’βtex
|| PCh *?*áj*’tah-APPL, *?*áj*’te-s-APPL || PW *?*áj*taχ, *?*áj*te-s

Clusters with a PM guttural fricative followed by another consonant evolve normally in Maká and Nivaclé, with an epenthetic Mk *i* breaking apart the PM cluster **xn* (1260) and an epenthetic Ni *a* resolving the triconsonantal cluster in (1259). In Chorote, the guttural consonant disappears stem-initially, as in (1260), (1263), (1264), (1262), except in (1261), where PM **Xp* yields PCh *?*ip*. Word-medially (at

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least before a stop), the guttural consonant yields PCh *h , and a vowel (a copy of the preceding vowel) is inserted to break the cluster apart, as in (1258)–(1259), (1265). In Wichí, the guttural consonant is lost stem-medially, at least preceding a stop, as in (1259) and (1265); stem-initial clusters of a guttural consonant and a sonorant yields PW $^{**}C$, as in (1260), (1264), (1262), whereas in the only example of a stem-initial cluster of a guttural consonant and a stop one finds PW $^{*}hp$ as the reflex (1263).

- (1258) PM $^{*-}k'óX_{23}te(?)\ (^{-}j^h)$ ‘ear’ > PCh $^{*-}k'óote\ (^{-}j^h)$ || PW $^{*-}k^j'óte\ (^{-}j^h)$
- (1259) PM $^{**}njánxte?$ ‘tapeti rabbit, cavy’ > Mk *nijaxti?* || Ni *nánxate* || PCh $^{**}náháte?$ || PW $^{**}náte$
- (1260) PM $^{*}xnáwå'p$ ‘spring’ > Mk *xinawa'p* || Ni *snáβåp* ~ *snåβåp* || PCh $^{*}náwop$ || PW $^{*}náwop$
- (1261) PM $^{*}xpå'k$ ~ $^{*}xpå'k$ ‘straw’ > Mk *xupa(?)k* ~ *xupek* || Ni *xpå'k* || PCh $^{*}?ipåk$
- (1262) PM $^{*}Xmáwoh$ ‘fox’ > PCh $^{*}máwo-tah$ || PW $^{*}máwoh$
- (1263) PM $^{*(-)}X_{23}pél$ ‘shadow’ > Ni *xpek* || PCh $^{*-}pél$ || PW $^{*}hpél^h$ / $^{*-}hpel^h$
- (1264) PM $^{*}X_{23}wé'lah$, $^{*}X_{23}wé'la-ts$ ‘moon’ > Ni *xiβe'la(-s)* || PCh $^{*}wé'lah$, $^{*}wé'la-s$ || PW $^{*}wé'lah$
- (1265) PM $^{*-}2áX_{23}te(?)\ (^{-}j^h)$ ‘female breast’ > Ni *-2axte (-j)* || PCh $^{*-}2áhate?\ (^{-}j^h)$ || PW $^{*-}t-áte\ (^{-}j^h)$

Clusters with PM $^{(*)}w$ as the last element are followed by PM $^{*}u$ in all known examples. These evolve normally in Nivaclé, with an epenthetic Ni *a* resolving the triconsonantal cluster in (1266). The cluster PM $^{*}s^{(*)}w$ yields Mk *su?*, PCh $^{*}s^{*}?$, PW $^{*}s$, whereas PM $^{*}stw$ is found in one example (1266), where it evolves in an idiosyncratic way in Chorote and Wichí.

- (1266) PM $^{*}stwú'n$, $^{*}stwún-its$ ‘king vulture’ > Ni *staβu'n*, *staβun-is* || PCh $^{*}2stúu'n$, $^{*}2stúun-is$ || PW $^{*}2istíwin$
- (1267) PM $^{*}s^{*}wúla'χ$, $^{*}s^{*}wúla-ts$ ‘anteater’ > Ni *s'βuklax*, *sβukla-s* || PCh $^{*}s^{*}2úlah$, $^{*}s^{*}2úla-s$ || PW $^{*}súlaχ$
- (1268) PM $^{*}[ji]s^{*}wun$ ~ $^{*}[ji]s^{*}wún$ ‘to like, to love’ > Mk *[ji]su?un* || Ni *[ji]s^{*}βun* || PCh $^{*}[2i]s^{*}2ún$

The PM clusters $^{*}sk$, $^{*}sl$, and $^{*}tl$ are resolved by vowel insertion in Chorote (PCh $^{*}2$) and Wichí (PW $^{*}i$) when tautosyllabic. In the only example, a heterosyllabic instance of $^{*}sk$ develops normally in Chorote. In Nivaclé, an epenthetic *a*

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breaks apart the cluster *tkl*, and in most dialects the PM sequence **sl* is reflected as *fkl* rather than *skl*.

- (1269) PM *(-)skä't 'mesh' > Ni -*stfa't* || PW **sikjet*
- (1270) PM **sláqha*(')*j*, **sláqhaj-its* 'wild cat' > Ni *fklåkxaj* ~ *sklåkxaj* (-is) || PCh **s²låhqaj?* ~ **s²låhqåj?* (*-is) || PW **silåqhåj*
- (1271) PM **tlú'k* 'blind' > Ni *taklu'k* || PCh **t²luk* || PW **tiluk^w*
- (1272) PM **?åsk'åla*(')*χ* 'widower' > Ni *?åstf'aklax* || PCh **?åsk'élah*

The PM clusters **qk* and **tts* occur in one etymology each. In Maká, they yield *qq* and *tts*. In Nivaclé, they are reflected as *k* and *ts*. In Chorote, **qk* is reflected as **Vk*, with the doubling of the preceding vowel.

- (1273) PM *(-)håqke? 'well' > Mk *haqqi?* river' || Ni -*xåke* 'dry well' || PCh *-*hååke?* artificial well'
- (1274) PM **låttsiki-ju'k* 'willow' > Mk *lattsiki-ju'k* || Ni *klåtsiki-juk*

Finally, the PM clusters **φq* and **φts* occur in one or two etymologies each and are reconstructed based on evidence from Nivaclé. In other languages, PM **φ* is either lost or separated from the following consonant by an epenthetic **i*. Due to the scarcity of examples, it is difficult to formulate a generalization.

- (1275) PM *-*φqató*(*-*l*) 'elbow' > Ni -(?V)*φkato*(-*k*) || PCh *-*qató?*(*-*l*) || PW *-*qáto*(*-*l^h*)
- (1276) PM **φtsåna*(')*χ* 'suncho (*Baccharis sp.*)' > Ni *φtsåanax* || PCh **sánah* || PW **x^witsåna*
- (1277) PM **φts-u'k* 'palm (*Copernicia alba*)' > Mk *fits-uk* || Ni *φts-u'k* || PCh **hwis<úk>* || PW **x^wits<uk^w*

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Some coronal consonants could apparently occur as syllabic nuclei. They are reconstructed only at the left margin of words in grammatical prefixes, with very few exceptions. This distribution aligns well with one's typological expectations: cross-linguistically, syllabic consonants are known to be preferred in grammatical affixes and at word edges (Bell 1978: 159–161). The inventory of syllabic consonants in our reconstruction is, however, rather surprising from a typological point of view: alongside the cross-linguistically common syllabic nasal **n* we posit two syllabic obstruents, **θ* and *t̪*. This counters Bell's (1978) generalization

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whereby “[i]f a language possesses syllabic obstruents, it possesses syllabic s or š [IPA [ʃ] – A.N., J.C.], given that it has nonsyllabic s or š [IPA [ʃ] – A.N., J.C.]”: note that Proto-Mataguayan clearly had a *s, but we have found no solid evidence to support the reconstruction of *s.¹⁰ Be it as it may, at this time we are unable to ascertain the details of phonetic implementation of the phonologically syllabic obstruents in Proto-Mataguayan. At least *t must have been articulated with an audible release or with a transitional (intrusive) vowel, as syllabic voiceless stops must be released in order to be audible before another obstruent (Bell 1978: 185). This is indirectly supported by the reflexes in the daughter languages, where one frequently finds an epenthetic vowel continuing what may have been a PM intrusive vowel (that way, an erstwhile syllabic consonant is unpacked into a sequence of a consonant and a vowel, with the preservation of the mora associated with the consonant in PM). The insertion of a segment in these cases must have occurred independently in the daughter languages, because the individual languages differ regarding the exact conditions and quality of the inserted vowels.

2.6.1 Syllabic *t

Syllabic *t occurs in a number of homophonous prefixes when they precede consonant-initial stems. These include the 3.POSS prefix, the 2.ACT prefix, and the feminine prefix in demonstratives. Before vowels, all of these prefixes surface as a regular (non-syllabic) *t-. Before consonants, these prefixes constitute a syllable on their own in PM, as evidenced by their reflexes in the daughter languages (this does not include the position before a glottal stop, as PM *t-? coalesces into *t'-).

In Maká, the third-person possessive and the second-person active prefixes both surface as t- before vowels (1278), whereas before consonants te- is found; in the latter case the prefix vowel harmonizes to a or o if the next syllable contains a low vowel (Gerzenstein & Gualdieri 2003: 106–107), as in (1279). Before Mk ?, the third-person possessive prefix surfaces as t-, a combination claimed to involve a syllabic t by Gerzenstein (1989: 67) and transcribed as *t'- in this book (1280). The feminine prefix in demonstratives is not preserved in Maká.

(1278) Maká (Gerzenstein 1994: 85, 91, 148)

¹⁰It is technically possible that some of the *sC sequences that we reconstruct for Proto-Mataguayan, as in PM *skā't 'mesh' or *stwú'n 'king vulture', could have in fact involved a syllabic *s, as suggested by the fact that Maká, Chorote, and Wichí typically insert a vowel before or after the *s in such words. However, it is equally possible to account for the evolution of these cognate sets by positing a non-syllabic *s for Proto-Mataguayan, as done in this book.

2 *Consonants*Table 2.4: PM prefixes of the shape **l-* and their reflexes

PM	function	position	Maká	Nivaçlé	PCh	PW
<i>*l-V...</i>	3.POSS	before V	l-V...	l-V...	<i>*hl-V...</i>	<i>*l-V...</i>
<i>*l-V...</i>	2.ACT	before V	l-V...	l-V...	<i>*hl-V...</i>	<i>*l-V...</i>
<i>*l-V...</i>	F.DEM	before C	—	—	<i>*hl-</i>	—
<i>*l-C...</i>	3.POSS	before C	le-C... / la-Ca... / lo-Co...	l-C... / la-CC... lo-Co...	<i>*h³-C...</i>	<i>*l-C...</i>
<i>*l-C...</i>	2.ACT	before C	le-C... / la-Ca... / lo-Co...	l-C... / la-CC... lo-Co...	<i>*h³-C...</i>	<i>*l-C...</i>
<i>*l-C...</i>	F.DEM	before C	—	l-C...	<i>*ha-C...</i>	—
<i>*l'-...</i>	3.POSS	before ?	l'...	t'...	<i>*t'...</i>	<i>*t'...</i>
<i>*l'-...</i>	2.ACT	before ?	?	t'...	<i>*<h³>t'-</i>	<i>*<l>t-</i>
					V	

- a. l-uk
3.POSS-grandson
'his/her grandson'
- b. l-exi?
3.POSS-mouth
'his/her mouth'
- c. l-otoj
2.ACT-dance
'you dance'
- d. l-ijsa
2.ACT-drink
'you drink'

(1279) Maká (Gerzenstein 1994: 85, 88, 148)

- a. le-k'inix
3.POSS-younger_brother
'his/her younger brother'

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- b. *ɬo-noki?*
3.POSS-elbow
'his/her elbow'
- c. *ɬe-fejejki?*
2.ACT-rotate
'you rotate'
- d. *ɬa-ma?*
2.ACT-sleep
'you sleep'

(1280) Maká (*Gerzenstein 1994*: 68)

- a. *ɬ-’i?*
3.POSS-juice
'its juice'

In Nivaâle, according to *Gutiérrez (2015b: 59, 62, 230–231)*, the third-person possessive and the second-person active prefixes surface as *t*- before vowels (1281) and before simplex onsets, a position where the prefixes in question are likely to form a syllable on their own (1282). (The feminine prefix in demonstratives, which only occurs before consonants, also surfaces as *t*-.) Before consonant clusters, *ɬa-* is found (1283). If the stem starts with a glottal stop, the prefixes in question coalesce with them as *t*-’ (1284).

(1281) Nivaâle (*Gutiérrez 2015b: 59, 62*)

- a. *ɬ-åse*
3.POSS-daughter
'his/her daughter'
- b. *ɬ-ám*
2.ACT-come
'you come'

(1282) Nivaâle (*Gutiérrez 2015b: 59, 62, 99, 231*)

- a. *ɬ-t’óx*
3.POSS-aunt
'his/her aunt'
- b. *ɬ-klí’ʃ*
3.POSS-word
'his/her word'

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- c. *ɬ-pé?*ja
2.ACT-listen
'you listen'
- d. *ɬ-pa*
F-DEM.NFH
'that (feminine, never seen by the speaker)'

(1283) Nivaâcle (Gutiérrez 2015b: 59, 62, 231)

- a. *ɬa-kté?*tʃ
3.POSS-grandfather
'his/her grandfather'
- b. *ɬa-ɸxúx*
3.POSS-toe
'his/her toe'
- c. *ɬa-ktfá?*
2.ACT-paddle
'you paddle'

(1284) Nivaâcle (Gutiérrez 2015b, Seelwische 2016: 123)

- a. *t-’í?*
3.POSS-liquid
'its broth'
- b. *t-’eɸén*
2.ACT-help
'you help'

In Chorote, the third-person possessive, the second-person active prefixes, and the feminine prefix in demonstratives surface as *hl-* before vowels or *h*-initial stems (1285) but as *hi-* before supraglottal consonants (1286). The *i* in the latter case goes back to the intrusive vowel *^o, as it causes the second palatalization but not the first palatalization in Chorote (see §8.2.1). If the stem starts with a glottal stop, the third-person possessive prefix coalesces with it as *t-* and the second-person active prefix as *hit-* (1287).

(1285) Iyojwa’aja’ (Drayson 2009: 132, 161, 169)

- a. *hl-ót*
3.POSS-scales
'its scales'

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- b. hl-́h
2.ACT-shovel
'you shovel'
- c. hl-aha
F-DEM:not_visible
'that.F (not visible)'

(1286) Iyojwa'aja' (Drayson 2009: 113, 122, 169)

- a. hi-ḱó?
3.Poss-hand
'his/her hand'
- b. hi-t́ét-e
2.ACT-throw-APPL
'you throw it for her/him'
- c. ha-na
F-DEM:outside_hands'_reach
'this.F (outside one's hands' reach)'

(1287) Iyojwa'aja' (Drayson 2009: 156)

- a. t-́t
3.Poss-breast
'her/his breast'
- b. hit-́ijasa'n
2.ACT-teach
'you teach'

In Proto-Wichí, the third-person possessive and the second-person active prefixes surface as *t- before vowels, as in (1288)–(1289), but as *t- before supralabial consonants, as in (1290)–(1291). If the stem starts with a glottal stop, the third-person possessive prefix coalesces with it as *t- and the second-person active prefix as *t- (1292). In the contemporary Wichí dialects, PW *t is variously reflected as *la*, *le*, or *ha* (see §9.2.1.13). The feminine prefix in demonstratives is not preserved in Wichí.

(1288) 'Weenayek (Claesson 2016: 234, 550)

- a. t-áwo?
3.Poss-flower
'its flower'

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b. †-ok

2.ACT-say

‘you say’

(1289) Lower Bermejeño Wichí ([Nercesian 2014](#): 166, 226)

a. †-omet

3.POSS-word

‘her/his word’

b. †-otax̄

2.ACT-be_fat

‘you are fat’

(1290) 'Weenayek ([Claesson 2016](#): 220, 438)

a. la-p'ot

3.POSS-lid

‘its lid’

b. la-t-’ek

2.ACT-T-eat

‘you eat’

(1291) Lower Bermejeño Wichí ([Nercesian 2014](#): 163, 237)

a. la-ñes

3.POSS-nose

‘her/his/its nose’

b. la-ta-qatay

2.ACT-T-cook

‘you cook’

(1292) 'Weenayek ([Claesson 2016](#): 96, 123)

a. t-’áte?

3.POSS-breast

‘her breast’

b. lat-’é’l

2.ACT-be_tired

‘you are tired’

The allomorphs of the 2.ACT prefix before a ?-initial stem in Chorote (Ijw/Mk *hit-*... < PCh **h^ət-*...) and 'Weenayek ('Wk *lat-*... < PCh **łt-*...) likely result from a

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morphological innovation whereby the inherited reflex **t-*... was augmented by **ɬ-*, the allomorph of the same morpheme found in consonant-initial stems.

2.6.2 Syllabic **n*

The reconstruction of a syllabic **n* for Proto-Mataguayan remains rather tentative. The first piece of evidence comes from the allomorphy patterns of several homophonous prefixes.

- (1293) PM **n-* / **n-* / **'n-* **'3.A/S_A.IRR'** > Mk *ne-* / *n-* || Ni *na-* / *n-* || PCh **ʔ^on-* / **n-* / **'n-* || PW **ní-...-a?* / **n-́...-a?* / **'n-́...-a?*
- (1294) PM **n-* / **n-* / **'n-* **'indefinite possessor'** > Mk *n-* || Ni *na-* / *n-* || PCh **ʔ^on-* / **n-* / **'n-*
- (1295) PM **n-* / **n-* / **'n-* **'2.P/S_P.RLS'** > Mk *<te>n-* / *<ta>n-* / *<to>n-* || Ni *na-* / *n-* || PCh **ʔ^on-* / **n-* / **'n-*

The 3.A/S_A.IRR and indefinite possessor prefixes both surface as *n-* before vowel-initial stems in all contemporary Mataguayan languages (except Iyojwa'aja and Manjui), but a moraic allomorph is found before supraglottal consonants (Mk *ne-*; Ni *na-*; I'w *in-* ~ *ŋ-*; 'Wk *ni-*, LB *ni-* < PW **ní-*). The 2.P/S_P.RLS follows a similar pattern, except that in Maká the prefix was augmented by the element *te-* / *ta-* / *to-* and is never moraic. At least in Chorote and 'Weenhayek, the prefixes in question fuse with the initial glottal stop of stems that start with a ? as *'n*.

The following examples show Mk *n-* occurring before vowel- (1296) and consonant-initial (1297) stems.

- (1296) Maká (Gerzenstein 1994: 90–91, 147, fn. 41)

- a. n-aqfinet
GNR-pestle
'pestle'
- b. n-ija
3.A/S_A.IRR-drink
'(that) s/he drink'
- c. n-ek'uwet
3.A/S_A.IRR-get_drunk
'(that) s/he get drunk'

- (1297) Maká (Gerzenstein 1994: 85–86, 96)

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- a. ne-tux
3.A/S_A.IRR-eat.TR
'(that) s/he eat it'
- b. no-t-otoj
3.A/S_A.IRR-3INTR-dance
'(that) s/he dance'
- c. na-wanqa
3.A/S_A.IRR-wash_hands
'(that) s/he wash their hands'

The following examples from Nivaçle show the allomorph Ni *n*- occurring before vowel-initial (or ?-initial) stems (1298) and the allomorph *na*- preceding stems that begin with supraglottal consonants (1299).¹¹

- (1298) Nivaçle (Campbell et al. 2020: 159, 256, 414)

- a. n-?a'kphiij [nak'phi:]
GNR-shoe
'shoe'
- b. n-ulåx
2.P/S_P.RLS-be_tired
'you are tired'
- c. n-åk
3.A/S_A.IRR-go
'(that) s/he go'

- (1299) Nivaçle (Campbell et al. 2020: 255, 527)

- a. na-pånt'ax
2.P/S_P.RLS-jump_well
'you can jump high'
- b. na-n-tſa'x
3.A/S_A.IRR-CISL-carry
'(that) s/he bring'

Of the Chorote varieties, Iyo'awujwa' is the one that best preserves the archaic allomorphy patterns. The following examples show the allomorph I'w *n*- occurring before vowel-initial stems (1300), I'w ?*n*- before ?-initial stems (1301), and

¹¹Even before consonants, the 3.A/S_A.IRR prefix can surface as *n*; in this case it syllabifies as a coda of the irrealis conjunction *ka?*.

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the allomorph *in-* ~ *ŋ-* preceding stems that begin with supraglottal consonants (1302), with the alveolar nasal assimilating to *m* before the labial stop *p*.¹² The examples below are mostly from Gerzenstein (1983), but we have altered her transcriptions in order to match our conventions. (1300a) and (1301) are from Carol's field data; note that Gerzenstein (1983: 77) mistranscribes I'w 'n as *n* (nóxtele? 'heart', *nafwés* 'body').

- (1300) Iyo'awujwa' (Gerzenstein 1983: 77)

- a. n-óp'ale?
2.P/S_P.RLS-hiccup
'you hiccup'
- b. n-é'le?
2.P/S_P.RLS-be_dry
'you are dry'
- c. n-áyah
2.P/S_P.RLS-be_fat
'you are fat'

- (1301) Iyo'awujwa'

- a. n-?óhtele [?"nóhtele?]
GNR-heart
'heart'
- b. n-?ahwís [?'na'hwís]
GNR-body
'body'

- (1302) Iyo'awujwa' (Gerzenstein 1983: 69, 77)

- a. ?in-tówe
GNR-belly
'belly'
- b. ɻ-tókɻo?
GNR-face
'face'

¹²Other Chorote varieties have innovated in that the moraic allomorph *?in-* is now used there before vowel-initial stems. With ?-initial stems, however, one finds the non-moraic allomorph of the indefinite possessor prefix and, in some cases, of the 2.P/S_P.RLS and 3.A/S_A.IRR prefixes both in Iyojwa'aja' and Manjui.

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- c. m-póxs-ej
GNR-beard-PL
'beards'
- d. ?im-páxsat
GNR-lip
'lip'
- e. ?in-káhej
2.P/S_P.RLS-be_rich
'you are rich'
- f. ?in-tój?
2.P/S_P.RLS-be_tall
'you are tall'
- g. ?in-hwíhl^len
2.P/S_P.RLS-dream
'you dream'

In Wichí, the 3.A/S_A.IRR prefix is reflected as PW **n*- before vowel-initial stems, as PW **ní*- before stems that start with a supraglottal consonant, and as PW **ñ*- before ?-initial stems.

(1303) 'Weenhayek (Claesson 2016: 125, 544)

- a. n(i)-ek^w-a [nẽ:k(w)a?]
3.NEG.IRR-go-NEG.IRR
'lest s/he go'
- b. n(i)-t(a)-áhuj-a [nĩ:ta'hūja?]
3.NEG.IRR-T-speak-NEG.IRR
'lest s/he speak'
- c. n(i)-?ip-a [ñi:pa?]
3.NEG.IRR-cry-NEG.IRR
'lest s/he cry'

Finally, syllabic **n* may have also apparently occurred as part of roots, as in the following example.

(1304) PM **pnä'k* / *-*nnä'k* 'spoon' > Mk *nene'k* || PW *-<ñ>*nnek* / -<qá>*nnek*

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Syllabic *t is reconstructed for one morpheme, the T-class third-person prefix *t- (in Nivaclé and Wichí, its reflex is also found in some other inflected forms and is best analyzed as a T-class marker rather than a person index). Before vowels, its surfaces as regular (non-syllabic) *t- in Proto-Mataguayan and in all contemporary languages (this is also the allomorph used in Chorote with *h*-initial stems). Before supraglottal consonants, it has a moraic allomorph in almost all contemporary languages (which we reconstruct as PM *t̪-), unless it can syllabify as a coda to a preceding morpheme. Nivaclé is an exception in that the moraic allomorph shows up only before *tʃ*('), but not before other consonants. In stems that start with a glottal stop, PM *t-? coalesces into *t'-.

(1305) Maká (Gerzenstein 1999: 118, 121, 244, 329)

- a. t-altsaj
3.T-beget
'she begets'
- b. te-lixtsij
3.T-sing
's/he sings'
- c. ne-t-lixtsij
3.A/S_A.IRR-3.T-sing
's/he snores'
- d. t-'an
3.T-win
's/he wins'

(1306) Nivaclé (Seelwische 2016: 248, 266, 270, 282)

- a. t-itsin
3.T-get_cured
's/he gets cured'
- b. t-klå'j
3.T-play
's/he plays'
- c. ta-tʃ'an
3.T-obey
's/he obeys'

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- d. *la-t-tʃ'an*
2.ACT-T-obey
'you obey'
- e. *∅-t-'akut*
3-T-steal
's/he steals'

(1307) *Iyojwa'aja'* (Carol 2014b)

- a. *t-ámti?*
3.T.RLS-speak
's/he speaks'
- b. *ti-més*
3.T.RLS-be_two
'they are two'
- c. *ti-l̪áki'n*
3.T.RLS-play/dance
's/he plays/dances'
- d. *ta-kásit*
3.T.RLS-stand
's/he stands'
- e. *t-́ósi?*
3.T.RLS-run
's/he runs'

(1308) *Iyo'awujwa'* (Gerzenstein 1983: 75)

- a. *t-ákihnán*
3.T.RLS-hunt
's/he hunts'
- b. *ti-lákjen*
3.T.RLS-play
's/he plays'
- c. *te-kénixsjen*
3.T.RLS-sing
's/he sings'

(1309) *Manjui* (Carol 2018)

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- a. t-án
3.T.RLS-shout
's/he shouts'
 - b. t-hój?
3.T.RLS-return_home
's/he returns home'
 - c. ti-khán
3.T.RLS-dig
's/he digs'
 - d. t-'as
3.T.RLS-step
's/he steps'
- (1310) 'Weenhayek (Claesson 2016: 375, 426, 431)
- a. Ø-t-útk^{jej}?
3-T-sow
's/he sows'
 - b. Ø-ta-qásit
3-T-stand_up
's/he stands up'
 - c. ?õ-t-qásit
1SG-T-stand_up
'I stand up'
 - d. Ø-t-'áf
3-T-ask
's/he asks'
- (1311) Lower Bermejeño Wichí (Nercesian 2014: 239-40)
- a. Ø-t-af^whi
3-T-cry
's/he cries'
 - b. Ø-ta-qatin
3-T-jump
's/he jumps'
 - c. ɳ-t-qatin
1SG-T-jump
'I jump'

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- d. Ø-t-’on
- 3-T-shout
- ‘s/he shouts’

In Chorote and Wichí, there are prefixes of the same shape that present an identical allomorphy pattern. In Chorote, *t- / ti- / t'* (in Iyojwa’aja’ also *ta-* before /k/) is used in the impersonal forms of verbs. In Wichí, the prefix *t- / ta-* is found in a closed set of nouns that denote body parts (Nercesian 2014: 164–165). It is, however, unclear whether they are related to the 3.T prefix of Proto-Mataguayan and whether they represent retentions or innovations.

2.6.4 Syllabic consonants as opposed to consonant clusters

An anonymous reviewer inquires whether what we reconstruct as syllabic consonants could be replaced with plain consonants as first members of consonant clusters. In this regard, it should be noted that the reflexes of syllabic consonants often contrast with those of word-initial non-syllabic consonants followed by another consonant.

For examples, PM **tk* and **tk* have distinct reflexes in varieties such as ’Ween-hayek or Vejoz. PM **tk* is reflected as ’Wk *k^j* word-initially, as in PM **tkénaX₁₂* ~ **tkánaX₁₂* > ’Wk *k^jénax* ‘mountain, hill’. Conversely, PM **tk* is reflected as ’Wk *tak^j*, as in PM **t-kúm=ex* > ’Wk *ta-k^júm=ex* ‘s/he grabs it’.

Similarly, the reflexes of PM **tl* contrast with those of PM **tl*. Word-initially the Proto-Mataguayan sequence **tl* evolves into Ni *takl̩* and ’Wk *til*, as in PM **tlú’k* > Ni *takl̩u’k*, ’Wk *tilúk* ‘blind’. By contrast, when PM **t* combines with an **l*-initial verbal root, one finds the reflexes Ni *tkl̩* (with loss of syllabicity), as in Ni *t-kl̩a”j* ‘s/he dances’, and ’Wk *tal*, as in ’Wk *ta-lik”j*i? ‘in good condition, not shabby’. Unfortunately, we do not know of any **l*-initial T-class verb reconstructible to Proto-Mataguayan.

The reconstruction of PM **n* and **t̩* is less questionable than that of PM **t*, since these sounds are preserved even synchronically in some cases, as in I’w *n-tók’o?* ‘face’ or Ni *t̩-kl̩i”j* ‘his/her word’.

3 Vowels

This chapter deals with the reconstruction of the Proto-Mataguayan vowels. We reconstruct an inventory composed of seven vowels (PM *i, *e, *ä, *a, *å, *o, *u), as discussed in §3.1–§3.7.

3.1 PM *i

PM *i is typically preserved as *i* in all daughter languages: Maká, Nivaâle, Proto-Chorote, and Proto-Wichí. In Maká, it merges with PM *e, which also yields Mk *i* (see §3.2, §6.2.1). Irregular reflexes include Mk *u* in (39); PCh *a in (4), probably due to a sporadic metathesis; and PW *u in (51), *o in (52)–(53). In (36), PM *i is unexpectedly lost in Nivaâle, whereas the Maká form is restructured. The variation *i* ~ *e* in Nivaâle in (22) is likewise irregular.

- (1) PM *-á(-j^h)-xi?(*-l) ‘mouth’ > Mk -exi?(-l) || Ni -afí (-k) || PCh (?) *-á<aj?> || PW *-t-áj-hi (*-l^h)
- (2) PM *n-ájin ‘to go first’ > Mk [wa]<th>ajin || Ni n-ájin || PCh *[?i]<n>ájin
- (3) PM *-áni’s ‘stinger’ > Mk 3 t-ani’s || Ni 3 t-ánis || PCh 3 *hl-ánis || PW (?) 3 *t-á’ni
- (4) PM *-pháji’x ‘right’ > Mk -feji’x‘left’ || Ni -phaji’ʃ || PCh *-hwíjah
- (5) PM *-phálits ‘daughter-in-law, sister-in-law’ > Mk -felits || Ni -phaklís<?a>‘sister-in-law’ || PCh *-hwélis‘daughter-in-law’
- (6) PM *[ji]phi’j ~ *[ji]phi’j ‘not to be afraid’ > Ni [ji]phi’j || PCh *[?i]hwíj? || PW *[?i]xʷíj-eh
- (7) PM *phi’ját ‘cold weather, south wind’ > Ni phi’jat || PCh *hwi’jét || PW *xʷi’jét
- (8) PM *[ji]phi’k ~ *[ji]phi’k ‘to hide’ > Ni [ji]phi’tf || PCh *[?i]hwík
- (9) PM *phiñá(‘)χ ‘crab’ > Ni phiñax || PCh *hwíneh
- (10) PM *phi’s ‘leech’ > Ni phi’s || PW *xʷis
- (11) PM *phiñ-kat ‘palm grove (*Copernicia alba*)’ > Mk fis-ket || Ni phiñ-tfat
- (12) PM *[j]ik ‘she/he goes away’ > Mk ik || Ni [j]itʃ || PW *[j]iq

3 Vowels

- (13) PM *?[j]ip ‘she/he cries’ > Mk *ip* || Ni *[j]ip* || PW *?[j]ip
- (14) PM *-í(t)s’i(?) (*-l) ‘resin, sap’ > Ni *-its’i(-k)* || PCh 3 *hl-íts’i? (*-l) || PW *-t-íts’i
- (15) PM *-(i)ts ‘PL’ > Mk *-(i)ts* || Ni *-(i)s* || PCh *-(i)s || PW *-(i)s
- (16) PM **jijá’ts* ‘dew’ > Mk *ije’ts* || Ni *jija’s* || PCh *?ijés-tah || PW *?ijás
- (17) PM **jiju’s* ~ **jijú’s* ‘wax’ > Ni *jiju’s* || PCh *?ijús
- (18) PM **jiná’t*, **jinát-its* ‘water’ > Ni *jiná’t*, *jinát-is* || PCh *?i’nat (*-es) || PW *?iná’t (*-es)
- (19) PM *{j/?}is{a/å/e}’χ ~ *{j/?}is{á/å/e}’χ ‘sand’ > Mk *isa’χ* || PCh *?isáh ~ *?isáh
- (20) PM **jixá(?)* ~ **jixá(?)* ‘to be true’ > Mk *ixa* || Ni *jixá?* || PCh *?ihá<wet>
- (21) PM *-kífah, *-kífa-ts ‘neighbor’ > Mk *-kife(-ts)* || Ni *-tſiſa(-s)* || PCh *-kíhwah, *-kíhwa-s
- (22) PM *-kilá?(*-wot) ‘elder brother’ > Ni *-tſekla?* / *tſikla-(-βot)* || PCh *-kilá?(*-wot) || PW *-kíila
- (23) PM *-kitá?(*-wot) ‘elder sister’ > Ni *-tſita?* (-βot) || PCh *-kitá? (*-wot) || PW *-kíita
- (24) PM *-k’íniX, *-k’íniX-ts ‘younger brother’ > Mk *-k’íniX* || Ni *-tſiniʃ* || PCh *-k’ínih, *-k’ínihi-s || PW *-k’íniχ, *-k’ínihi-s
- (25) PM *-k’ínxā? ~ *-k’ínxā? (*-wot) ‘younger sister’ > Mk *-k’ínxā?* ~ *-k’ínxā?* || Ni *-tſinxā* (-βot) || PCh *-k’íhnā? (*-wot) || PW *-k’ínhå
- (26) PM *láp’ih ~ *láp’ih ‘snail’ > Ni *kláp’i* || PCh *láp’ih
- (27) PM *lim ~ *lím ‘white’ > Ni *klím* || PCh *lím-
- (28) PM *-li’x, *-lix-áj^h ‘language, word’ > Mk *-lix<e?>* || Ni *-kliʃ*, *-klif-aj* || PCh *-lih, *-lih-áj^h
- (29) PM *-li’k ~ *-li’k, *-li-j^h ‘thread’ > Ni *-li’f*, *-li-j<is>* || PCh *-hlík, *-hlí-j^h
- (30) PM *mijó? (*-l) ‘savannah hawk’ > Mk *mijo(-l)* || Ni *mijo(-k)* || PCh *mijó? (*-l) || PW *mijóh
- (31) PM *(-)niják, *(-)nijhå-j^h ‘rope, cord’ > Mk *(-)nijak*, *(-)nijha-j* || Ni *-niják*, *-nijxå-j* || PCh *niják, *nijhå-j^h || PW *niják^w, *nijhå-j^h
- (32) PM *-nji’x ‘smell’ > Mk *-nji’x* || Ni *-niʃ* || PCh *-níh || PW *-nijχ
- (33) PM *[ji]nxi’wán ‘to smell’ > Mk *[ji]nxi’wen* || PCh *[?i]hni’wen
- (34) PM *(-)náji’x, *(-)nájx-aj^h ‘path’ > Ni *náji’ʃ*, *(-)nájf-aj / -náji’ʃ* || PCh *(-)nájih, *(-)náhj-aj^h || PW *(-)nájiχ, *(-)nájh-aj^h
- (35) PM *pitéχ, *pité-ts ‘long’ > Ni *pitex*, *pite-s* || PW *pitáχ, *pité-s

- (36) PM **[ji]pónit-ex* ‘to fill’ > Mk *[j]<o>pon-het-ix* || Ni *[ji]pont-e* || PCh **[?i]pónit-eh* || PW **[?i]tá-ponit-ex*
- (37) PM **sténi*(?) ‘white quebracho’ > Mk *sitin-u’k* || PCh **?sténi?* || PW **?isté’nih*
- (38) PM **tiɸ* ~ **tiɸ* ‘to spend’ > Ni *tiɸ* || PCh **[?i]tíℳ*
- (39) PM **ti’ɸ* ‘to suck breast’ > Mk *tu’f/-tu’f* || Ni *ti’ɸ* || PCh **[?i]tíℳ* || PW **tip*
- (40) PM **tijáχ* ‘to shoot, to throw’ > Mk *tija’χ/-tija’χ* || Ni *tijá’x* || PCh **[?i]tíjáh* || PW **tijáχ*
- (41) PM *-*ti’ɬ* ‘to spin, to sew’ > Mk *[ji]tiɬ* || Ni *ti’ɬ* || PCh **[j]<á>tiɬ*
- (42) PM **tiɬá’x* ‘to carry on one’s shoulders’ > Mk *tiɬo’x / -tiɬo’x* || Ni *tiɬá’x* || PCh **[?i]tíhláh* || PW **tiɬáχ*
- (43) PM **tim* ‘to swallow’ > Mk *tim-xu?* / -*tim-xu?* || Ni *tim* || PCh **[?i]tíℳ* || PW **tim*
- (44) PM **tis* ‘to invite, to pay’ > Mk *tis-ix / -tis-ix* || Ni *tis* || PCh **[?i]tíℳ* || PW **tis*
- (45) PM **títe(?)k*, **títhe-j^h* ‘plate’ > Ni *(-)titetʃ, (-)titxe-j* || PCh **títek*, **títhe-j^h*
- (46) PM **ti’x* ‘to dig’ > Mk *ti(?)x-APPL / -ti(?)x-APPL* || Ni *ti’ʃ* || PCh **[?i]tíh-ij?* || PW **tiχ*
- (47) PM *-*t’ij* ~ *-*t’íj* ‘to move’ > Ni *[βa]t’ij* || PCh **[?i]t’ij?*
- (48) PM *-*t’íle?*(*-*j^h*) ‘rheum’ > Mk *-t’ili?(-j)* || Ni *-t’iklē(-j)* || PCh *-*t’ile-*
- (49) PM **t’isá?* ~ *t’isá?*(*-*l*) ‘cream-backed woodpecker (*Campephilus leuco-pogon*)’ > Mk *t’isa?(-l)* || Ni *t’isá?(-k)* || PCh **t’isá?(-l)*
- (50) PM **ts’áts’ih*, **ts’áts’i-l* ‘rufous hornero’ > Mk *ts’its’i(-l)* || Ni *ts’ats’i(-k)* || PCh **sát’ih* || PW **táts’i*
- (51) PM **wije?* ‘caraguatá (*Bromelia serra*)’ > Ni *βije? ~ jije?* || PCh **wijé?* || PW **wuje?*
- (52) PM **wósitseχ* ‘black algarrobo fruit (*Prosopis nigra*)’ > Mk *ositsaχ* || Ni *βaitse* || PW **wósotsaχ*
- (53) PM **wósits-u’k* ‘black algarrobo tree (*Prosopis nigra*)’ > Mk *osits-u’k* || Ni *βaitse-juk* || PCh **wósis-uk* || PW **wósots-uk^w*
- (54) PM *-*wli?* ~ *-*wli?*, *-*wtí-ts* ‘rib’ > Mk *-wetli?(-ts)* || Ni *-βtli / -βtli?(-s)* || PCh *-*hlí<s>*
- (55) PM *-*xíj^h* ‘recipient’ > Mk *-xij* || Ni *-sij / -xij* || PW *-*híh*
- (56) PM **?ánitih* ‘wasp (*sp.*)’ > Ni *?ániti* || PCh **?ánitih*

3 Vowels

- (57) PM *-i̥(-l) 'liquid, juice' > Mk ɬ-i? (-l) || Ni -i? (-k) || PCh *-i? (-l) || PW *-t-í (*-l^h)
- (58) PM *-[j]im 'to dry out' > Mk [j]im || Ni [j]im || PCh *-[j]ím-APPL || PW *-[j]im
- (59) PM *?is 'good' > Ni ?is || PCh *?is || PW *?is
- (60) PM *?ítå(?)χ, *?ítå-ts 'fire' > Ni ?itåχ, ?ítå-s || PCh *?ítåh, *?ítå-s || PW *?ítåχ, *?ítå-s

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaclé, Chorote and Wichí), whose PM age is thus questionable.

- (61) PM *-[j]åfti(?)t 'to spin' > Mk [j]afti(?)t || Ni [j]åfti^t
- (62) PM *-[j]åtsi(?)j 'to spill' > Mk [j]atsij-xu? || Ni [j]åtsij
- (63) PM *φaxi(?)j ~ *φäxi(?)j 'green ameiva' > Mk fexij || Ni φasij
- (64) PM *φílå(?)X₁₂ 'pocote (*Solanum sp.*)' > PCh *hwílåh || PW *xʷílåχ
- (65) PM *-φítan 'to dream' > PCh *[?i]hwíhlan || PW *[t]xʷítan
- (66) PM *-φítä(?)k 'dream' > PCh *-hwíhlek || PW *-xʷíteq
- (67) PM *φinåk, *φinhå-j^h 'tobacco' > Mk finak, finha-j || Ni φinåk, φinxå-j
- (68) PM *-φ'i(?) 'foot' > Mk -f'i? || Ni -p'i-k'o 'heel'
- (69) PM *him (*-its) 'coati' > Mk him (-its) || Ni xim (-is)
- (70) PM *(-)jipku?(?-l) 'hunger' > Mk (-)jipku? (-l) || Ni jipku? / -jipku (-k)
- (71) PM *ji?ixåtaχ, *ji?ixåta-ts 'ocelot' > Mk i?ixataχ, i?ixate-ts || Ni jixåtax, jixåta-s
- (72) PM *ktá'nih 'Chaco tortoise' > PCh *kitá'nih || PW *k^jtá'nih
- (73) PM *[t]k'ij 'to spit' > Mk [te]k'ij || Ni [t]<'a>k'ij
- (74) PM *låttsiki-ju'k 'willow' > Mk latttsiki-ju'k || Ni kłåtsiki-juk
- (75) PM *-i'wte? 'heart' > Mk -liti? || Ni -ti'βte
- (76) PM *níltsa(?)X₁₂, *níltsX₁₃a-ts 'white-lipped peccary' > PCh *-i^hnílsah, *-i^hnílsa-s || PW *nítsaχ, *nítsha-s
- (77) PM *på'jih 'frog (*Leptodactylus sp.*)' > PCh *på'jih || PW *på'jih
- (78) PM *[t]qásí(?)t / -qásí(?)t 'to stand' > PCh *[t^h]qásit || PW *[t]qásit; IMP *qasít
- (79) PM *qatsíwo(?) 'limpkin' > PCh *qasíwo<?oh> || PW *qatsíwo
- (80) PM *sija(?)χ, *sijaχ-is 'fish (sp.)' > Mk sija(?)χ, sijaχ-its || Ni sijåx (-is)

- (81) PM **silóʔtåɸ*V[?] **siwóʔtåɸe* ‘Caatinga puffbird’ > PCh **silóʔtåhwV?* || PW **siwótåxʷe*
- (82) PM **tiʔj* ‘to weave’ > Mk *tij* / -*tij* || Ni *tiʔj*
- (83) PM **wkína*(*)X₁₂*, **wkínX₁₃a-ts* ‘metal’ > PCh **wókínah*, **wókínha-s* || PW **kínaχ*, **kíñha-ts*
- (84) PM **wóp’ih* ~ **wóɸ’ih* ~ **móp’ih* ~ **móɸ’ih* ‘white egret’ > PCh **wóp’ih* || PW **móp’i*
- (85) PM *-*ʔå*(*)l*, 3 **[j]i*(*)l* ‘to die’ > PCh **[j]á*(*)l* || PW **[j]il^h*
- (86) PM **ji’no*, **ji’nó-l* ‘man’ > PCh **ji’nó?*(*-l*) || PW **hi’no*, **hi’nó-l^h*
- (87) PM **?utsi*(*h*) (*-l*) ‘eel’ > Mk *utsi* (*-l*) || Ni *?utsi* (*-k*)

In Chorote and Wichí, PM *i lowers to *e before *ts, provided that there is a low vowel in the preceding syllable. This regularly happens when the syllable has *t as the onset, but one example with PM *x > PCh/PW *h has also been identified.¹ This proposed sound change admittedly lacks a clear phonetic motivation, but it still seems to be regular. As a consequence, the nominal plural suffix -is in the contemporary Chorote and Wichí varieties shows the allomorph -es, an alternation best described as an instance of progressive height harmony in these languages.

- (88) PM *-*át-its* ‘drink.PL’ > Ni *-át-is* || PCh *-*át-es*
- (89) PM **jinát-its* ‘water.PL’ > Ni *jinát-is* || PCh **ji’nát-es* || PW **?inát-es*
- (90) PM **qati’ts*, **qatits-él* ‘star’ > Ni *kati’s* || PCh **qatés*, **qates-él* || PW **qates*, **qatéts-él^h*
- (91) PM *...*X₂₃a’t-its* ‘earth.PL’ > Ni <*kots*>*xat-is* || PCh *<*a*>*h<n>át-es* ~ *<*ʔå*>*h<n>át-es* || PW *<*hon*>*hat-es*
- (92) PM *-*ʔåx-íts* ‘skins, barks’ > Mk *-ʔax-its* || Ni *-ʔåx-is* || PCh *-*ʔåh-és* || PW *-*t-’åh-és*

The examples below show that word-initial instances of PM *ji > *?i changed to PCh *?a and PW *ha preceding a glottalized consonant followed by a low vowel (§8.1.2.4, §9.1.2.4).

- (93) PM **ji’já*[?]*X₁₂* ‘jaguar’ > Ni *ji’já*[?]*x* || PCh **ʔa’jáh* || PW **ha’jáχ*

¹A somewhat similar change has affected the nominal plural suffix PM *-its in some Nivaclé varieties: in the Shichaam Lhavos dialect, -is varies with -es after coronals, whereas in the Chishamnee Lhavos dialect the allomorph -es may be found even after consonants such as *p* (Gutiérrez 2015b: 276–277).

3 Vowels

- (94) PM **ji'la?*, **ji'la-j^h* ‘tree’ > Ni *ji'klå?* (-j) || PCh **?a'lå?* (*-j^h) || PW **ha'lå*, **ha'lå-j^h*
- (95) PM **jit'å?*, **jit'å-l* ‘vulture’ > Ni *jit'å?* (-k) || PCh **?at'å?* (*-l) || PW **hat'å?*

3.2 PM *e

PM *e is typically preserved as *e* in Nivaclé, Proto-Chorote, and Proto-Wichí. In Maká, it yields *i* and thus merges with PM *i. In Chorote and Wichí, it merges with PM *ä instead. Special reflexes of PM *e are found before the uvular fricative PM *χ, as discussed later in this section. Some representative examples follow. Note the irregular reflexes in Maká in (138), in Nivaclé in (144), and in Chorote in (101).

- (96) PM *-aje'k ~ *-ajé'k ‘honey comb’ > Ni *-aje'tʃ* || PCh *-q-ájek
- (97) PM *-áse? ‘daughter’ > Mk *-asi?* || Ni *-áse* || PCh *-áse? || PW *-t-áse
- (98) PM *-e, *-é-l ‘thorn’ > Mk 3 *t-i?* || Ni *-e?* (-k) || PCh 3 **hl-é?* (*-l) || PW *-l-é
- (99) PM *-éj(*-its) ‘name’ > Mk *-ij(-its)* || Ni *-ej(-is)* || PCh *-éj?(*-is) || PW *-t-éj(*-is)
- (100) PM *-ej^h ‘**APPL:DISTAL**’ > Mk *-ij* || Ni *-ej* || PCh *-ej^h || PW *-ej^h
- (101) PM *(-)φełek ~ *-éłe- ~ *-eté- ‘mortar’ > Mk *(-)fiłik* || Ni *-fełetsʃ* || PCh *(-)hwVhlek || PW *xʷéłeq
- (102) PM *(-)φétä'ts ‘root’ > Mk *fitets* || Ni *-φeta's* || PCh *-hwéetus || PW *(-)xʷétes
- (103) PM *φkéna(?)χ ‘north wind, north’ > Ni *φtſenax* || PCh *hw^hkénah
- (104) PM *(-)háqke? ‘well’ > Mk *haqqi?* ‘river’ || Ni *-xáke* ‘dry well’ || PCh *-háåke? ‘artificial well’
- (105) PM *k'ék'eh ‘monk parakeet’ > Ni *tf'etʃ'e* || PCh *kék'eh || PW *k'ék'j'e
- (106) PM *[ji]kén ‘to send’ > Mk *[j]<u>kin* || Ni *[ji]tſen* || PCh *[?i]kén || PW *[?i]k^hén
- (107) PM *-ke?(*-j^h) ‘feminine’ > Mk *-ki?* (-j) || Ni *-tſe* / *-ke* (-j) || PCh *-ke?(*-j^h) || PW *-k^he (*-j^h)
- (108) PM *-kφe(?) (*-j^h) ‘ear’ > Mk *-kfi?* (-j) || Ni *-kφe?* (-j) || PW *-(t-)k^we<j> / *-(t-)k^we- ‘arm, hand’
- (109) PM *-k'áxe? (*-l) ‘arrow’ > Mk *-qaxi?* (-l) || Ni *-k'áxe* || PCh *-k'áhe? (*-l) || PW *-k^háhe (*-l^h)
- (110) PM *látseni(?) ‘chañar fruit’ > PCh *létſeni? || PW *létſe'nih
- (111) PM *látsen-u'k ‘chañar plant’ > Mk <xu>letsin-u'k || PCh *léseni-k || PW *létſen-uk^w

3.2 PM *^e

- (112) PM *-lēts 'offspring' > Mk -lits || Ni -k̄les || PCh *-lés || PW *-lés
- (113) PM *[ji]lē'x 'to wash' > Mk [ji]lix-uʔ 'to clean' || Ni [ji]k̄le'ʃ || PCh *[ʔi]lēχ || PW *[ʔi]lēχ
- (114) PM *lkéte 'squash' > Mk lekiti || PCh *kéte?
- (115) PM *(-)lútse'x, *(-)lútsxe-ts 'bow' > Ni k̄lutseʃ / -k̄lutse'ʃ, (-)k̄lutsse-s || PCh *(-)lúseh (*-es) || PW *(-)lútseχ, *(-)lútse-s
- (116) PM *teł 'white snail' > Ni teł || PW *teł
- (117) PM *(-)t̄é(?)t 'firewood' > Mk t̄it<u?> || PCh *-<ʔa>hlét ~ *-<ʔå>hlét || PW *-t̄é
- (118) PM *me(?) ~ *mé(?) 'otter' > Mk mi? || Ni me? || PCh *mé?
- (119) PM *njánxte? 'tapeti rabbit, cavy' > Mk nijaxti? || Ni nánxate || PCh *náhåte? || PW *náte
- (120) PM *[ji]pé'j-a? 'to hear' > Mk [ji]pi'j-e? || Ni [ji]pe'j-a || PCh *[ʔi]pé'j-a?
- (121) PM *péta(?)j, *pétaj-its 'rain' > Mk piłej (-its) || PCh *péhlaj? || PW *pétaj^h, *pétaj-is
- (122) PM *-pe(?), *-pé-l 'fat' > Ni -<a>pe? (-k) || PCh *-pé? (*-l) || PW *-pe(?)
- (123) PM *-pxúse? (*-j^h) 'beard' > Mk -<a>pxusi? (-j) || Ni -påse (-j) || PCh *-púse? (*-j^h) || PW *-påse (*-j^h)
- (124) PM *-qéj (*-its) 'costume' > Ni -kej (-is) || PCh *-qéj? (*-is) || PW *-qéj (*-is)
- (125) PM *[ji]selán 'to spank' > Mk [j]<eq>silan 'to spank' || PCh *[ʔi]selán 'to store'; *[ʔi]selán-eh 'to prepare'
- (126) PM *sténi(?) 'white quebracho' > Mk sitin-u'k || PCh *sténi? || PW *isté'nih
- (127) PM *-tátse? (*-j^h) 'eyelash' > Mk -tetsi? (-j) || Ni -tátse (-j) || PCh *-táse? (*-j^h)
- (128) PM *-te?, *-té-j^h 'eye' > Mk -t<o?> (-j) || PCh *-ta-té? (*-j^h) || PW *-t(a)-te? (*-j^h)
- (129) PM *títe(?)k, *títhe-j^h 'plate' > Ni (-)titetʃ, (-)titxe-j || PCh *títek, *títhe-j^h
- (130) PM *-t(á)ko-se? (*-j^h) 'eyebrow' > Mk -tko-si? (*-j) || PCh *-tóko-se? (*-j^h) || PW *-ták'o-se? (*-j^h)
- (131) PM *-tséwte(?) (*-j^h) 'tooth' > Ni -tseβte (-j) || PW *-tsóte (*-j^h)
- (132) PM *-t'é-l 'tears' > Mk -t'i-l || Ni -t'e<k̄l>-is || PCh *-t'é<l>-is
- (133) PM *-t'ile? (*-j^h) 'rheum' > Mk -t'ili? (-j) || Ni -t'ik̄le (-j) || PCh *-t'ile-
- (134) PM *wije? 'caraguatá (*Bromelia serra*)' > Ni βije? ~ jije? || PCh *wijé? || PW *wuje(?)
- (135) PM *-w(t)s'é (*-l) 'belly' > Ni -βts'e (-k) || PCh *-ts'é? (*-l) || PW *-ts'é (*-l^h)

3 Vowels

- (136) PM *²wäle²k ‘to walk’ > Mk -<i>²welki-²met‘to limp’ || Ni βaklē²tf || PCh *[ʔi]²wélek
|| PW *²weleq
- (137) PM *-xäte²k, *-xäthe-j^h ‘head’ > Ni -fate²tf, -f²atxe-s || PCh *-hétek, *-héhte-j^h
|| PW *-t-éteq, *-t-éthe-j^h
- (138) PM *xéjà? (*-l) ‘bat’ > Mk xaja? (-l) || Ni seja? (-k) || PCh *<ʔa>héja? (*-l)
- (139) PM *xélä-ju²k ‘tree (sp.)’ > Ni sekłå-juk || PCh *hél-ek || PW *hél-ek^h
- (140) PM *(-)X₂₃pél ‘shadow’ > Ni xpek || PCh *-pél || PW *hpél^h / *-hpel^h
- (141) PM *X₂₃wé²lah, *X₂₃wé²la-ts ‘moon’ > Ni xiße²la (-s) || PCh *wé²lah, *wé²la-s
|| PW *wé²lah
- (142) PM *ʔaqáje²k ‘wild honey’ > Ni ʔakåjetf || PW *ʔaqájeq
- (143) PM *-ʔáX₂₃te(?) (*-j^h) ‘female breast’ > Ni -ʔaxte (-j) || PCh *-ʔáhate? (*-j^h)
|| PW *-t-’áte (*-j^h)
- (144) PM *ʔéja? (*-l) ‘mosquito’ > Mk ije? (-l) || Ni jija? || PCh *ʔéja? (*-l)
- (145) PM *[j]éjxäts-han ‘to teach’ > Mk [j]ixats<hen> || Ni [j]ejxats-xan / -ʔejxats-xan
|| PCh *'[j]éjåhås<an>
- (146) PM *ʔéle(?) ‘parrot’ > Ni ʔeklē || PCh *ʔéle? || PW *ʔéle
- (147) PM *-ʔet ~ *-ʔé²t ‘other’ > Ni -ʔet || PW *-ʔet ~ *-ʔé²t

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable.

- (148) PM *-áte(?) (*-j^h) ‘jar’ > PCh *-áte? (*-j^h) || PW *<^xj>áte (*-j^h)
- (149) PM *-éle(?) ~ *-äle(?) (*-j^h) ‘inhabitant, inner’ > PCh *-éle? (*-j^h) ‘inhabitant, intestine’ || PW *-t-éle (*-j^h)
- (150) PM *-kéjà(?) (f.), *-kéjåts (m.), *-ké(j)tså-ts (pl.) ‘grandchild’ > PCh *-kéjà?, *-kéjås, *-kétsås || PW *-k^jéjà, *-k^jéjås, *-k^jétsås
- (151) PM *-k’óX₂₃te(?) (*-j^h) ‘ear’ > PCh *-k’óote? (*-j^h) || PW *-k^j’óte (*-j^h)
- (152) PM *k’uhate-nha? ‘pacu fish’ > Mk <i>k’uhet-i-nhe? (-j) || Ni k’unxate<nxa> (-j)
- (153) PM *-t^j’wte? ‘heart’ > Mk -titi? || Ni -t^j’βte
- (154) PM *púle(?) (*-ts) ‘sky, cloud’ > PCh *púle? (*-s) || PW *púle (*-s ~ *-tajis)
- (155) PM *-qátsile(?) (*-j^h) ‘guts’ > PCh *-qásile-j^h || PW *-qásle-j^h
- (156) PM *stáfe(?) ‘Chaco chachalaca’ > PCh *ʔ²stáhwe? || PW *ʔistáx^we

3.2 PM *e

- (157) PM **[ji]t'ex* ‘to say’ > Mk *[ji]t'ix* || Ni *[ji]t'e*
- (158) PM **waben* ~ **wäpen* ‘to be ashamed’ > Mk *wepin* || Ni *βaben*
- (159) PM *(*wåse?*) ‘cloud’ > Mk *wasi?* || Ni *βåse?*
- (160) PM *²*wé't=a?* ‘one’ > Mk <*e*>*wi't-e?* || Ni *βé't<a>* / -²*βé't<a>*
- (161) PM *²*wóle(?)* ‘leaf, hair, feather’ > PCh *²*wóle?* || PW *²*wole*
- (162) PM **-xéle?* ‘dirt’ > Mk *-xili?* || Ni *-sekle*
- (163) PM **?åfte'l* ‘orphan’ > Mk *afti'l* || Ni *?åfte'k*
- (164) PM **[j]óp'ale(?)* ‘to hiccup’ > Ni *[j]op'akle* / -*op'akle* ‘to choke’ || PCh **[j]óp'ale?* || PW **[j]óp'le*
- (165) PM *²*-zó'thale(?)* ~ *²*-zó'thåle(?)* ‘heart’ > PCh *²*-zóhtale?* ~ *²*-zóhtåle?* || PW **-t-ótle*

Before the uvular fricative PM *χ, the vowel *e has a special lowered reflex in all languages except Nivaclé: Mk *a* (rather than *i*), PCh **a* (rather than **e*), and PW **a* (rather than **e*).

- (166) PM **[j]áte(?)χ* ‘to be fat’ > Ni *[j]åtex* || PCh **[j]átah* || PW **[j]åtax*
- (167) PM **påttséχ* ‘jabiru’ > Ni *påtsex* || PCh **påtsáh* || PW **påtsáχ*
- (168) PM **pátse(?)χ* ‘fast, quick’ > Ni *påtsex* || PCh **(-)pásah*
- (169) PM **pitéχ*, **pité-ts* ‘long’ > Ni *pitex*, *pite-s* || PW **pitáχ*, **pité-s*
- (170) PM **tséχ-APPL* ‘full (river)’ > Ni *tsex-APPL* || PCh **-sáh* || PW **tsáχ-APPL*
- (171) PM **wóositsex* ‘black algarrobo fruit (*Prosopis nigra*)’ > Mk *ositsaχ* || Ni *βaitsex* || PW **wósotsaχ*
- (172) PM **?áwu(C)tseχ* ‘peccary’ > Ni *?aβuktsex* ~ *?aβoktsex* || PCh **?áwusah* || PW **?áwutsaχ*
- (173) PM **?á'jteχ*, **?á'jte-ts* ‘to hurt’ > Mk *a?taχ*, *a?ti-ts* || Ni *?á'jtex* ~ *?á'βtex* || PCh **?áj?tah-APPL*, **-?áj?te-s-APPL* || PW **?ájtaχ*, **?ájte-s*
- (174) PM **?ál(V)tse(?)χ*, **?ál(V)tse-ts* ‘cháguar (*Deinacanthus urbanianum*)’ > Ni *?áktsex*, *?áktse-s* || PCh **?ál'sah*, **?ál'se-s* || PW **?áletsaχ*
- (175) PM **?ánhajex* ‘wild bean (*Capparis retusa*)’ > Mk *anhejaχ* || Ni *?ánxajex* || PCh **?ohnajah* || PW **?ánhjaχ*
- (176) PM **?ax₁₃áje(?)χ* ‘mistol fruit’ > Ni *?axåjex* || PCh **?ahájah* || PW **?ahåjaχ*

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- (177) PM *?*uwáłe*(?)χ ~ **C'uwáłe*(?)χ ‘**puma**’ > Ni <*xum>p'uβałex* || PCh **k'uwáhlah* || PW *?*owáłax* ~ **C'owáłax*

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable.

- (178) PM *(-)tútse(?)χ ‘**smoke**’ > PCh *(-)túsah || PW *(-)tútsaχ

- (179) PM *?*åthajex* ~ *?*åthäjex* ‘**molle fruit**’ > Mk *athejaχ* || Ni *åtxajex*

If a consonant intervenes between the target vowel and the uvular trigger, the lowering occurs only in Maká (but not in Chorote and Wichí), and in that case the outcome is Mk *e* (rather than *i*, as in non-lowering environments, or *a*, as when a uvular consonant is adjacent to the vowel).

- (180) PM **kéłχa-ju'k*, **kéłχa-jku-j^h* ‘**red quebracho**’ > Mk *kełe-jku-* || Ni *tsełxa-juk*, *tsełxa-ku-j* || PCh **kéhla-juk* / **kéhla-jku-* || PW **k'él-juk^w*, **k'él-k'ju-j^h*

The lowering induced by the uvular fricative left behind a number of synchronically active alternations in Maká, Chorote, and Wichí. In forms that go back to PM etyma with a *χ, the lowering applies, and one finds Mk *a*, PCh **a*, PW **a*. By contrast, the reflexes of PM forms derived from the vocalic stems of the same etyma (see §5.2.2) show no lowering, because PM *χ was absent in the respective protoforms. Consequently, one finds Mk *i*, PCh **e* (raised to *i* in the unstressed position in the contemporary varieties), PW **e*. Some examples are given in (181)–(185).

- (181) Maká (Gerzenstein 1999: 121, 130, 183)
- a. *anhejaχ* ‘wild bean’ → *anheji-?p* ‘wild bean season’
 - b. *a?taχ* ‘it hurts’ → *a?ti-ts* ‘they hurt’
 - c. *i-f'ilxetsaχ* ‘poor.SG’ → *i-f'ilxetsi-ts* ‘poor.PL’
- (182) Iyojwa'aja' (Drayson 2009: 96, 143, 144)
- a. *pánsa* ‘fast, quick.SG’ → *pánsi-s* ‘fast, quick.PL’
 - b. *p'élíxs'e* ‘poor.SG’ → *p'ihl'úxsi-s* ‘poor.PL’
 - c. *?á?t'eh-e?* ‘it hurts’ → *?á?ti-xs-i* ‘they hurt’
- (183) Iyo'awujwa' (Gerzenstein 1983: 120, 166)
- a. *álisa* ‘cháguar.SG’ → *álisi-s* ‘cháguar.PL’

- b. *tóxsa* ‘smoke.SG’ → *tóxsi-s* ‘smoke.PL’
- (184) Manjui (Carol 2018)
- p’ilixsáh* ‘poor.SG’ → *p’ilixsé-s* ‘poor.PL’
- (185) ’Weenhayek (Claesson 2016: 8, 92, 293, 297, 426)
- pitáx* ‘long.SG’ → *pité-s* ‘long.PL’
 - p’alítsax* ‘poor.SG’ → *p’alitse-s* ‘poor.PL’
 - (-)tútsax ‘smoke’ → *tútse-tax* ‘mist’
 - ?ájtax ‘it hurts’ → ?ájte-ts ‘they hurt’

In two examples, PM *e appears to have acquired rounding in Chorote and Wichí before a cluster with a labial consonant, yielding Proto-Chorote and Proto-Wichí *o.

- (186) PM *[j]ékfa’x **‘to bite’** > Mk [j]ikfe’x || PCh *[j]ókwah || PW *[j]ókʷaχ
- (187) PM *-tséwte(?) (*-j^h) **‘tooth’** > Ni -tseβte (-j) || PW *-tsóte (*-j^h)

Finally, some cognate sets show deviant correspondences, which seem to instantiate vowel assimilation processes in individual languages. In (188) and (190), Nivaçle reflects PM *éwV as oβV, which could represent a regular pattern of vowel assimilation. An apparently irregular pattern of progressive vowel assimilation is seen in Chorote in (189).

- (188) PM *népo(?)k **‘wild manioc’** > Ni noβok || PCh (?) *nʷwák || PW *némwokʷ
- (189) PM *-pás(-e²t) **‘lip’** > Mk -pas || Ni -pás<e²t> || PCh *-pás<at> ~ *-pás<åt> || PW *-pás<et>
- (190) PM *téwó(?)k ~ *téwå(?)k **‘river’** > Ni toβok ~ toβåk || PCh *téwok ~ *téwåk || PW *téwokʷ

3.3 PM *ä

PM *ä is reconstructed based on the correspondence between Mk e, Ni a, PCh *e, and PW *e. It therefore merges with PM *a in Maká and Nivaçle, but with PM *e in Chorote and Wichí. Irregular reflexes are seen in Nivaçle in (197), possibly due to vowel assimilation, as well as in Chorote in (202). The reflex PW *i in (226) is apparently the regular continuation of PM *äj. The reflex PCh *i in (200) is due to harmonic rising triggered by the following *u – as opposed to the reflex

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PCh **e* in (199) —, a process that might be regular in the environment **W_Lu*, where *W* stands for a labial consonant and *L* for a coronal one (compare PCh *-*pél* ‘shadow’, but Mj -*péilik* ‘shadow’ < *-*píl-uk*).

- (191) PM *[*j*]áp'ä(?)t ~ *[*j*]áφ'ä(?)t **‘to burn’** > Ni [*j*]ap'at || PCh *[*j*]áp'et || PW *[*j*]áp'et
- (192) PM *-ä²*t*, *-φä-ts **‘wing’** > Mk 3 *t*-*ef*, *te-fe-ts* || Ni -*aφ*, -<*a>φa-s* || PCh *-hw<é²s> || PW *-*t-ex^w*
- (193) PM *-ä²*j*, *-äj-is **‘yica bag’** > Ni -*a²j*, -*aj-is* || PCh *-éj?(*-is) || PW *-*t-éj*(*-is)
- (194) PM *-ä²*äk* **‘you go away’** > PCh **hl-ék* || PW *-*t-eq*
- (195) PM *-n-ä²*k* **‘to come’** > Mk *n-ek* || Ni *n-atʃ* || PW *-*n-eq*
- (196) PM *[*j*]är **‘to put’** > Mk [*j*]*en-APPL* || Ni [*j*]*an* || PCh *[*j*]én || PW *[*j*]én
- (197) PM *[*ji*]φä²*jå* ~ *φä²*jå* **‘to fly’** > Ni [*ji*]φä²*jå* || PCh *[*?i*]hwé²*jå* || PW **x^we²jå* ~ **w-* ~ *-*i-*
- (198) PM *[*ji*]φäl **‘to tell’** > Mk *n(i)-fel-im* || Ni *n(i)-fak* / *n(i)-φakl* || PCh *[*?i*]hwél || PW *[*?i*]x^wél^h / *[*?i*]x^wél-
- (199) PM *-φälits **‘daughter-in-law, sister-in-law’** > Mk -*felits* || Ni -*φaklís* <?a> **‘sister-in-law’** || PCh *-hwélis **‘daughter-in-law’**
- (200) PM *-φäl?u?(*-ts) **‘son-in-law, brother-in-law’** > Mk -*felu?(-ts)* || Ni -*φakl?*u(-s) **‘brother’** || PCh *-hwílu? ~ -hwélu?(*-s) **‘son-in-law’**
- (201) PM *φä²*x* ~ *φä²*x* **‘field’** > Ni φa²*f* || PCh **hwéh*
- (202) PM *(-)φétä²*ts* **‘root’** > Mk *fitets* || Ni -*φeta's* || PCh *-hwétus || PW *(-)*x^wétes*
- (203) PM *φi²*ját* **‘cold weather, south wind’** > Ni φi²*jat* || PCh **hwi²jét* || PW **x^wi²jét*
- (204) PM *φínä(?)χ **‘crab’** > Ni φinax || PCh **hwíneh*
- (205) PM *[*ji*]φχän- ~ *[*ji*]φχän- **‘to kill a bird’** > Ni [*ji*]φxan-*APPL* || PCh *<*a>hwén-(n)ah* **‘bird’** || PW *<*a>x^wén-k^je **‘bird’***
- (206) PM *-k'älφah **‘spouse’** > Ni -*t^jakφa* || PCh *-k'élhwah || PW *-k^jéx^wah
- (207) PM *[*ji*]k'än **‘to stretch out’** > Ni [*ji*]t^j*an* || PCh *[*?i*]k'én-*APPL* || PW *[*hi*]k^jén
- (208) PM *[*ji*]k'äsa²χ ~ *[*ji*]k'äse²χ **‘to divide’** > Mk [*j*]<*a>k'esa²χ* || PCh *[*?i*]k'ésah || PW *[*hi*]k^jésax
- (209) PM *lätseni(?) **‘chañar fruit’** > PCh *létseni? || PW *létse^wnih
- (210) PM *lätsen-*u^jk* **‘chañar plant’** > Mk <*xu>letsin-u^jk* || PCh *léseni-*k* || PW *létsen-*uk^w*

- (211) PM *(-)lkä(?)l ‘nasal mucus, cold’ > Mk *-leke*(?)l || PCh *kétl || PW *k^jétl-taχ, *k^jétl-ta-s
- (212) PM *[?]läjX₂₃VnåX₁₃å ‘Azara’s night monkey’ > Ni *kläjxenåxå* || PCh *[?]lēhjanåhå-ke?
- (213) PM *mät ‘hither, nearby’ > Mk *met*‘nearby’ || PCh *mét‘hither’
- (214) PM *[ji]nxí[?]wän ‘to smell’ > Mk *[ji]nxi*[?]wen || PCh *[?i]hní[?]wen
- (215) PM *pútäh ‘tapeti rabbit’ > Ni *puta* || PCh *púteh
- (216) PM *(-)skä[?]t ‘mesh’ > Ni *-stfa*[?]t || PW *sik^jet
- (217) PM *[ni]-tåfää(?)l-APPL ‘to know, to be acquainted’ > Ni *[ni]tåfakl*-APPL || PCh *[?i]tåhwel-APPL || PW *-tåx^wel-APPL/ *-tåx^wnh-APPL
- (218) PM *-tåwä[?]x, *-tåwxä-ts ‘(abdominal) cavity’ > Mk *-tawe*[?]x, *-tawxe*-ts || Ni *-tåβa*[?]s, *-tåβxa*-s || PCh *-tóweh || PW *-tóweχ
- (219) PM *-tä(?)ts, *-täts-él ‘trunk, base’ > PCh *-tés (*-el) || PW *-tes, *-téts-el^h
- (220) PM *-täts-u[?]k, *-täts-ku-j^h ‘trunk’ > Ni *-tats-uk*, *-tas-ku-j* || PCh *(-)tés-uk, *-tés-ku-j^h
- (221) PM *wäk ‘all’ > Mk *we:k* || Ni *-βatf* || PCh *-wek || PW *-weq
- (222) PM *-wä[?]x, *-w(ä)x-áj^h ‘burrow; anus’ > Ni *-βa*[?]s, *-βaf-aj*^h || PCh *-wéh || PW *-wéχ, *-wh-áj*^h
- (223) PM *[?]wäle[?]k ‘to walk’ > Mk *-<i>welki-*met‘to limp’ || Ni *βaklē*[?]tf || PCh *[?i][?]wélek || PW *-weleq
- (224) PM *[ji][?]wän ‘to see’ > Mk *[ji][?]wen* || Ni *[ji][?]βan* || PCh *[?i][?]wén || PW *[hi][?]wén
- (225) PM *-[?]wät ‘place’ > Mk *-wet || Ni *-βat || PCh *-[?]wét || PW *-[?]wet
- (226) PM *-xäjk’u(?) (*-l) ‘egg’ > Ni *-sajk’u(-k)* || PCh 3 *hl-éjk’u? (*-l) || PW *-t-ík’u (*-l^h)
- (227) PM *-xä[?]n(e?) ‘verbal plural (suffix)’ > Ni *-fa*[?]ne? / *-xa*[?]ne? || PCh *-he[?]n(e?) || PW *-he[?]n
- (228) PM *-xäte[?]k, *-xäthe-j^h ‘head’ > Ni *-fate*[?]tf, *-satxe*-s || PCh *-hétek, *-héhte-j^h || PW *-t-éteq, *-t-éthe-j^h
- (229) PM *[t][?]ä(?)k ‘to eat.INTR’ > Mk *[t]’ek* || PW *[t][?]eq

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaclé, Chorote and Wichi), whose PM age is thus questionable.

- (230) PM *-φítä(?)k ‘dream’ > PCh *-hwíhlek || PW *-x^wíteq

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- (231) PM **kowä́x* / *-*kówä́x* ‘hole’ > PCh **kowéh* / *-*kóweh* || PW **k'owex* / *-*k'óweχ*
- (232) PM *-*témä́(?)k* ~ *-*tämä́(?)k*, *-*témh-aj^h* ~ *-*tämh-aj^h* ‘bile’ > PCh *-*témek*, *-*téhm-aj^h* || PW *-*témeq*, *-*témh-aj^h*
- (233) PM **?omhatäk* ~ **?omhätäk* ‘queen palm fruit’ > Mk *omhetek* || Ni *?omxatats*

The regular reflex in Chorote and Wichí seems to be **i* rather than **e* in syllables that precede the accented one, though the conditioning environment is not entirely clear at present.

- (234) PM **pätóχ* ‘to be deep’ > Ni [?a]patox || PCh *-*pítohw<ij?>* || PW **pitóx^w*
- (235) PM **tänük* (*-*its*) ‘feline’ > Mk *tenuk* (-*its*) || Ni *tanuk* (-*is*) || PCh **tinük* (*-*is*)
- (236) PM **tsänǘk* ‘duraznillo trees’ > Ni *tsanúk* || PCh **sinük* || PW **tsinük^w*
- (237) PM *-*?äsxán*, *-*?äsχán-its* ‘meat’ > Mk -*?esén*, -*?esen-its* || Ni -(?a)sxán, -(?a)sxan-is || PCh *-*?isá́n*, *-*?isán-is* || PW *-*t-’isán*, *-*t-’isán-is*

3.4 PM *a

PM **a* is typically preserved as *a* in Nivaçle, Proto-Chorote, and Proto-Wichí. In Maká it is typically raised to *e* (whereas PM **e* is raised to Mk *i*). Therefore, PM **a* usually merges with PM **ä* in Maká and Nivaçle. However, PM **a* yields Mk *a* before the uvular fricative PM **χ* – as in (295), (297), (304), (305) – and assimilates to Mk *o* if the following syllable contains an **o* – as in (265), (354), (365), (366) –. The irregular reflexes in Maká include *a* in (278) and (317); *i* in (299). The irregular reflexes in Nivaçle include *e* in (294); zero in (297)–(298). The irregular reflexes in Chorote include an irregular metathesis in (246); **e* in (257); **i* in (265); assimilation to **å* in (279) and to **o* in (292), (293), (342); **ø* in (357). In Wichí, the irregular reflexes include **i* in (247); zero in (260), (324), and (368); **a* ~ **e* in (278); assimilation to **å* in (286) and (290). The unaccented sequence PM **aju* may yield PW **e*, as in (270), (306).

- (238) PM *-*ajék* ~ *-*ajé́k* ‘honey comb’ > Ni -*ajétʃ* || PCh *-*q-ájek*
- (239) PM *-*(á)j^h* ‘PL’ > Mk -(*e*)j || Ni -(*a*)j || PCh *-*(á)j^h* || PW *-*(á)j^h*
- (240) PM **n-ap'u* ~ **n-aφ'u* (~ *-á- ~ *-ú) ‘to lick’ > Ni *n-ap'u* || PCh **[?i]<n>áp'u?* || PW **<n>ap'u* ~ **<n>áp'u* ~ **<n>ap'uh*
- (241) PM **n-át* ‘to fall on its own’ > Ni *n-at* || PW **<n>át*

- (242) PM *-á(-j^h)-xi?(*-l) 'mouth' > Mk -exi?(-l) || Ni -a^hi (-k) || PCh (?) *-á<aj?> || PW *-t-áj-hi (*-l^h)
- (243) PM *-á?(*-j^h) 'fruit' > Mk 3 t-e? (-j) || Ni -a? (-j) || PCh 3 *hl-á? (*-j^h) || PW *-t-á? (*-j^h)
- (244) PM *[j]ékfa'x 'to bite' > Mk [j]ikfe'x || PCh *[j]ókwah || PW *[j]ókʷaχ
- (245) PM *-φah, *-φa-ts 'companion' > Mk -fe (-ts) || Ni -φa (-s) || PCh *-hwah, *-hwa-s || PW *-xʷah, *-xʷa-s
- (246) PM *-φájí'x 'right' > Mk -fejí'x 'left' || Ni -φají'ʃ || PCh *-hwíjah
- (247) PM *φajXo?, *φajXó-l / *-φájXo?(*-l) 'coal' > Ni (-)φajxo?(-k) || PCh *hwa(h)jo- || PW *xʷijho(?), *xʷijhó-l^h / *-xʷijho (*-l^h)
- (248) PM *-φá-^hmat 'disease' > Mk <eq>fe-^hmet || Ni -φa-^hmat || PCh *-hwá-^hmat
- (249) PM *φa^ht ~ *φá^ht 'fire' > Mk fe^ht || PCh *hwát
- (250) PM *φátsu(?)χ, *φátshu-ts 'centipede' > Ni φatsux, φatsxu-s || PCh *(h)wásuh, *(h)wásu-s || PW *xʷátsuxʷ
- (251) PM *[ji]φá'x 'to cut down' > Mk fex-inet-ki?ax' || Ni [ji]φa'ʃ || PCh *[?i]hwáh-APPL || PW *[?i]xʷáχ
- (252) PM *φa?áj 'algarrobo fruit (*Prosopis alba*)' > Ni φa?aj || PCh *hwa?áj? || PW *xʷa?áj^h
- (253) PM *φkéná(?)χ 'north wind, north' > Ni φtſenax || PCh *hw^hkénah
- (254) PM *-φqató(*-l) 'elbow' > Ni -(?V)φkato(-k) || PCh *-qató?(*-l) || PW *-qáto(*-l^h)
- (255) PM *φtsána(?)χ 'suncho (*Baccharis sp.*)' > Ni φtsánax || PCh *sánah || PW *xʷitsánaχ
- (256) PM *-jáɬ 'breath' > Ni -jaɬ || PCh *-jáɬ || PW *-jáɬ
- (257) PM *jijá'ts 'dew' > Mk ije'ts || Ni jija's || PCh *?ijés-tah || PW *?ijás
- (258) PM *-ka, *-ká-l 'tool, skillful person' > Ni -tſa? (-k) || PCh *-ká? (*-l) || PW *-k^ha, *-k^há-l^h
- (259) PM *-kat 'collective of plants' > Mk -ket || Ni -tſat / -kat || PCh *-kat || PW *-k^hat (*-at after *kʷ, *q)
- (260) PM *kéɬχa-ju'k, *kéɬχa-jku-j^h 'red quebracho' > Mk kele-jku- || Ni tſeɬxa-juk, tſeɬxa-ku-j || PCh *kéhla-juk / *kéhla-jku- || PW *k^héɬ-jukʷ, *k^héɬ-k'u-j^h
- (261) PM *-kíφah, *-kíφa-ts 'neighbor' > Mk -kife(-ts) || Ni -tſíφa (-s) || PCh *-kíhwah, *-kíhwa-s

3 Vowels

- (262) PM *-kilá?(*-wot) ‘elder brother’ > Ni *-tſekla?* / *tfikla-*(-βot) || PCh *-kilá?(*-wot) || PW *-k'íla
- (263) PM *-kitá?(*-wot) ‘elder sister’ > Ni *-tſita?*(-βot) || PCh *-kitá?(*-wot) || PW *-k'íta
- (264) PM *kula'j ~ *kulá'j ‘sun’ > Ni <xum> *kukla'j* || PCh *kulá?
- (265) PM *k'álxó(*-ts) ‘armadillo (sp.)’ > Mk *k'olo*'x || Ni *k'akxo*(-s) || PCh *k'ihló?(*-s) || PW *k'anhóh
- (266) PM *-k'álphaf ‘spouse’ > Ni *-tſakpha* || PCh *-k'élhwah || PW *-k'jéxʷah
- (267) PM *k'ú(t)sta(?)χ, *k'ú(t)sta-ts ‘barn owl’ > Ni (?) *k'ustax*, *k'usta-s* ‘mockingbird’ || PCh *k'ústah, *k'ústa-s || PW *k'jústaxχ
- (268) PM *k'utX₂₃á'n, *k'utX₂₃án-its ‘thorn’ > Ni *k'utxa*'n, *k'utxan-is* || PCh *k'utá'n, *k'után-is || PW *k'juthá'n, *k'juthán-is
- (269) PM *(-)k'útsa'χ, *(-)k'útsha-ts ‘old’ > Mk *k'utsa*'χ, *k'utshe-ts* || Ni *k'utsa*'x, *k'utsxa-s* || PCh *-k'úsah, *-k'úsa-s || PW *-k'jútsax
- (270) PM *lóta-(ju)'k ‘tree for making bows’ > Ni *klotá*<*tſ*> || PCh *lóta-juk || PW *lóte<*q*>
- (271) PM *(-)tla?, *(-)tá-ts ‘louse’ > Mk <*ij*> *le?*(-ts) || Ni -*ta?*(-s) || PCh *-hlá?(*-s) || PW *tla?
- (272) PM *túm?a ‘day’ > Ni *tum?*a- || PCh *hlúma?
- (273) PM *tútsX₂₃a(?) (*-jek) ‘girl’ > Ni *tutsxa* (-jetſ) || PCh *hlúsa? (*-jek) || PW *tútsha
- (274) PM *ma ‘interrogative particle’ > Mk *me* || PCh *ma
- (275) PM *-[?]mat ‘negative quality, physical defect’ > Mk -[?]met || Ni -[?]mat || PCh *-[?]mat
- (276) PM *-náj^h ‘to bathe’ > Ni [βa]naj || PCh *[ʔi]náj-APPL || PW *[ʔi]náj^h
- (277) PM *-na'x ~ *-ná'x / *-nxa- ~ *-nxá- ‘nose’ > Mk -*ne*'x / -*nxe-* || Ni -*na*'ʃ, -*nfa-s* || PCh *-hná<*tVwoh*> || PW *-nh<*us*>
- (278) PM *ŋk'a ‘new’ > Mk *i'ŋk'a* || Ni *nitʃ'a* || PCh *ŋk'á? || PW *nek'j'a ~ *nék'j'a ~ *nek'j'e ~ *nék'j'e
- (279) PM *-nX₂₃aq(?)á't ‘to snore’ > Ni [ta]nxaká't || PCh *[ʔi]hnáq'á't
- (280) PM *-nX₂₃atá? ‘nasal mucus’ > Ni -*nxatá?* || PCh *-hnát<*ijah-PL*>
- (281) PM *-nálu(h), *-nálu-ts ‘day, world’ > Mk *neɻu*(-ts) || Ni *naɻu*(-s) || PCh *-náhl<*ikis*> ~ *náhl<*ikes*> ‘midday’

- (282) PM **péla*(?)*j*, **péla**j*-*its* ‘rain’ > Mk *piłej* (-*its*) || PCh **péhlaj?* || PW **péla*^h, **péla**j*-*is*
- (283) PM **qa* ‘in order to’ > Mk *qe* || Ni *ka* || PCh **qa*
- (284) PM **qá- / *q-* ‘indirect possession’ > Mk *qe-* / *qa-* / *qo-* / *q-* || Ni *ka- / k-* || PCh **qá- / *q-* || PW **qá- / *q-*
- (285) PM *[*ji*]*qáku?* ‘to distrust’ > Mk [*je*]*qeku?* || Ni [*ji*]*kaku* || PCh *[*ji*]*qáku?* || PW *[*ji*]*qákju-APPL*
- (286) PM *-*qalá?* (*-*j^h*) ‘leg’ > Ni -*kaklå?* (-*j*) || PCh *-*qa*’*lå?* ~ *-*qå*’*lå?* (*-*j^h*) || PW *-*qålå* (*-*j^h*)
- (287) PM *[*t*]*qáñhan* ‘to fish with a hook’ > Mk [*ta*]<*qa*>*qanhen* || PCh *[*t^o*]*qáñnan* || PW *[*t*]*qáñhan*
- (288) PM **qati*⁷*ts*, **qatits-él* ‘star’ > Ni *kati*⁷*s* || PCh **qatés*, **qates-él* || PW **qates*, **qatéts-él^h*
- (289) PM **sát’**a*(?)*(t)s* ‘parakeet’ > Ni *sat’as* || PCh **sát’as* || PW **sát’as*
- (290) PM **sláqha*(?)*j*, **sláqhaj-its* ‘wild cat’ > Ni *sklåkxaj* ~ *sklåkxaj*(-*is*) || PCh **s^olåhqaj?* ~ **s^olåhqåj?* (*-*is*) || PW **silåqhåj*
- (291) PM **s^owúla*⁷*χ*, **s^owúla*-*ts* ‘anteater’ > Ni *s^oβuklax*, *s^oβuklā-s* || PCh **s^o?úlah*, **s^o?úla*⁷*s* || PW **súla*⁷*χ*
- (292) PM *-*t*(á)*ko?* (*-*l*) ‘face’ > Mk -*tko*<*kek*> || Ni -*tako?*(-*k*) || PCh *-*tóko?* (*-*l*) || PW *-*ták⁷o* (*-*l^h*)
- (293) PM *-*t*(á)*ko-se?* (*-*j^h*) ‘eyebrow’ > Mk -*tko*-*si?* (*-*j*) || PCh *-*tóko*-*se?* (*-*j^h*) || PW *-*ták⁷o*-*se* (*-*j^h*)
- (294) PM **táχyan* ‘to thunder’ > Mk *texen* || Ni *taʃxen* || PW **t’áχan*
- (295) PM *-*tax*, *-*ta-ts* ‘pseudo-’ > Mk -*taχ*, -*te-ts* || Ni -*tax*, -*ta-s* || PCh *-*tah*, *-*ta-s* || PW *-*tax*, *-*ta-s*
- (296) PM **tsópha*(?) ‘fruit of a shrub (*Lycium americanum*)’ > PCh **sóhwa?* || PW **tsóx^wa*(?)
- (297) PM **tsópha-taχ* ‘fruit of a shrub (*Lycium americanum*)’ > Mk *tsofe-taχ* || Ni *tsoφ-taχ*
- (298) PM **tsópha-ta-(ju)’k* ‘shrub (*Lycium americanum*)’ > Mk *tsofe-te-k* || Ni *tsoφ-ta-juk* || PW **tsóx^wa-t-uk^w*
- (299) PM **ts’áts’ih*, **ts’áts’i-l* ‘rufous hornero’ > Mk *ts’its’i* (-*l*) || Ni *ts’ats’i* (-*k*) || PCh **sát’ih* || PW **táts’i*

3 Vowels

- (300) PM *-uwa ‘termite house’ > Ni -uβa || PW *-t>uwa
- (301) PM *wák’-a-ju’k, *wák’-a-jku-j^h ‘guayacán’ > Mk wek’-e-ju’k, wek’-e-jkw-i || PCh *wák’-a-juk, *wák’-a-jku-j^h || PW *wák’-a-juk^w, *wák’-a-k^ju-j^h
- (302) PM *wátshan ~ *wátsχan ‘to be healthy, alive’ > Ni βatsxan || PCh *wásan || PW *wátshan
- (303) PM *-xa, *-xá- ‘price’ > Ni -fa?(-k) || PW *-ha, -há-l^h
- (304) PM *(X₁₃on-)-xa’χ, *(X₁₃on-)-xáh-aj^h ‘night’ > Mk <na>xa’χ || Ni <xon>fa’x, <xon>fa’x-aj || PCh *-a>h<n>áh ~ *-2á>h<n>áh || PW *-hon>aχ, *-hon>áh-aj^h
- (305) PM *xunxátaχ ‘tusca fruit’ > Mk xunxetaχ || Ni xunxataχ || PCh *ihnátaḥ || PW *xnhátaχ
- (306) PM *xunxáta-(ju)’k ‘tusca tree’ > Mk xunxete-’k || Ni xunxata-juk || PCh *ihnáta-k || PW *xnháte-q
- (307) PM *xunxáta-kat ‘tusca grove’ > Mk xunxete-ket || Ni xunxata-tsat || PCh *ihnáta-kat
- (308) PM *(?a)X₁₃útsa(?)χ, *(?a)X₁₃útsa-ts ‘crested caracara’ > Ni xutsax, xutsxa-s || PCh *(?a)húsah, *(?a)húsa-s || PW *ahútsaχ, *ahútsa-s
- (309) PM *...X₂₃a’t (*-its) ‘earth’ > Ni <kots>xa’t, <kots>xat-is || PCh *-a>h<n>áṭ ~ *-2á>h<n>áṭ (*-es) || PW *-hon>hat, *-hon>hát-es
- (310) PM *X₂₃wé’lah, *X₂₃wé’la-ts ‘moon’ > Ni xiβe’la(-s) || PCh *wé’lah, *wé’la-s || PW *wé’lah
- (311) PM *?aɸu ~ *?aɸú ‘woman’ > Mk eɸu || PCh *ahwú?
- (312) PM *[t]’á’t ‘to ask’ > Ni [t]’a’t || PCh *[t]’á’t || PW *[t]’á’t
- (313) PM *?áṭu(?) ‘iguana’ > Ni ?áṭu (-s) || PCh *?áhlu? (*-s) || PW *?áṭu
- (314) PM *?ám?áh, *?ám?á-ts ‘rat’ > Ni ?am?á (-s) || PCh *?ám?ah ~ *?ám?áh, *?ám?á-s ~ *?ám?á-s || PW *?áma
- (315) PM *?áp’-a(?)χ ~ *?áɸ’-a(?)χ ‘jararaca’ > Ni ?ap’ax || PCh *?áp’ah
- (316) PM *?aqáje’k ‘wild honey’ > Ni ?akájetʃ || PW *?aqájeq
- (317) PM *-laqhu’ts ~ *-laqhú’ts ‘knee’ > Mk -aqhu’ts || Ni -(?a)kxu’s || PCh *-laqús
- (318) PM *?atu’χ ~ *?atú’χ ‘snake (sp.)’ > Ni ?atu’x || PCh *?atúh
- (319) PM *?áwu(C)tseχ ‘peccary’ > Ni ?aβuktsex ~ ?aβoktsex || PCh *?áwusah || PW *?áwutsaχ
- (320) PM *?áxa? ‘stork’ > Mk exe? ‘maguari stock’ || PCh *?áha? ‘jabiru’
- (321) PM *-?áX₂₃te(?) (*-j^h) ‘female breast’ > Ni -?axte (-j) || PCh *-?áhate? (*-j^h) || PW *-t-’áte (*-j^h)

- (322) PM *ʔaX₁₃áje(?)χ ‘mistol fruit’ > Ni ʔaxájex || PCh *ʔahájah || PW *ʔahájaχ
- (323) PM *ʔaX₁₃áj-u^hk, *ʔaX₁₃áj-ku-j^h ‘mistol tree’ > Ni ʔaxáj-uk, ʔaxáj-ku-j || PCh *ʔaháj-uk, *ʔaháj-ku-j^h || PW *ʔaháj-uk^w
- (324) PM *ʔánhajex ‘wild bean (*Capparis retusa*)’ > Mk anhejaχ || Ni ʔánxajex || PCh *ʔohnajah || PW *ʔánhjaχ
- (325) PM *-ʔásχa^hn, *-ʔásχán-its ‘meat’ > Mk -ʔese^hn, -ʔesen-its || Ni -(ʔa)sxa^hn, -(ʔa)sxan-is || PCh *-ʔisá^hn, *-ʔisán-is || PW *-t-’isa^hn, *-t-’isán-is
- (326) PM *ʔéja?(*-l) ‘mosquito’ > Mk ije?(-l) || Ni jija? || PCh *ʔéja?(*-l)
- (327) PM *[j]éjxáts-han ‘to teach’ > Mk [j]ixats<hen> || Ni [j]ejxats-xan / -ʔejxats-xan || PCh *'[j]éjåhås<an>
- (328) PM *ʔóna(?)χ ‘my brother’ > Ni ʔonax || PCh *ʔónah
- (329) PM *ʔuwále(?)χ ~ *C'uwále(?)χ ‘puma’ > Ni <xum>p'uβałex || PCh *k'uwáhlah || PW *ʔowáłax ~ *C'owáłax
- (330) PM *ʔvlá?ah, *ʔvlá?a-ts ‘lesser grison’ > Mk ile || Ni ʔaklā?a(-s) || PCh *ʔelá?ah, *ʔelá?a-s ~ *ʔalá?ah, *ʔalá?a-s || PW *ʔilá?ah

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaclé, Chorote and Wichí), whose PM age is thus questionable.

- (331) PM *-á'l ‘light, brightness’ > PCh 3 *hl-á'l || PW *-t-ál^h
- (332) PM *-phiłan ‘to dream’ > PCh *[ʔi]hwíhlan || PW *[t]xʷíłan
- (333) PM *jiʔixåtaχ, *jiʔixåta-ts ‘ocelot’ > Mk iʔixataχ, iʔixate-ts || Ni jixåtax, jixåta-s
- (334) PM *ká'lah, *ká'la-ts ‘lizard’ > PCh *ká'lah, *ká'la-s || PW *ká'lah, *ká'la-s
- (335) PM *kójXa(?)t ‘to be heavy’ > PCh *kóhjat-APPL || PW *kójhat
- (336) PM *ktá'nih ‘Chaco tortoise’ > PCh *kitá'nih || PW *kitá'nih
- (337) PM *ktéta(?) ~ *ktäta(?) ‘white algarrobo fruit (*Prosopis elata*)’ > PCh *kitéta? || PW *ktéta
- (338) PM *-k'alo(?) (*-ts) ‘cheek’ > PCh *-k'alo? (*-s) || PW *-k'alo (*-s)
- (339) PM *k'unhate-nha? ‘pacu fish’ > Mk <i>k'unheti-nhe?(-j) || Ni k'unxate<nxa>(-j)
- (340) PM *lama(h) ~ *läma(h) (*-m) ‘to be smooth’ > Mk le:me, leme-m || Ni kłama<m>

3 Vowels

- (341) PM **níltsa*([?])*X*₁₂, **níltsX*₁₃*a-ts* ‘white-lipped peccary’ > PCh **<?ih>nílsah*, **<?ih>nílsa-s* || PW **nítsaχ*, **nítsha-s*
- (342) PM *-pák’o ‘heel’ > PCh *-pók’o? || PW *-pák’o
- (343) PM **kpéna*([?])*X*₁₂ ~ **kpäna*([?])*X*₁₂, **kpénX*₁₃*a-ts* ~ **kpäñX*₁₃*a-ts* ‘orphan’ > PCh **kpénah*, **kpéhna-s* || PW **k'pénaχ*, **k'péhna-s*
- (344) PM *-qáká (*-l) ‘medicine’ > PCh *-qáká? (*-l) || PW *-qák^ja (*-l^h)
- (345) PM *[*t*]qási([?])*t* / -qasí([?])*t* ‘to stand’ > PCh *[*t*]qásit || PW *[*t*]qásit; IMP *qasít
- (346) PM *-qáwa([?])*q* ‘belt, band’ > PCh *-qáwak || PW *-qáwaq
- (347) PM *-qá?tu(?) ‘yellow’ > PCh *-qá?tu? || PW *qá?tu
- (348) PM *-q’á([?])*X*₁₂ ‘tongue’ > PCh *-q’áh || PW *-q’áχ ‘mouth’
- (349) PM *stá-[?]*q* ‘toothpick cactus (*Stetsonia coryne*)’ > PCh *[?]stá-k || PW *[?]istá-*q*
- (350) PM **tana(h)* ~ **täna(h)* ‘standing, vertical’ > Mk *te:ne*, *tene-m* || Ni *tana*
- (351) PM **tkéna*([?])*X*₁₂ ~ **tkána*([?])*X*₁₂, **tkénX*₁₃*a-ts* ~ **tkáñX*₁₃*a-ts* ‘precipice; hill, mountain’ > PCh **t[?]kénah*, **t[?]kéhna-s* || PW **tk'énáχ*, **tk'énha-s*
- (352) PM *[*ji*]-*tXá*([?])*t* ‘to throw, to put’ > PCh *[*?i*]tát-APPL || PW *[*?i*]thát
- (353) PM **tsóna*(?) ‘red brocket’ > PCh **tsóna?* || PW **tsó?nah*
- (354) PM *([?])*wawo(h)* (*-l) ‘maned wolf’ > Mk *wowo* (-l) || Ni *βaβo* (-k)
- (355) PM **wkína*([?])*X*₁₂, **wkínX*₁₃*a-ts* ‘metal’ > PCh **w[?]kínah*, **w[?]kínya-s* || PW **k'ínaχ*, **k'ínya-ts*
- (356) PM **wóna*(?) ‘bala wasp honey; hat’ > PCh **wóna?* || PW **wó?nah*
- (357) PM **wósak’V*([?])*t* ‘red-crested cardinal’ > PCh **wós[?]k’at* || PW **wósak’it* ~ **wósak’ut*
- (358) PM *[?]*wá*([?])*x*, *[?]*wáx-aj^h* ‘stagnant water’ > PCh **hl-<a>wáh* (*-aj^h) || PW *[?]*wáχ*, *[?]*wáh-aj^h*
- (359) PM **Xmáwoh* ‘fox’ > PCh **máwo-tah* || PW *[?]*máwoh*
- (360) PM *[*ji*]*X*₁₃*án-ex* ‘to know’ > PCh **<[j]a>hán-eh* || PW *[*ji*]*hán-ex*
- (361) PM *-*?atå*(?) ‘fat’ > PCh *-*?ahlá?* || PW *-*t-’atå*(?)
- (362) PM *-*?a*([?])*q* ‘rope, cord’ > PCh *-*?ák* || PW *-*t-’aq*
- (363) PM **?áte*([?])*k* ~ **?átä*([?])*k* ‘celib, vinal’ > PCh **?átek* || PW **?áteq*
- (364) PM **?at’e*([?])*(t)s* ~ **?at’ä*([?])*(t)s* ‘aloja drink’ > PCh **?at’és* || PW **hat’és*
- (365) PM **?a’nqo’k* ‘paralytic’ > Mk *onqok* || Ni *?a’nko’k*

3.5 PM *å

- (366) PM *[t]’at’o ‘to yawn’ > Mk [t]ot’o-kij || Ni [t]’at’o
- (367) PM *?atsXa(?) , *?atsXá-l ‘dorado’ > PCh *?asá?(*-l) || PW *?atsha(?) , *?atshá-l^h
- (368) PM *[j]óp’ale(?) ‘to hiccup’ > Ni [j]op’aklé / -?op’aklé ‘to choke’ || PCh *[j]óp’ale? || PW *[j]óp’le

In a number of stems, all of which are provisionally reconstructed with the vowels *a and *å in two adjacent syllables, a correspondence is found between Mk a...a, Ni å...å, PCh *a...o, and PW *a...o. In each case there is a labial consonant either between the vowels or before the first of them. In (370)–(371), Chorote shows PCh *o...o instead, as in (342) above. In (369), Nivaclé has a instead of the expected *å, which is likely due to a sound change whereby PM *å changed to Ni a at least in some dialects (§7.2.1.3).

- (369) PM *-áwå(?) ‘flower’ > Ni -aβå || PCh 3 *hl-áwo? || PW *-t-áwo
- (370) PM *-φapá(?) ‘shoulder’ > PCh *-hwopó? || PW *-xʷápo
- (371) PM *-φapá-ke? ‘shoulder blade’ > Ni -φápå-ke || PCh *-hwopó-ke?
- (372) PM *wátå(?)χ ‘palo flojo fruit’ > Ni βåtåx || PW *wátox^w
- (373) PM *wáth(å-j)u’k ‘palo flojo tree’ > Ni βåtxå-juk || PCh *wáht<uk>
- (374) PM *xnáwå’p ‘spring’ > Mk xinawa’p || Ni snaβåp ~ snåβåp || PCh *náwop || PW *xnáwop

3.5 PM *å

PM *å is preserved as a low back unrounded vowel (distinct from the low non-back unrounded vowel /a/) in most dialects of Nivaclé, in Proto-Chorote, and in Proto-Wichí. In Maká, it yields a, but does not merge with PM *a in most environments because the default reflex of the latter vowel is Mk e. In the contemporary Chorote varieties, it survives as an underlying segment in Iyojwa’aja’ (which consistently surfaces as [a], whereas underlying /a/ surfaces either as [a] or as [e]); in other Chorote dialects, it merged with *a. In Southeastern Wichí, it yields ɔ (in the Rivadavia subdialect) or even o, but no merger occurs because PW *o yields u in the same varieties. In Nivaclé, *å merges with *a in the Yita’ Lhavos dialect in all environments (§7.2.1.1); in other dialects the merger takes place before labial consonants (§7.2.1.3). It should be noted that in Wichí PM *å exceptionally yields PW *a preceding the coda *’m, as in (409) and (461). Irregular reflexes include Mk e in (435), o in (437); Ni a in (401) and (458); PCh zero in (442), *a in (444), *o in (453); PW *o in (413), *a in (420) and (446), zero in (442).

3 Vowels

In addition, irregular reflexes are apparently found in Maká in (428) and in Wichí in (452), but it is unclear whether the words in question actually belong to the respective cognate sets.

- (375) PM **n-åjin* ‘to go first’ > Mk [wa]<*th*>*ajin* || Ni *n-åjin* || PCh *[?i]<*n*>*åjin*
- (376) PM **h-åk* ‘I go away’ > Mk *h-ak* || Ni *x-åk* || PCh *?*åk*
- (377) PM **n-åm* ‘to arrive’ > Mk *n-am* || Ni *n-am* || PCh **n-åm* || PW **<n>åm*
- (378) PM *[*t*]’*ån* ‘to shout’ > Mk (?) [*t*]’*an* ‘to win’ || Ni [*t*]*ån* || PCh *[*t*]*ån* || PW *[*t*]’*ån*
- (379) PM *-*åni*’s ‘stinger’ > Mk 3 *t-ani*’s || Ni 3 *t-ånis* || PCh 3 **hl-ånis* || PW (?) 3 **t-åni*
- (380) PM *-*åp* ‘to cry’ > Mk *-ap* || Ni *-ap* || PCh *[*j*]*åp*
- (381) PM *-*åpil* ‘to return thither’ > Mk [*w*]*apil* || Ni [*β*]*apek* || PCh *[*j*]*åpil* || PW *[*j*]*åpil*’*h*
- (382) PM *[*j*]*åp’ä*(?)*t* ~ *[*j*]*åf’ä*(?)*t* ‘to burn’ > Ni [*j*]*ap’at* || PCh *[*j*]*åp’et* || PW *[*j*]*åp’et*
- (383) PM *-*åq*, *-*qå-ts* ‘food’ > Mk *-aq*, *-qa-ts* || Ni *-åk*, *-kå-s* || PCh *-*åk*, *-qå-s* || PW *-*t-åq*, *-*qå-s*
- (384) PM *-*å’s* ‘son’ > Mk *-a’s* || Ni *-å’s* || PCh *-*ås* || PW *-*t-ås*
- (385) PM *-*åse?* ‘daughter’ > Mk *-asi?* || Ni *-åse* || PCh *-*åse?* || PW *-*t-åse*
- (386) PM *[*n*]*åt* ~ *[*n*]*åt* ‘to bleed’ > Mk [*n*]*at-xu?* || Ni [*n*]*åt* || PCh **<n>åt-* || PW **<n>åt-* ~ **<n>åt-*
- (387) PM *-*å’t*, *-*åt-its* ‘drink’ > Ni *-å’t*, *-åt-is* || PCh *-*åt* (*-es) || PW *-*t-åt*
- (388) PM *[*j*]*åte*(?)*χ* ‘to be fat’ > Ni [*j*]*åtex* || PCh *[*j*]*åtah* || PW *[*j*]*åtaχ*
- (389) PM *[*ji*]*φä’jå* ~ **φä’jå* ‘to fly’ > Ni [*ji*]*φä’jå* || PCh *[?i]*hwé’jå?* || PW **xʷe’jå* ~ **w-* ~ **-i-*
- (390) PM **φtsåna*(?)*χ* ‘suncho (*Baccharis sp.*)’ > Ni *φtsåanax* || PCh **sånah* || PW **xʷitsåanax*
- (391) PM *(-)*håqke?* ‘well’ > Mk *haqqi?* river’ || Ni *-xåke* ‘dry well’ || PCh *-*hååke?* artificial well’
- (392) PM *[*ji*]*jå?* ‘to drink’ > Mk <*i*>*ja?* || Ni [*ji*]*jå?* || PCh *[?i]*jå?* || PW *[?i]*jå?*
- (393) PM **ji’jå*’*X*₁₂ ‘jaguar’ > Ni *ji’jå’x* || PCh **?a’jåh* || PW **ha’jåχ*
- (394) PM **ji’lå?*, **ji’lá-j^h* ‘tree’ > Ni *ji’klå?*(-*j*) || PCh **?a’lå?*(*-*j^h*) || PW **ha’lå*, **ha’lá-j^h*

3.5 PM *å

- (395) PM **jiná^čt*, **jiná^č-its* ‘water’ > Ni *jiná^čt*, *jiná^č-is* || PCh **?i[?]ná^čt* (*-es) || PW **?iná^čt* (*-es)
- (396) PM **jit’å?*, **jit’å-l* ‘vulture’ > Ni *jit’å?*(-k) || PCh **?at’å?*(*-l) || PW **hat’å?*(?)
- (397) PM **jixå?*(?) ~ **jixá?*(?) ‘to be true’ > Mk *ixa* || Ni *jixå?* || PCh **?ihá^č<wet>*
- (398) PM *-*kán* (*-its) ‘testicle’ > Ni -*kán-sij* || PCh *-*kán*<is> || PW *-*kán*<is>
- (399) PM *-*kå^šs*, *-*kås-él* ‘tail’ > Ni -*kå^šs*, -*kås-ek* || PCh *-*kå^šs* || PW *-*kå^šs*, *-*kå^šs-el^h*
- (400) PM *[*ji*]kå^št-APPL ‘to fall’ > Ni [*ji*]kå^št-APPL || PW *[*ni*]kå^št-APPL
- (401) PM **khǻt* ‘cactus’ > Mk *khat-u[?]k* || Ni *kxat* || PCh **kåhǻt* || PW **kåhǻt*
- (402) PM *-*k’åxe?*(*-l) ‘arrow’ > Mk -*qaxi?*(*-l) || Ni -*k’åxe* || PCh *-*k’åhe?*(*-l) || PW *-*k’åhe*(*-l^h)
- (403) PM *-*k’ínxå?* ~ *-*k’ínxå?*(*-wot) ‘younger sister’ > Mk -*k’ínxå?* ~ -*k’ínxå?* || Ni -*tfinxå* (-βot) || PCh *-*k’ihnå?*(*-wot) || PW *-*k’ínhå*
- (404) PM *[*ji*]lå[?]j ‘to withstand’ > Ni [*ji*]klå[?]j || PCh *[*ji*]låj-eh || PW *[*ji*]låj
- (405) PM *[*ji*]lån ‘to kill’ > Mk [*ji*]lan || Ni [*ji*]klån || PCh *[*?i*]lån || PW *[*?i*]lån
- (406) PM **låp’ih* ~ **låf’ih* ‘snail’ > Ni klåp’i || PCh **låp’ih*
- (407) PM *-*lå?*, *-*lå-j^h* ‘domestic animal’ > Ni -*klå?*(-j) || PCh *-*lå<hwah>* || PW *-*lå?*, *-*lå-j^h*
- (408) PM **låjX₂₃VnåX₁₃å* ‘Azara’s night monkey’ > Ni klåjxenåxå || PCh **låjanåhå-ke?*
- (409) PM *[*ji*]lå[?]m ‘to defecate’ > Mk <i>la[?]m || Ni [*ji*]lå[?]m || PCh *[*?i*]hlå[?]m || PW *[*t*]<*a*>lå[?]m
- (410) PM *[*ji*]lån ‘to light fire’ > Mk [*ni*]lan-APPL || Ni [*ji*]lån || PCh *[*?i*]hlån-APPL || PW *[*?i*]lån-APPL
- (411) PM *[*ji*]må ‘to sleep’ > Mk [*ji*]ma? || Ni [*ji*]må? || PCh *[*?i*]må? || PW *[*?i*]må
- (412) PM **måh* ‘go!’ > Mk *ma* || Ni *må* || PCh **må^h* || PW **måh*
- (413) PM *-*må[?]k*, *-*mhǻ-j^h* ‘powder, flour’ > Ni -*må[?]k*, -*mxå-j* || PCh *-*måk* || PW *-*mók^w*, *-*mhó-j^h*
- (414) PM *-*nå?*(?) ~ *-*nå?*(*-wot) ‘father’ > Ni *nå-βot* ‘parents’ || PCh *-*nå?*(*-nå-wot)
- (415) PM *(-)nijåk, *(-)nijhå-j^h ‘rope, cord’ > Mk (-)nijak, (-)nijha-j || Ni -*nijåk*, -*nijxå-j* || PCh **nijåk*, **nihjå-j^h* || PW **nijåk^w*, **nijhå-j^h*

3 Vowels

- (416) PM *(-)⁹náji⁹x, *(-)⁹nájx-aj⁹ ‘path’ > Ni náji⁹f, (-)⁹nájf-aj / -⁹náji⁹f || PCh *(-)⁹nájih, *(-)⁹náhj-aj⁹ || PW *(-)⁹nájiχ, *(-)⁹nájh-aj⁹
- (417) PM *⁹nánxte? ‘tapeti rabbit, cavy’ > Mk níjaxti? || Ni nánxate || PCh *⁹náhåte? || PW *⁹náte
- (418) PM *-nX₂₃aq(’)åt ‘to snore’ > Ni [ta]nxakåt || PCh *[?i]hnåq’åt
- (419) PM *-nX₂₃atå? ‘nasal mucus’ > Ni -nxatå? || PCh *-hnát<ijah-PL>
- (420) PM *[t]på⁹j ‘to be bitter’ > Ni [t'a]på⁹j || PCh *påhj-i? || PW *[t]páj
- (421) PM *-pås(-e⁹t) ‘lip’ > Mk -pas || Ni -pås<e⁹t> || PCh *-pås<at> ~ *-pås<åt> || PW *-pås<et>
- (422) PM *-påt ~ *-påt ‘to shuck’ > Ni [t]påt-xan / [n(i)]påt-a? || PCh *[?i]påt
- (423) PM *påttséχ ‘jabiru’ > Ni påtsex || PCh *påtsáh || PW *påtsáχ
- (424) PM *påtse(?)χ ‘fast, quick’ > Ni påtsex || PCh *(-)påsah
- (425) PM *phå⁹m ‘up’ > Mk -pha⁹m || PCh *p⁹hå⁹m || PW *-phå / *phåm-
- (426) PM *-qalå? (*-j^h) ‘leg’ > Ni -kaklå? (-j) || PCh *-qa⁹lå? ~ *-qå⁹lå? (*-j^h) || PW *-qålå (*-j^h)
- (427) PM *[t]qåñhan ‘to fish with a hook’ > Mk [ta]<qa>qanhen || PCh *[t⁹]qåñnan || PW *[t]qåñhan
- (428) PM *-såq’ål^h, *-såq’ål-its ‘soul, spirit’ > Mk (?) -si⁹nq’al(-its) || Ni -såk’åkl<it> || PCh *-såq’ål^h, *-såq’ål-is
- (429) PM *-så⁹t ‘vein’ > Mk -<?a>sa⁹t || Ni -så⁹t || PCh *-såt- || PW *-såt
- (430) PM *[ji]selåñ ‘to spank’ > Mk [j]<eq>silan ‘to spank’ || PCh *[?i]selåñ ‘to store’; *[?i]selåñ-eh ‘to prepare’
- (431) PM *slåqha(?)j, *slåqhaj-its ‘wild cat’ > Ni sklåkxaj ~ sklåkxaj(-is) || PCh *s⁹låhqaj? ~ *s⁹låhqåj? (*-is) || PW *silåqhåj
- (432) PM *[ni]-tåfä(?)l-APPL ‘to know, to be acquainted’ > Ni [ni]tåfäakl-APPL || PCh *[?i]tåhwel-APPL || PW *-tåx⁹el-APPL / *-tåx⁹nh-APPL
- (433) PM *tå⁹t ‘to sprout’ > Mk ta⁹t || Ni tå⁹t || PCh *tå⁹t || PW *tå⁹t
- (434) PM *-tåmte? (*-ts) ‘daughter-in-law’ > Ni -tåmte<?e>(-s) || PCh *-tåmte?(*-s)
- (435) PM *-tåtse? (*-j^h) ‘eyelash’ > Mk -tetsi?(-j) || Ni -tåtse(-j) || PCh *-tåse?(*-j^h)
- (436) PM *tija⁹χ ‘to shoot, to throw’ > Mk tija⁹χ / -tija⁹χ || Ni tija⁹x || PCh *[?i]tíjåh || PW *tijåχ
- (437) PM *tiłå⁹x ‘to carry on one’s shoulders’ > Mk tiło⁹x / -tiło⁹x || Ni tiłå⁹x || PCh *[?i]tíhlåh || PW *tiłåχ

3.5 PM *å

- (438) PM **t'iså?* ~ *t'iså?* (*-l) 'cream-backed woodpecker (*Campephilus leuco-pogon*)' > Mk *t'isa?* (-l) || Ni *t'iså?* (-k) || PCh **t'iså?* (-l)
- (439) PM **tsåhåq* (*-its) 'chajá bird' > Mk *tsahaq* (-its) || PCh **såhåk*, **såhåq-es* ~ **såhåq-is* || PW **tsåhåq*
- (440) PM *[*j*]útlå(?)χ 'to be tired' > Mk -*ułla*(?)χ 'breath' || Ni [*j*]ułłax || PCh *[*j*]úhlåh
- (441) PM *-wå'k 'bad mood' > Mk -*wak* || Ni -*βå'k* || PCh *-wåk || PW *-wåk^w
- (442) PM *^wåñXåtlåχ, *^wåñXåtlå-ts 'rhea' > Mk *waalaχ* || Ni βånxåtlåx, βånxåtlå-s || PCh *^wåñhlåh, *^wåñhlå-s || PW *wå'nłåχ, *wå'nłå-s
- (443) PM *^wóså(?)q ~ *^wóså(?)k 'butterfly' > Ni βosåk || PCh *^wósåk
- (444) PM *xéjå? (*-l) 'bat' > Mk *xaja?* (-l) || Ni *sejå* (-k) || PCh *<?a>héja? (*-l)
- (445) PM **xpå'k* ~ **xpå'k* 'straw' > Mk *xupå*(?)k ~ *xupek* || Ni *xpå'k* || PCh **ipåk*
- (446) PM *[?]ám?åh, *[?]ám?å-ts 'rat' > Ni [?]am?å (-s) || PCh *[?]ám?ah ~ *[?]ám?åh, *[?]ám?a-s ~ *[?]ám?å-s || PW *[?]áma
- (447) PM *[?]aqåje'k 'wild honey' > Ni *akåjetʃ* || PW *[?]aqåjeq
- (448) PM *[?]aX₁₃åje(?)χ 'mistol fruit' > Ni *axåjex* || PCh **ahájah* || PW **ahåjaχ*
- (449) PM *[?]aX₁₃åj-u'k, *[?]aX₁₃åj-ku-j^h 'mistol tree' > Ni *axåj-uk*, *axåj-ku-j* || PCh **ahåj-uk*, **ahåj-ku-j^h* || PW **ahåj-uk^w*
- (450) PM *[?]å'jteχ, *[?]å'jte-ts 'to hurt' > Mk *a?tax*, *a?ti-ts* || Ni [?]å'jtex ~ [?]å'βtex || PCh *[?]åj?tah-APPL, *-[?]åj?te-s-APPL || PW *[?]åjtaχ, *[?]åjte-s
- (451) PM *[?]ål(V)tse(?)χ, *[?]ål(V)tse-ts 'cháguar (*Deinacanthus urbanianum*)' > Ni [?]åktsex, [?]åktse-s || PCh *[?]ål^osah, *[?]ål^ose-s || PW *[?]åletsax
- (452) PM *[?]å'lå-taχ, *[?]å'lå-ta-s 'Argentine boa' > Ni [?]å'klå-tax, [?]å'klå-ta-s || PCh *[?]å'lå-tah> ~ *[?]å'lå-tah>, *[?]å'lå-ta>-s ~ *[?]å'lå-ta>-s || PW (?) *lá-tax>
- (453) PM *[?]ånhajex 'wild bean (*Capparis retusa*)' > Mk *anhejaχ* || Ni [?]ånxajex || PCh *[?]ohnajah || PW *[?]ånhajax
- (454) PM *[?]ånitih 'wasp (sp.)' > Ni [?]åniti || PCh *[?]ånitih
- (455) PM *[*t*]ås 'to step' > Ni [*t*]ås || PCh *[*t*]ås || PW *[*t*]ås-APPL
- (456) PM *[?]åtits ~ *-i- ~ *-e- ~ *-é- 'wild pepper' > Mk *atits* || PCh *[?]åtés
- (457) PM *-[?]åx (*-its) 'skin, bark' > Mk -*åx* (-its) || Ni -[?]åx (-is) || PCh *-[?]åh, *-[?]åh-és || PW *-t-'åχ, *-t-'åh-és
- (458) PM *[*j*]éjxåts-han 'to teach' > Mk [*j*]ixats<hen> || Ni [*j*]ejxats-xan / -*ejxats-xan* || PCh *[?][*j*]éjåhås<an>

3 Vowels

- (459) PM *ʔítå(?)χ, *ʔítå-ts ‘fire’ > Ni ʔítåx, ʔítå-s || PCh *ʔítåh, *ʔítå-s || PW *ʔítåχ, *ʔítå-s

- (460) PM *ʔúlʔåh, *ʔúlʔå-ts ‘dove’ > Ni ʔuklʔå (-s) || PCh *ʔúlʔåh, *ʔúlʔå-s

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable.

- (461) PM *-á'm ‘pronominal formative’ > PCh *-á'm || PW *-á'm

- (462) PM *-áme(?)t / -ámt-e- ‘word’ > PCh *-ámt- || PW *-ámet, -ámt-e-s

- (463) PM *[j]åfti(?)t ‘to spin’ > Mk [j]afti(?)t || Ni [j]åfti-t

- (464) PM *-áte(?) (*-j^h) ‘jar’ > PCh *-áte? (*-j^h) || PW *<^x>áte (*-j^h)

- (465) PM *[j]åtsi(?)j ‘to spill’ > Mk [j]atsij-xu? || Ni [j]åtsij

- (466) PM *phiłå(?)X₁₂ ‘pocote (*Solanum sp.*)’ > PCh *hwílåh || PW *xʷílåχ

- (467) PM *phinåk, *phinħå-j^h ‘tobacco’ > Mk finak, finha-j || Ni φinåk, φinxå-j

- (468) PM *jiʔixåtaχ, *jiʔixåta-ts ‘ocelot’ > Mk iʔixataχ, iʔixate-ts || Ni jixåtax, jixåta-s

- (469) PM *[ji]kå(?)t ‘to be red’ > PCh *[ʔi]kåt || PW *[ʔi]k^jåt

- (470) PM *[ji]kå? ‘to be torn’ > PCh *[ʔi]kå? || PW *[ʔi]k^jå?

- (471) PM *-kéjå(?) (f.), *-kéjåts (m.), *-ké(j)tså-ts (pl.) ‘grandchild’ > PCh *-kéjå?, *-kéjås, *-kétsås || PW *-k^jéja, *-k^jéjås, *-k^jétsås

- (472) PM *[ji]lå(?)t ‘to feel’ > PCh *[ʔi]låt-ej^h || PW *[ʔi]låt

- (473) PM *låttsiki-ju'k ‘willow’ > Mk lattsiki-ju'k || Ni klåtsiki-juk

- (474) PM *ntå(?)k ‘two’ > PCh *ntåk || PW *nitåk^w

- (475) PM *på'jih ‘frog (*Leptodactylus sp.*)’ > PCh *på'jih || PW *på'jih

- (476) PM *-qåtsile(?) (*-j^h) ‘guts’ > PCh *-qåsile-j^h || PW *-qåsle-j^h

- (477) PM *sålå(?)l, *sålål-its ‘middle-sized cicada’ > Mk sala(?)l, salal-its || Ni såkl<åkl>åk (-is)

- (478) PM *sijå(?)χ, *sijåχ-is ‘fish (*sp.*)’ > Mk sija(?)χ, sijax-its || Ni sijåx (-is)

- (479) PM *silóʔtåɸV ~ *siwóʔtåɸe ‘Caatinga puffbird’ > PCh *silóʔtåhwV? || PW *siwótåx^we

- (480) PM *stáɸe(?) ‘Chaco chachalaca’ > PCh *ʔ^ostáhwe? || PW *ʔistáx^we

- (481) PM *tåtsna(?)X₁₂ ~ *tåtsne(?)χ ‘toad’ > PCh *tåsVnah || PW *tåtnax

3.6 PM **o*

- (482) PM **t'åj* ‘to sound, to have voice’ > Mk *t'aj* || Ni *t'åj*
- (483) PM **[ji]tså(?)j* ‘to spill’ > PCh **[?i]såj?* || PW **[?i]tsåj*
- (484) PM *(*wånaχ*, *(*wånhä-ts* ‘piranha’ > Mk *wanaχ*, *wanhe-ts* || Ni *βåanax*, *βånxå-s*
- (485) PM *(*wås* ‘sky’ > Mk *wa's* || Ni *βå's*
- (486) PM *(*wåse?* ‘cloud’ > Mk *wasi?* || Ni *βåse?*
- (487) PM *-*atå(?)* ‘fat’ > PCh *-*ahlå?* || PW *-*t-'atå(?)*
- (488) PM *[?][*nåphé(?)t* ~ *[?][*nåphä(?)t* ‘to be ashamed’ > PCh *[?][*nåhwétl* || PW *[?]<*n>åx^wétl* ~ *[?]<*n>åx^wélh*
- (489) PM **?åfte'l* ‘orphan’ > Mk *afti'l* || Ni *?åfte'k*
- (490) PM *-*å(?)l*, 3 *[?][*j*i(?)l ‘to die’ > PCh *[?][*jå(?)l* || PW *[?][*j*il^h
- (491) PM **?åthajex* ~ **?åthäjex* ‘molle fruit’ > Mk *athejaχ* || Ni *?åtxajex*

In a number of stems, PM *å yields **o* in Chorote and Wichí, a development usually found in the vicinity of a labial consonant or PM *χ. In the same words, PM **a* in the preceding syllable typically harmonizes to Mk *a*, Ni å.

- (492) PM *-*åwå(?)* ‘flower’ > Ni *-aβå* || PCh 3 **hl-åwo?* || PW *-*tl-åwo*
- (493) PM **n-åχ* ‘to end up’ > Mk *n-aχ* || Ni *n-åx* || PCh *[?]*n>óhw-APPL* || PW *[?]*n>ox^w*
- (494) PM *-*phapå(?)* ‘shoulder’ > PCh *-*hwopó?* || PW *-*x^wåpo*
- (495) PM *-*phapå-ke?* ‘shoulder blade’ > Ni *-phåpå-ke* || PCh *-*hwopó-ke?*
- (496) PM *-*tåwå'x*, *-*tåwxä-ts* ‘(abdominal) cavity’ > Mk *-tawe'x*, *-tawxä-ts* || Ni *-tåβa'ʃ*, *-tåβxa-s* || PCh *-*tóweh* || PW *-*tóweχ*
- (497) PM **wåtå(?)χ* ‘palo flojo fruit’ > Ni *βåtåx* || PW **wåtox^w*
- (498) PM **xnåwå'p* ‘spring’ > Mk *xinawa'p* || Ni *fnåβåp* ~ *fnåβåp* || PCh **nåwop* || PW **xnåwop*

3.6 PM **o*

PM **o* is typically preserved as *o* in all daughter languages: Maká, Nivaclé, Proto-Chorote, and Proto-Wichí. Only a few cognate sets show deviant reflexes: Mk *u* in (533), Ni *a* in (536)–(537), PCh *[?]*o* in (512).

- (499) PM **phajXo?*, **phajXó-l* / *-*phájXo?*(*-*l*) ‘coal’ > Ni (-)*phajxo?(-k)* || PCh **hwa(h)jo-* || PW **x^wijho?*, **x^wijhó-l^h* / *-*x^wíjho* (*-*l^h*)

3 Vowels

- (500) PM *-ɸqató(*-l) 'elbow' > Ni -(?V)ɸkato(-k) || PCh *-qató?(*-l) || PW *-qáto(*-l^h)
- (501) PM *-ko(?)j (*-áj^h) 'hand, arm' > Mk -koj (-ej) || PCh *-kój?, *-koj-áj^h
- (502) PM *k(?)ój-APPL 'to be round' > Mk k'o:j-xi? || PCh *kój<oj>-APPL
- (503) PM *k'alxó(*-ts) 'armadillo (sp.)' > Mk k'olo²x || Ni k'akxo(-s) || PCh *k'ihló?(*-s) || PW *k'anhóh
- (504) PM *-k'o, *-k'ó-l 'bottom' > Ni -k'o?(-k) || PCh *-k'ó? || PW *-k'ó, *-k'ó-l^h
- (505) PM *(-)lo(?) ~ *(-)ló(?) 'ashes' > Mk lo? || PCh *-ló?
- (506) PM *lo²p ~ *ló²p, *lop-íts ~ *lóp-its 'winter' > Mk lo²p, lop-its || Ni klo²p, klop-is || PCh *lóp || PW *lop ~ *lóp
- (507) PM *lóta-(ju)'k 'tree for making bows' > Ni klotá<tf> || PCh *lóta-juk || PW *lóte<q>
- (508) PM *[?]lóχ, *[?]ló-ts 'many' > Mk <o>lo<ts> || Ni <?a>klox || PCh *[?]lóh || PW *<?a>ló<s>
- (509) PM *[ji]Xón 'to roast' > Ni [ji]kxon || PCh *[?i]hlón || PW *[t]nhón
- (510) PM *mijó(*-l) 'savannah hawk' > Mk mijo(-l) || Ni mijo(-k) || PCh *mijó?(*-l) || PW *mijóh
- (511) PM **mók (*-its) 'zorzar bird (*Turdus sp.*)' > Mk mok (-its) || Ni mok (-is) || PCh **mók (*-is)
- (512) PM *néwo(?)k 'wild manioc' > Ni noþok || PCh (?) *n²wák || PW *néwok^w
- (513) PM *-ó (*-l) 'penis' > Ni -o?(-k) || PCh *-ó?(*-l) || PW *-t-ó (*-l^h)
- (514) PM *-ó?(*-j^h) 'seed' > Mk 3 t-o? (-j) || PCh *-ó? || PW *-t-ó?(*-j^h)
- (515) PM *pätóχ 'to be deep' > Ni [?]patox || PCh *-pítóhw<ij?> || PW *pitóx^w
- (516) PM *[t]pó?-ex 'to be full' > Mk [to]po?-ox || Ni [to]po?-x || PCh *[t²]pó-eh || PW *[t]pó-jeχ
- (517) PM *[ji]pónit-ex 'to fill' > Mk [j]<o>pon-het-ix || Ni [ji]pont-ef || PCh *[?i]pónit-eh || PW *[?i]tá-ponit-eχ
- (518) PM *[ji]p'o(?) ~ *[ji]ɸ'o(?) ~ *[ji]p'ó(?) ~ *[ji]ɸ'ó(?) 'to cover' > Ni [ji]p'o || PCh *[?i]p'ó-APPL || PW *[hi]p'ó-APPL
- (519) PM *-p'o'k ~ *-ɸ'o'k 'fence' > Ni -p'o'k || PCh *-p'ók || PW *-p'ok^w
- (520) PM *-p'o't 'lid' > Mk -p'ot<o?> || Ni -p'o't || PCh *-p'ót || PW *-p'ot
- (521) PM *siló?tåɸV ~ *siwó?tåɸe 'Caatinga puffbird' > PCh *siló?tåhwV? || PW *siwótåx^we

3.6 PM **o*

- (522) PM *-*t(á)ko?*(*-*l*) 'face' > Mk -*tko*<*je**k* || Ni -*tako?*(*-*k*) || PCh *-*tóko?*(*-*l*)
 || PW *-*ták’o*(*-*l^h*)
- (523) PM *-*t(á)ko-se?*(*-*j^h*) 'eyebrow' > Mk -*tko*-*si?*(*-*j*) || PCh *-*tóko-se?*(*-*j^h*)
 || PW *-*ták’o-se*(*-*j^h*)
- (524) PM **tós*(*-*its*) 'snake' > Ni *tos*(*-*is*) || PCh **tós*(*-*is*)
- (525) PM **tóχ-APPL*, **tó-ts-APPL* 'far' > Mk -*toχ-ij*, *to-ts-ij* || Ni *tox-APPL* || PCh **tóh(w)-APPL*,
 **tó-ts-APPL* || PW **tóx^w-ej^h*
- (526) PM *-*txo’k* ~ *-*txó’k*, *-*txóko-wot* 'uncle' > Mk -*txo’k* || Ni -*txo’k*, -*txoko-βot*
 || PCh *-<*i*>*tók*, *-<*i*>*tóko-wot* || PW *-<*wi*>*thok^w*
- (527) PM *-*t’ox* ~ *-*t’óx* 'aunt' > Ni -*t’ox* || PCh *-<*i*>*t’óh* || PW *-<*wi*>*t’oχ*
- (528) PM **tsópha*(?) 'fruit of a shrub (*Lycium americanum*)' > PCh **sóhwa?* ||
 PW **tsóx^wa*(?)
- (529) PM **tsópha-taχ* 'fruit of a shrub (*Lycium americanum*)' > Mk *tsofe-taχ* ||
 Ni *tsoφ-taχ*
- (530) PM **tsópha-ta-(ju)’k* 'shrub (*Lycium americanum*)' > Mk *tsofe-te-k* || Ni *tsoφ-ta-juk*
 || PW **tsóx^wa-t-uk^w*
- (531) PM **[ji]wó* 'to do' > Mk *wo2-oj* || Ni *βo?*<*oj*> || PCh **[ʔi]wó* / *-*wó* || PW **[ʔi]wó*
- (532) PM *-*wó*(*-*ts*) 'worm' > Ni -*βo?*(*-*s*) || PCh *-*wó?*(*-*s*) || PW *-*wó*(*-*s*)
- (533) PM **[ji]wo’m* 'to throw' > Mk *[i]wu’m* || PCh **[ʔi]wóm-APPL* || PW **[ʔi]wo’m*
- (534) PM **wóp’ih* ~ **wóφ’ih* ~ **móp’ih* ~ **móφ’ih* 'white egret' > PCh **wóp’ih*
 || PW **móp’i*
- (535) PM **wósak’V(?)t* 'red-crested cardinal' > PCh **wós²k’at* || PW **wósak^j’it*
 ~ **wósak^j’ut*
- (536) PM **wósitseχ* 'black algarrobo fruit (*Prosopis nigra*)' > Mk *ositsaχ* || Ni *βaitseχ*
 || PW **wósotsaχ*
- (537) PM **wósits-u’k* 'black algarrobo tree (*Prosopis nigra*)' > Mk *osits-u’k* ||
 Ni *βaitse-juk* || PCh **wósis-uk* || PW **wósots-uk^w*
- (538) PM *-*wó?*(*-*ts*) 'expert' > Mk -*wo?*(*-*ts*) || Ni -*βo?*(*-*s*) || PCh *-*wó?*(*-*s*) ||
 PW *-*wó?*(*-*s*)
- (539) PM *-*wo*, *-*wó-l* 'neck' > Mk -*wo*<*nxe?*> || Ni -*βo?*(*-*k*) || PCh *-*wó?*(*-*l*)
 || PW *-*wo*, *-*wó-l^h*
- (540) PM *-*wo’j* 'blood' > Ni *βo’j* / -*βoj-ej* || PCh *-*wój-is* || PW *-*woj-ís* /
 *-*wój-is*

3 Vowels

- (541) PM $^{*?}wóså(?)q$ ~ $^{*?}wóså(?)k$ ‘butterfly’ > Ni β osåk || PCh $^{*?}wósåk$
- (542) PM $^{*[ji]}X_{13}o(?)$ ~ $^{*[ji]}X_{13}ó(?)$ ‘to go’ > Ni $[ji]xo?$ || PCh $^{*[?i]}hó?$ || PW $^{*[ji]}ho(?)$ ~ $^{*[ji]}hó(?)$
- (543) PM $^{*}X_{13}ó?k$ ‘palo santo (*Bulnesia sarmientoi*)’ > Ni $xo?k$ || PCh $^{*}hók$ || PW $^{*}hók^w$
- (544) PM $^{*}X_{13}on-xa^?χ$, $^{*}X_{13}on-xáh-aj^h$ ‘night’ > Ni $<xon>sa^?x$, $<xon>sa^?x-aj$ || PW $^{*}<hon>aχ$, $^{*}<hon>áh-aj^h$
- (545) PM $^{*}X_{13}ó?t$ ‘sandy place’ > Ni $xo?t$ || PCh $^{*}hót$ || PW $^{*}hót$
- (546) PM $^{*}?\phi o?(-ts)$ ‘pigeon’ > Mk $ofo?(-l)$ || Ni $?\phi o(-s)$ || PCh $^{*}?\phi hwo?(-s)$
- (547) PM $^{*}[j]om$ ‘to be extinguished’ > Mk $[j]om$ || PCh $^{*}[j]óm-APPL$ || PW $^{*}[j]om$
- (548) PM $^{*}?\phi na(?)χ$ ‘my brother’ > Ni $?\phi nax$ || PCh $^{*}?\phi náh$
- (549) PM $^{*}[j]óp'ale(?)$ ‘to hiccup’ > Ni $[j]op'aklē$ / $-?op'aklē$ ‘to choke’ || PCh $^{*}[j]óp'ale?$ || PW $^{*}[j]óp'le$
- (550) PM $^{*}?\phi o?t$ ~ $^{*}?\phi o?t$ ‘chest’ > Ni $-?\phi o?t$ || PCh $^{*}?\phi t$

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaâle, Chorote and Wichí), whose PM age is thus questionable.

- (551) PM $^{*}-\phi om$ ‘to throw, to push’ > PCh $^{*[?i]}hwóm-ah$ || PW $^{*[t]}x^wom$
- (552) PM $^{*(-)}\phi'ok$ ~ $^{*(-)}\phi'ók$ (*-its) ‘arrow’ > Mk $(-\phi)ok$ (-its) || Ni $(-\phi)ok$ (-is)
- (553) PM $^{*}ji'no$, $^{*}ji'nó-l$ ‘man’ > PCh $^{*}i'nó?(?-l)$ || PW $^{*}hi'no$, $^{*}hi'nó-l^h$
- (554) PM $^{*}kójXa(?)t$ ‘to be heavy’ > PCh $^{*}kóhjat-APPL$ || PW $^{*}kójhat$
- (555) PM $^{*}kó'l$ ‘locust’ > PCh $^{*}kó'l$ || PW $^{*}kój'l^h$
- (556) PM $^{*}kowá?x$ / $^{*}-kowá?x$ ‘hole’ > PCh $^{*}kowéh$ / $^{*}-kóweh$ || PW $^{*}kójweχ$ / $^{*}-kójweχ$
- (557) PM $^{*}-k'aló(?)$ (*-ts) ‘cheek’ > PCh $^{*}-k'aló?(?-s)$ || PW $^{*}-k^j'álo$ (*-s)
- (558) PM $^{*}-k'óX_{23}te(?)$ (*-j^h) ‘ear’ > PCh $^{*}-k'óote?(?-j^h)$ || PW $^{*}-k^j'óte$ (*-j^h)
- (559) PM $^{*}-pák'o$ ‘heel’ > PCh $^{*}-pók'o?$ || PW $^{*}-pák'j'o$
- (560) PM $^{*}-qótso(?)$ ‘node’ > PCh $^{*}-qóso-ke?$ || PW $^{*}-qótso$
- (561) PM $^{*(-)}tak'o(h)$ ~ $^{*(-)}täk'o(h)$ ‘kind of utensil’ > Mk $tok'o$ || Ni $-tak'o-tax$
- (562) PM $^{*}tsóna(?)$ ‘red brocket’ > PCh $^{*}tsóna?$ || PW $^{*}tsó'nah$
- (563) PM $^{*}(?)wawo(h)$ (*-l) ‘maned wolf’ > Mk $wowo$ (-l) || Ni β a β o (-k)

3.7 PM **u*

- (564) PM **wóna*(?) ‘*bala* wasp honey; hat’ > PCh **wóna?* || PW **wó’nah*
- (565) PM *-*wóle*(?) ‘leaf, hair, feather’ > PCh *-*wóle?* || PW *-*wole*
- (566) PM **Xmáwoh* ‘fox’ > PCh **máwo-tah* || PW **máwoh*
- (567) PM **xoxaw-u’k* ~ **xoxi-ju’k*, *-*ku-j* ‘*palo cruz (Tabebuia nodosa)*’ > Mk *xoxew-u’k*, *xoxew-kw-i* || Ni *xoxi-juk*, *xoxi-ku-j*
- (568) PM **?a’nqo’k* ‘paralytic’ > Mk *onqok* || Ni *?a’nko’k*
- (569) PM *[*t*]’*at’o* ‘to yawn’ > Mk [*t*]’*ot’o-kij* || Ni [*t*]’*at’o*
- (570) PM **[j]o* ‘to be ripe’ > PCh **[j]ó-?e?* || PW **[j]o*
- (571) PM **?omhatäk* ~ **?omhätäk* ‘queen palm fruit’ > Mk *omhetek* || Ni *?omxatatj*
- (572) PM *-*?ó’thale*(?) ~ *-*?ó’thåle*(?) ‘heart’ > PCh *-*?óhtale?* ~ *-*?óhtåle?* || PW *-*t-’ótle*

3.7 PM **u*

PM **u* is typically preserved as *u* in all daughter languages: Maká, Nivaclé, Proto-Chorote, and Proto-Wichí. In the Chorote varieties, it may front to *i* after palatalized consonants, but this sound change must have occurred after the disintegration of Proto-Chorote into dialects (see §8.2.3.5). Note that the reflexes in (600) in Nivaclé and Wichí are entirely irregular due to contamination with those of PM *-*pás(-e’t)* ‘lip’; the regular reflexes are found in Maká and Chorote. The Wichí reflexes in (602) and (632) are also irregular. In (619)–(621), PM **xu-* is reflected as PCh **?i-* and PW **x-*, which could be a regular development in word-initial unstressed syllables. In (598), Chorote has lost the original vowel before what looks like a fossilized vowel-initial suffix.

- (573) PM **n-ap’u* ~ **n-aφ’u* (~ *-á- ~ *-ú) ‘to lick’ > Ni *n-ap’u* || PCh *[*?i*]’*n-áp’u* || PW **<n>ap’u* ~ **<n>áp’u* ~ **<n>ap’uh*
- (574) PM **φátsu*(?)*χ*, **φátshu-ts* ‘centipede’ > Ni *φatsux*, *φatsxu-s* || PCh *(*h*)*wásuh*, *(*h*)*wásu-s* || PW **xʷátsuxʷ*
- (575) PM *-*φál?u?*(*-*ts*) ‘son-in-law, brother-in-law’ > Mk *-felu?*(-*ts*) || Ni *-φakl?u*(-*s*) ‘brother-in-law’ || PCh *-*hwílu?* ~ -*hwélu?*(*-*s*) ‘son-in-law’
- (576) PM **φts-u’k* ‘palm (*Copernicia alba*)’ > Mk *fits-uk* || Ni *φts-u’k* || PCh **hwis<úk>* || PW **xʷits<ukʷ>*
- (577) PM *-*φu’t* ~ *-*φí’t*, *-*φtú-ts* ‘flatulence’ > Mk *-ftu-ts* || Ni *-φu’t*, *-φtu-ts* || PCh *-*hwút*

3 Vowels

- (578) PM *-ɸχúx, *-ɸχú-ts ‘**finger**’ > Mk -fux || Ni -ɸxux, -ɸxu-s ‘**toe**’ || PCh *-hwu-ké? || PW *-xʷúxʷ, *-xʷú-s
- (579) PM *jiju’s ~ *jijú’s ‘**wax**’ > Ni jiju’s || PCh *?ijús
- (580) PM *kula’j ~ *kulá’j ‘**sun**’ > Ni <xum>kuklā’j || PCh *kuláj?
- (581) PM *[ji]kú’t ‘**to answer**’ > Mk [j]<e>ku’t || Ni [ji]ku’t || PCh *[?i]kúhl-APPL || PW *[ni]k’út
- (582) PM *[t]kú’m-APPL ‘**to grab; to work**’ > Mk [te]ku’m-APPL || Ni [t’ɑ]ku’m-APPL || PCh *[?i]kúm-APPL || PW *[t]k’ú(?)m-APPL
- (583) PM *-kun ~ *kún ‘**to eat.INTR**’ > Ni <tsak>kun || PCh *[t³]<’já>kun
- (584) PM *kús ~ *kúts ‘**heat**’ > Mk (?) kus (*Pyrocephalus rubinus*) || Ni kus || PCh *kús-APPL
- (585) PM *-kút-ex ‘**to meet**’ > Mk [w(e)]kut-ix-u’t || Ni [βa]kut-ef || PCh *[?i]kút-eh || PW *-k’út-eχ
- (586) PM *kú’X₁₂ ‘**sweat**’ > Ni -β-ku’x || PW *k’úxʷ
- (587) PM *-k’u, *-k’ú-l ‘**horn, club**’ > Mk -k’u?(-l) || Ni -k’u?(-k) || PCh *-k’ú?(*-l) || PW *-k’u, *-k’ú-l^h
- (588) PM *k’uj ~ *k’új ‘**cold**’ > Mk k’wi / k’uj- || Ni k’uj || PCh *k’új?
- (589) PM *k’ú(t)sta(?)χ, *k’ú(t)sta-ts ‘**barn owl**’ > Ni (?) k’ustax, k’usta-s ‘**mockingbird**’ || PCh *k’ústah, *k’ústa-s || PW *k’ústax
- (590) PM *k’utX₂₃á’n, *k’utX₂₃án-its ‘**thorn**’ > Ni k’utxa’n, k’utxan-is || PCh *k’utá’n, *k’után-is || PW *k’uthá’n, *k’uthán-is
- (591) PM *(-)lútse’x, *(-)lútsxe-ts ‘**bow**’ > Ni k’lútsef / -k’lútseʃ, (-)k’lútsfe-s || PCh *(-)lúseh (*-es) || PW *(-)lútseχ, *(-)lútse-s
- (592) PM *-tu’k, *-tú-j^h ‘**yica bag, load**’ > Mk -tu’k, -tu-j || Ni -tu’k || PCh *-hlúk, *-hlúj-... || PW *-tukʷ, *-tú-j<is>
- (593) PM *túm?a ‘**day**’ > Ni tūm?a- || PCh *hlúma?
- (594) PM *tútsX₂₃a(?) (*-jek) ‘**girl**’ > Ni tūtsxa (-jetʃ) || PCh *hlúsa? (*-jek) || PW *tútsha
- (595) PM *-muk, *-mhu-j^h ‘**feces**’ > Mk -<i>muk, -<i>mhu-j || Ni (-)<sa>muk, (-)<sa>mhu-j || PCh *-<’já>muk || PW *-<’já>mukʷ, *-<’já>mhu-j^h
- (596) PM *(-)nú(?) (*-ts) ‘**bone**’ > Mk -nu (-ts) || Ni -nu?(-s) || PW *nú(?)
- (597) PM *nú?uh, *nú?u-ts ‘**dog**’ > Ni nū?u (-s) || PCh *nú?uh, *nú?u-s

3.7 PM *u

- (598) PM *²nálu(h), *²nálu-ts ‘day, world’ > Mk ne²lu(-ts) || Ni na²lu(-s) || PCh *²náhl<ikis> ~ *náhl<ikes>‘midday’
- (599) PM *pútäh ‘tapeti rabbit’ > Ni puta || PCh *púteh
- (600) PM *-pxúse?(*-j^h) ‘beard’ > Mk -<a>pxusi?(-j) || Ni -påse(-j) || PCh *-púse?(*-j^h) || PW *-påse (*-j^h)
- (601) PM *[ji]qáku? ‘to distrust’ > Mk [je]qeku? || Ni [ji]kaku || PCh *[ji]qáku? || PW *[ji]qák^ju-APPL
- (602) PM *stwú²n, *stwún-its ‘king vulture’ > Ni staβu²n, staβun-is || PCh *²stúu²n, *²stúun-is || PW *istíwin
- (603) PM *-su(?), *-sú-l ‘vagina’ > Mk -su?(-l) || Ni -su?(-k) || PCh *-<í>su?(*-l) || PW *-su(?)
- (604) PM *s²wúla²χ, *s²wúla-ts ‘anteater’ > Ni s²βuklax, sβuklā-s || PCh *s²?úlah, *s²?úla-s || PW *súlaχ
- (605) PM *[ji]s²wun ~ *[ji]s²wún ‘to like, to love’ > Mk [ji]su?un || Ni [ji]s²βun || PCh *[?i]s²?ún
- (606) PM *tänük(*-its) ‘feline’ > Mk tenuk(-its) || Ni tanuk(-is) || PCh *tinúk(*-is)
- (607) PM *tlú²k ‘blind’ > Ni taklū²k || PCh *t²luk || PW *tiluk^w
- (608) PM *túku(?)ts ‘ant’ > Ni tukus || PCh *túkus
- (609) PM *túsus(?)ts ‘lesser yellowlegs’ > Ni tusus || PCh *túsus || PW *túsus
- (610) PM *tux ‘to eat.TR’ > Mk tux / -lux || Ni tux || PCh *[?i]túm || PW *tux^w
- (611) PM *tún ‘hard’ > Mk t'un || Ni t'un || PCh *tún || PW *tún
- (612) PM *tsänú²k ‘duraznillo trees’ > Ni tsanu²k || PCh *sinúk || PW *tsinúk^w
- (613) PM *-(j)uk, *-(j)ku-j^h ‘tree (suffix)’ > Mk -(j)uk, -(j)kw-i || Ni -(j)uk, -ku-j || PCh *-(j)uk, *-(j)ku-j^h || PW *-(j)uk^w, *-k^ju-j^h
- (614) PM *[j]úlå(?)χ ‘to be tired’ > Mk -u²la(?)χ ‘breath’ || Ni [j]u²låx || PCh *[j]úhlåh
- (615) PM *-ú²p, *-úp-its ‘nest’ > Mk 3 t-up (-its) || Ni -u²p, -up-is || PCh *-úp(*-is) || PW *-t-úp(*-is)
- (616) PM *-uwa ‘termite house’ > Ni -uβa || PW *-<t>uwa
- (617) PM *n-u(?) ~ *n-ú(?) ‘to throw oneself, to pass’ > Ni n-u? || PCh *[?i]<n>ú? || PW *[?i]<n>ú-APPL
- (618) PM *-xäjk'u(?)(*-l) ‘egg’ > Ni -sajk'u(-k) || PCh 3 *hl-éjk'u?(*-l) || PW *-t-ík^ju(*-l^h)
- (619) PM *xunxátaχ ‘tusca fruit’ > Mk xunxetaχ || Ni xunfatax || PCh *?ihnátah || PW *xnhátaχ

3 Vowels

- (620) PM **xunxáta-(ju)’k* ‘**tusca tree**’ > Mk *xunxete-’k* || Ni *xunxata-juk* || PCh **?ihnáta-k* || PW **’nháte-q*
- (621) PM **xunxáta-kat* ‘**tusca grove**’ > Mk *xunxete-ket* || Ni *xunxata-tsat* || PCh **?ihnáta-kat*
- (622) PM **xu(?)p* ‘**grass**’ > Mk *xup<’el>* || PCh **húp* || PW **hup*
- (623) PM *-*X₁₃u’k*, *-*X₁₃ú-j^h* ‘**firewood**’ > Ni -*xu’k*, -*xu-j* || PCh *(*?ítåh*)-*huk* || PW *-*huk^w*, *-*hú-j<is>*
- (624) PM *[*ji*]*X₁₃út* ‘**to push**’ > Ni [*ji*]*xut* || PCh *[*?i*]*hút* || PW *[*ji*]*hút*
- (625) PM **?aɸu* ~ **?aɸú* ‘**woman**’ > Mk *efu* || PCh **?ahwú?*
- (626) PM **?áɬu(?)* ‘**iguana**’ > Ni *?aɬu* (-s) || PCh **?áhlu?*(*-s) || PW **?áɬu*
- (627) PM *-*aqhu’ts* ~ *-*aqhú’ts* ‘**knee**’ > Mk *-aqhu’ts* || Ni -(*?a*)*kxu’s* || PCh *-*aqús*
- (628) PM **?atú’χ* ~ **?atú’χ* ‘**snake (sp.)**’ > Ni *?atú’x* || PCh **?atúh*
- (629) PM **?úl?ɬah*, **?úl?å-ts* ‘**dove**’ > Ni *?ukl?ɬå* (-s) || PCh **?úl?ɬah*, **?úl?å-s*
- (630) PM *-*?úɬ* ‘**to urinate**’ > Mk *uɬ* / -*?uɬ* || Ni [*j*]*uɬ* / -*?uɬ* || PCh *[*t*]’*úɬ* || PW *[*tʃ*]’*úɬ*
- (631) PM *-*?úɬu(?)* ‘**urine**’ > Ni -*?uɬu* || PCh *-*?úhlu?* || PW *-*t-’úɬu*
- (632) PM **?uwáɬe(?)χ* ~ **C’uwáɬe(?)χ* ‘**puma**’ > Ni <*xum>p’uβaɬex* || PCh **k’uwáhlah* || PW **?owáɬax* ~ **C’owáɬax*

The very same correspondence is observed in etymologies with a limited distribution (Maká and Nivaçle, Chorote and Wichí), whose PM age is thus questionable.

- (633) PM *[*?i*]*ɸá(t)s’un* ‘**to spit**’ > PCh *[*?i*]*hwáts’un-APPL* || PW *[*?i*]*xʷáts’un*
- (634) PM *(-)*jipku?*(*-l) ‘**hunger**’ > Mk (-)*jipku?*(-l) || Ni *jipku?* / -*jipku* (-k)
- (635) PM *[*wa*]*kuma’χ* ‘**to run**’ > Mk [*we*]*kuma’χ* || Ni [*βa*]*kuma’x*
- (636) PM **k(’)utsá(?)X₁₂* ~ **k(’)utsé(?)χ* ‘**cháguar (*Bromelia hieronymi*)**’ > PCh **k’usáh* || PW **k’utsáχ*
- (637) PM **k’uhate-nha?* ‘**pacu fish**’ > Mk <*i>k’uheti-nhe?*(-j) || Ni *k’unxate<nx>(-j)*
- (638) PM **púle(?)*(*-ts) ‘**sky, cloud**’ > PCh **púle?*(*-s) || PW **púle* (*-s ~ *-*ɬajis*)
- (639) PM **púm* ‘**drum**’ > PCh **púm* || PW **púm*
- (640) PM *-*qá?tu(?)* ‘**yellow**’ > PCh *-*qá?tu?* || PW **qá?tu*
- (641) PM **spú(?)p* ‘**dove**’ > PCh **s’púp* || PW **spúp*

3.8 Insufficient evidence for reconstruction of a specific vowel

- (642) PM *(-)tútse(?)χ ‘smoke’ > PCh *(-)túsah || PW *(-)tútsax
- (643) PM *tuχ-APPL ‘to burn (vi.)’ > Mk *tux-xem, tux-e?* || Ni *tux-a'm, tux-ej*
- (644) PM *[ji](t)s'u(?) ‘to suck’ > PCh *[?i]ts'ú-APPL || PW *[hi]ts'u(?)
- (645) PM *[ji]wún ‘to burn (vt.)’ > PCh *[?i]wún || PW *[?i]wún
- (646) PM *(?)wut ‘a bushy leguminous plant’ > Mk *wut* || Ni *βut*
- (647) PM *-wu(?)j ‘clothes, blanket’ > PCh *-wúj? || PW *-wuj
- (648) PM *-X₁₃úsek ~ *-X₁₃úsák ‘temperance’ > PCh *-húsek || PW *-húseq
- (649) PM *(?a)X₁₃útsa(?)χ, *(?a)X₁₃útsha-ts ‘crested caracara’ > Ni *xutsax, xutsxa-s* || PCh *(?a)húsah, *(?a)húsa-s || PW *?ahútsax, *?ahútsha-s
- (650) PM *?utsi(h) (*-l) ‘eel’ > Mk *utsi* (-l) || Ni *?utsi* (-k)

3.8 Insufficient evidence for reconstruction of a specific vowel

Some etymologies have a limited distribution (Maká and Nivaçle, Chorote and Wichí), and their PM age is thus questionable. For cognate sets that involve the correspondence between Mk *e* and Ni *a* with no cognates in Chorote and Wichí, it may not be possible to distinguish between PM **a* and **ä*.

- (651) PM *[n]a'ɬ ~ *[n]ä'ɬ ‘to burn’ > Mk [n]e'ɬ-xu? || Ni [ji]<n>-a'ɬ
- (652) PM *-ata(?)x ~ *-ä- ‘food’ > Mk -ete(?)x || Ni -ataf
- (653) PM *fánha? ~ *fánha?(*-j^h) ‘locust’ > Mk <e>fenhe?(-j) || Ni *fanxa* (-j)
- (654) PM *faxyi(?)j ~ *fäxi(?)j ‘green ameiva’ > Mk *fexij* || Ni *fafij*
- (655) PM *[t]k'an ~ *[t]k'än ‘to obey’ > Mk [te]k'en‘to respect’ || Ni [t(a)]tf'an
- (656) PM *lama(h) ~ *läma(h)(*-m) ‘to be smooth’ > Mk *le:me, leme-m* || Ni *kläma<m>*
- (657) PM *ma'la'l ~ *-ä- ‘agile’ > Mk *me'le'l*‘to move’ || Ni *maklä'k*
- (658) PM *(-)nawan ~ *-ä- ‘hook’ > Mk *newen* || Ni *-naβan*
- (659) PM *qapa(?)p ~ *-ä- ‘dwarf’ > Mk *qep<ep>e(?)p* || Ni *kapap* ‘dwarf dog’
- (660) PM *-sa'x ~ *-sä'x ‘leaf’ > Mk 3 *te-se'x* || Ni *-sa'ʃ*
- (661) PM *(-)tak'o(h) ~ *(-)täk'o(h) ‘kind of utensil’ > Mk *tok'o* || Ni *-tak'o-tax*
- (662) PM *tana(h) ~ *täna(h) ‘standing, vertical’ > Mk *te:ne, tene-m* || Ni *tana*
- (663) PM *tsaqaq ~ *-ä- ‘plant (sp.)’ > Mk *tseqeq* || Ni *tsakak*

3 Vowels

- (664) PM **waɸ* ~ **wäɸ* ‘to be tired, to die’ > Mk *[ji]wef* || Ni *βaɸ*
- (665) PM **wapen* ~ **wäpen* ‘to be ashamed’ > Mk *wepin* || Ni *βapen*
- (666) PM **?åthajex* ~ **?åthäjex* ‘molle fruit’ > Mk *athejaχ* || Ni *?åtxajex*
- (667) PM **?omhatäk* ~ **?omhätäk* ‘queen palm fruit’ > Mk *omhetek* || Ni *?omxatats*

For cognate sets that involve the correspondence between PCh **e* and PW **e* with no cognates in Maká and Nivaçle, it may not be possible to distinguish between PM **e* and **ä*.

- (668) PM *-éle(?) ~ *-äle(?) (*-j^h) ‘inhabitant, inner’ > PCh *-éle?(*-j^h) ‘inhabitant, intestine’ || PW *-t-éle (*-j^h)
- (669) PM *ktéta(?) ~ *ktäta(?) ‘white algarrobo fruit (*Prosopis elata*)’ > PCh *kitéta? || PW *k'téta
- (670) PM *[j]ókɸe(?)*(t)s* ~ *[j]ókɸä(?)*(t)s* ~ *[j]ékɸe(?)*(t)s* ~ *[j]ékɸä(?)*(t)s* ‘to frighten’ > PCh *[j]ókwes || PW *[j]ók^wes
- (671) PM *[?i]pén ~ *[?i]pán ‘to cook’ > PCh *[?i]pén || PW *[?i]pén
- (672) PM *kpéna(?)*X₁₂* ~ *kpäna(?)*X₁₂*, *kpén_{*X₁₃a-ts*} ~ *kpän_{*X₁₃a-ts*} ‘orphan’ > PCh *kpénah, *kpéhna-s || PW *k'pénaχ, *k'péhna-s
- (673) PM *-tämä(?)*k* ~ *-tämä(?)*k*, *-témh-aj^h ~ *-tämh-aj^h ‘bile’ > PCh *-témek, *-téhm-aj^h || PW *-témeq, *-témh-aj^h
- (674) PM *tkéna(?)*X₁₂* ~ *tkána(?)*X₁₂*, *tkén_{*X₁₃a-ts*} ~ *tkän_{*X₁₃a-ts*} ‘precipice; hill, mountain’ > PCh *t'kénah, *t'kéhna-s || PW *tk'énax, *tk'énha-s
- (675) PM *-X₁₃úsek ~ *-X₁₃úsäk ‘temperance’ > PCh *-húsek || PW *-húseq
- (676) PM *?áte(?)*k* ~ *?átä(?)*k* ‘cebil, vinal’ > PCh *?átek || PW *?áteq
- (677) PM *?at'e(?)*(t)s* ~ *?at'ä(?)*(t)s* ‘aloja drink’ > PCh *?at'és || PW *hat'és
- (678) PM *'[n]åɸé(?)*t* ~ *'[n]åɸä(?)*t* ‘to be ashamed’ > PCh *'[n]åhwéł || PW *'*<n>åx^wéł*
~ *'*<n>åx^wél*^h

For *χ-final stems that lack a known reflex in Nivaçle and whose vocalic stem is not recoverable, it is impossible to distinguish between PM **a* and **e* (and even **å*, if no Wichí cognate is available), because all these vowels merge before a uvular fricative as Maká *a*, Chorote *a*, and Wichí *a* (PM **å* remains distinct in Wichí, however).

- (679) PM *[ji]k'äsa'χ ~ *[ji]k'äse'χ ‘to divide’ > Mk *[j]<a>k'esa'χ* || PCh *[?i]k'ésah || PW *[hi]k'ésaχ

3.8 Insufficient evidence for reconstruction of a specific vowel

- (680) PM **k*(*')**utsá*(*?*)*X*₁₂ ~ **k*(*')**utsé*(*?*)χ 'cháguar (*Bromelia hieronymi*)' > PCh **k*'*usáh*
 || PW **k*^j*utsáχ*
- (681) PM *{*j*/*?*}*is{a/á/e}*[?]χ ~ *{*j*/*?*}*is{á/á/é}*[?]χ 'sand' > Mk *isa*[?]χ || PCh **?isáh* ~ **?isáh*

Finally, a divergent correspondence occurs in two examples, where Ni *å* corresponds to PCh **u* and PW **u* following a PM *(*')**w* (only one of these cognate sets has a reflex in Maká, where *e* is found). It is unclear as of yet which vowel should be reconstructed to Proto-Mataguayan in these two cases.

- (682) PM **w*̄[?]χ, **w*̄-*ts* 'large, fat' > Ni -*βá*[?]*x* || PCh **wúh*, **wú-s* || PW **wúx*^w, **wú-s*
- (683) PM *-[?]*wV*[?]*t* ~ *-[?]*w*̄[?]*t* 'to climb' > Mk *we*[?]*t* || Ni *βá*[?]*t* || PCh *[*i*][?]*wút* || PW *[*t*][?]*wut* ~ *[*t*][?]*wút*

4 Word-level prosody

This chapter deals with the reconstruction of the Proto-Mataguayan word-level prosody. We reconstruct word-level accent for Proto-Mataguayan based on evidence from the 'Weenhayek variety of Wichí and from Chorote; additional indirect evidence comes from Nivaclé.

Our proposal is based on the observation that long vowels in 'Weenhayek regularly correspond to stressed syllables in Chorote. In our reconstruction of Proto-Mataguayan, at most one syllable in a phonological word is contrastively **prominent**. A phonological word may also lack a prominent syllable; compare this to the so-called **enclinomena** in languages such as Old Russian, where words with a stress ("orthotonic words") are opposed to words without a stress, or enclinomena (Jakobson 1963).

In 'Weenhayek, the prominent syllables of Proto-Mataguayan are typically reflected as syllables with a long nucleus, whereas all other syllables have a short nucleus in 'Weenhayek. In Chorote, the prominent syllables of Proto-Mataguayan are typically reflected as stressed. The acoustic cues of stress in Chorote await further study; they may include an increase in intensity (Figure 4.1) and pitch (Figure 4.2) and, at least in some cases, increased vowel duration. Proto-Mataguayan words that lacked a prominent syllable receive a default stress in Chorote.

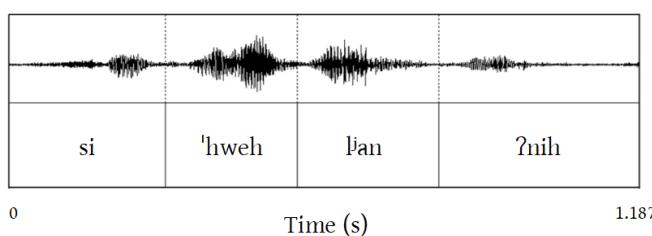


Figure 4.1: Intensity in Ijw *sihwéh'l'an?nih* 'I'm dreaming'

It is as of yet unclear which are the acoustic correlates of what we call prominence in Proto-Mataguayan; in this book, we speak of "accented" (˘) and "unaccented" (˘) syllables for ease of reference, but this is purely a terminological con-

4 Word-level prosody

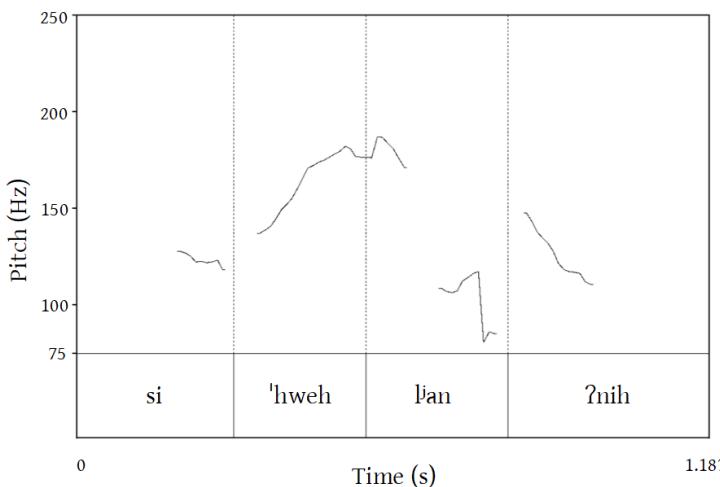


Figure 4.2: Pitch in Ijw *sihwéhljan?nih* ‘I’m dreaming’

vention, and we do not insist on any particular interpretation of the PM prominence. We indicate PM prominence, ’Weenhayek vowel length, and Chorote stress by means of an acute accent in this book. ’Weenhayek (as well as other Wichí varieties) also has stress, whose position is rather predictable; its placement is indicated by means of the dedicated IPA symbol ‘unless the stress is final.

The prosodic pattern of Proto-Mataguayan is not preserved in Maká and in most Wichí varieties, which have innovated final stress; Nivaclé is somewhat more conservative in this regard but less so than Chorote and ’Weenhayek. Innovative final stress is found even in ’Weenhayek, though it does not interact with the more archaic vowel length system in any way. Nevertheless, there are indirect vestiges of the Proto-Mataguayan prosodic system in Nivaclé and in Lower Bermejeño Wichí: in these varieties, PM *? is diachronically deleted when it occurs as a coda in posttonic syllables, but preserved in enclinomena and in accented syllables.

In our proposal, Proto-Mataguayan morphemes are underlyingly specified as accented or unaccented, and within a word only the leftmost underlying accent makes it to the surface. In addition, unaccented words of more than two syllables are not permitted; polysyllabic words composed of unaccented morphemes take a default peninitial accent.

§4.1 presents the distinction between unaccented (“enclinomena”) and accented (“orthotonic”) monosyllables of Proto-Mataguayan, with clearly distinct reflexes found in ’Weenhayek. §4.2 shows all three possible configurations for disyllabic

4.1 Monosyllabic words

words: enclinomena (unaccented–unaccented), iambs (unaccented–accented), and trochees (accented–unaccented). §4.3 shows the possible patterns in words with more than two syllables. Our findings are summarized in §4.4.

4.1 Monosyllabic words

This section discusses the distinction between unaccented (“enclinomena”) and accented (“orthotonic”) monosyllables of Proto-Mataguayan. They have clearly distinct reflexes in ’Weenhayek (and, consequently, in Proto-Wichí). No distinctions are found in other languages.

Note that this section covers monosyllabic *words* and not *stems*. This is important because monosyllabic consonant-initial stems of certain classes (such as relational nouns) always show up with a moraic prefix, and are thus considered in §4.2. However, monosyllabic vowel-initial stems of these same classes usually take non-moraic prefixes, and are thus discussed in this section.

4.1.1 [~]

Monosyllabic enclinomena are reflected as monosyllables with a short vowel in ’Weenhayek and, consequently, in Proto-Wichí. In (8) and (11), the word-initial consonant cluster is broken by an epenthetic PW **i*, in this case both vowels remain short.

- (1) PM 1 **h-åk*, 2 **t-äk*, 3 **[j]ik*; CISL **n-äk* ‘to go away’ > Mk 1 *h-ak*, 2 *t-ak*, 3 *ik*; CISL *n-ek* || Ni 1 *x-åk*, 2 *t-åk*, 3 *[j]itʃ*; CISL *n-atʃ* || PCh 1 *?åk*, 2 **hl-ék* || PW 2 **t-eq*, 3 **[j]iq*; CISL **n-eq*
- (2) PM **-åp*, 3 **[j]ip* ‘to cry’ > Mk *-ap*, 3 *ip* || Ni *-ap*, 3 *[j]ip* || PCh **[j]áp* || PW **[j]ip*
- (3) PM **t-åq* ‘its food’ > Mk *t-aq* || Ni *t-åk* || PCh **hl-åk* || PW **t-åq*
- (4) PM **n-åχ* ‘to end up’ > Mk *n-aχ* || Ni *n-åx* || PCh **<n>óhw-APPL* || PW **<n>ox^w*
- (5) PM **t-äɸ* ‘its wing’ > Mk *t-ef* || Ni *t-aɸ* || PW **t-ex^w*
- (6) PM **t-e* ‘its thorn’ > Mk *t-i?* || Ni *t-e?* || PCh **hl-é?* || PW **t-e*
- (7) PM **phi's* ‘leech’ > Ni *phi's* || PW **x^wis*
- (8) PM **φts-u'k* ‘palm (*Copernicia alba*)’ > Mk *fits-uk* || Ni *φts-u'k* || PCh **hwis<úk>* || PW **x^wits<uk^w*
- (9) PM **(-)ta?* ‘louse’ > Mk *-<ij>te?* || Ni *-ta?* || PCh **-hlá?* || PW **ta?*

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- (10) PM **tel* ‘white snail’ > Ni *tel* || PW **tel*
- (11) PM *(*-skä:t* ‘mesh’ > Ni *-stfa:t* || PW **sik:et*
- (12) PM **tå:t* ‘to sprout’ > Mk *ta:t* || Ni *tå:t* || PCh **tå:t* || PW **tå:t*
- (13) PM **ti:φ* ‘to suck breast’ > Mk *tu:f/-tu:f* || Ni *ti:φ* || PCh *[*i*]tím || PW **tip*
- (14) PM **tim* ‘to swallow’ > Mk *tim-xu?/-tim-xu?* || Ni *tim* || PCh *[*i*]tím || PW **tim*
- (15) PM **tis* ‘to invite, to pay’ > Mk *tis-ix/-tis-ix* || Ni *tis* || PCh *[*i*]tís || PW **tis*
- (16) PM **ti:x* ‘to dig’ > Mk *ti(?)x-APPL/-ti(?)x-APPL* || Ni *ti:f* || PCh *[*i*]tíh-ij? || PW **tiχ*
- (17) PM **tux* ‘to eat.TR’ > Mk *tux/-tux* || Ni *tux* || PCh *[*i*]túm || PW **tux^w*
- (18) PM **tså(?)j* ‘spill!’ > PCh **såj?* || PW **tsåj*
- (19) PM **xu(?)p* ‘grass’ > Mk *xup<’el>* || PCh **húp* || PW **hup*
- (20) PM **t-a(?)q* ‘its rope, its cord’ > PCh **t-’ák* || PW **t-’aq*
- (21) PM **-?å(?)l, 3* **[j]i(?)l* ‘to die’ > PCh **[j]á(?)l* || PW **[j]il^h*
- (22) PM **[t]ås* ‘to step’ > Ni *[t]ås* || PCh **[t]ås* || PW **[t]ås-APPL*
- (23) PM **t-’åx* ‘skin, bark’ > Mk *t-’ax* || Ni *t-’åx* || PCh **t-’åh* || PW **t-’åχ*
- (24) PM **[t]ä(?)k* ‘to eat.INTR’ > Mk *[t]ek* || PW **[t]eq*
- (25) PM **[j]im* ‘to dry out’ > Mk *[j]im* || Ni *[j]im* || PCh **[j]ím-APPL* || PW **[j]im*
- (26) PM **?is* ‘good’ > Ni *?is* || PCh **?is* || PW **?is*
- (27) PM **[j]om* ‘to be extinguished’ > Mk *[j]om* || PCh **[j]óm-APPL* || PW **[j]om*
- (28) PM **[j]o* ‘to be ripe’ > PCh **[j]ó-?e?* || PW **[j]o*

The accretion of a plural suffix to an unaccented monosyllabic noun invariably results in an orthotonic form. Suffixes of the shape *-VC* are stressed in Chorote in such cases, and in ’Weenayek they surface with a long vowel (recall that we indicate the long vowels of ’Weenayek and Proto-Wichí by means of an acute accent).

- (29) Iyojwa’aja’ (Carol 2014a: 92)
- ?és* ‘it is good’ → *?if-ís* ‘they are good’
 - t-’ák* ‘its rope, cord’ → *t-’ak-á? ~ t-’ak-á?l* ‘its ropes, cords’
 - t-’åx* ‘its skin’ → *t-’eh-és* ‘its skins’
- (30) Iyo’awujwa’ (Gerzenstein 1983: 176)

4.1 Monosyllabic words

- a. *hóp* ‘maize’ (etymologically ‘grass.SG’) → *hup-áj* ‘grass’
(etymologically ‘grass.PL’)
- (31) Manjui (Carol 2018)
- a. *hóp* ‘maize.SG’ → *hup-ájh* ‘maize.PL, grass’
 - b. *?éis* ‘it is good’ → *?as-éis* ‘they are good’
- (32) ’Weenhayek (Claesson 2016: 95, 96, 158, 235)
- a. *hup* ‘grass.SG; house made of hay’ → *hup-úç* ‘grass.PL; houses made of hay’
 - b. *t-ex^w* ‘its wing’ → *t-ex^w-ís* ‘its wings’
 - c. *t-’aq* ‘its tie’ → *t-’aq-áç* ‘its ties’
 - d. *t-’åx* ‘its skin’ → *t-’åh-és* ‘its skins’

If the plural suffix takes a non-moraic allomorph, the resulting plural form becomes orthotonic (as shown by the ’Weenhayek reflexes), even though the plural suffix does not constitute a syllable on its own.

- (33)
- a. PM **t-åq* ‘its food’ > Mk *t-aq* || Ni *t-åk* || PCh **hl-åk* || PW **t-åq*
 - b. PM **-qå-ts* ‘food.PL’ > Mk *-qa-ts* || Ni *-kå-s* || PCh **-qå-s* || PW **-qå-s>*
 - c. PM **-ka* ‘tool, skillful person’ > Ni *-tfa?* || PCh **-k^já?* || PW **-k^ja*
 - d. PM **-kå-l* ‘tools, skillful persons’ > Ni *-tfa-k* || PCh **-k^já-l* || PW **-k^já-l^h*

We propose that the suffixes PM **-l*, **-j^h*, and **-ts* contain an underlyingly accented vowel, which surfaces in the allomorphs **-él*, **-áj^h*, **-ítς* (see §5.2). The accent is preserved even when the underlying vowel is elided, as also seen in the plural forms of disyllabic enclinomina (§4.2.1).

4.1.2 -

Monosyllabic orthotonic words are reflected as monosyllables with a long vowel in ’Weenhayek and, consequently, in Proto-Wichí, as shown below. In (48), (56), and (57), the word-initial consonant cluster is resolved by means of inserting an unstressed (resp. short) vowel in Chorote (resp. Wichí). Recall that we indicate the long vowels of Proto-Wichí by means of an acute accent.

- (34) PM **t-á'l* ‘its light, its brightness’ > PCh **t-á'l* || PW **t-á'l^h*
- (35) PM **n-át* ‘to fall on its own’ > Ni *n-at* || PW **<n>át*

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- (36) PM **t-á?*(*-j^h) 'its fruit' > Mk *t-e?*(-j) || Ni *t-a?*(-j) || PCh **hl-á?*(*-j^h) || PW **t-á?*(*-j^h)
- (37) PM **n-ám* 'to arrive' > Mk *n-am* || Ni *n-am* || PCh **n-ám* || PW **<n>ám*
- (38) PM **-á'm* 'pronominal formative' > PCh **-á'm* || PW **-á'm*
- (39) PM *[*t*](')áñ 'to shout' > Mk (?) [*t*]an 'to win' || Ni [*t*]áñ || PCh *[*t*]áñ || PW *[*t*]áñ
- (40) PM *[*j*]áñ 'to put' > Mk [*j*en-APPL] || Ni [*j*an] || PCh *[*j*én] || PW *[*j*én]
- (41) PM **t-á's* 'her/his son' > Mk *t-a's* || Ni *t-á's* || PCh **hl-ás* || PW **t-ás*
- (42) PM **t-á't* 'her/his drink' > Ni *t-á't* || PCh **hl-át* || PW **t-át*
- (43) PM **t-áj* 'yica bag' > Ni *t-a'j* || PCh **hl-éj?* || PW **t-éj*
- (44) PM **t-éj* 'her/his name' > Mk *t-ij* || Ni *t-ej* || PCh **hl-éj?* || PW **t-éj*
- (45) PM **kó'l* 'locust' > PCh **kó'l* || PW **k'ól^h*
- (46) PM **kús* ~ **kúts* 'heat' > Mk (?) *kus* (*Pyrocephalus rubinus*) || Ni *kus* || PCh **kús-APPL*
- (47) PM **kú'X₁₂* 'sweat' > Ni -'β-ku'x || PW **k'úx^w*
- (48) PM **khá't* 'cactus' > Mk *khat-u'k* || Ni *kxat* || PCh **kåhá't* || PW **k'åhá't*
- (49) PM *(*-lká(')t* 'nasal mucus, cold' > Mk *-leke(')t* || PCh **ké't* || PW **k'él-taχ*, **k'él-ta-s*
- (50) PM **máh* 'go!' > Mk *ma* || Ni *må* || PCh **máh* || PW **máh*
- (51) PM **mók* 'zorzar bird (*Turdus sp.*)' > Mk *mok* || Ni *mok* || PCh **mók*
- (52) PM *(*-nú(?)*(*-ts) 'bone' > Mk *-nu*(*-ts) || Ni *-nu?*(-s) || PW **nú(?)*
- (53) PM **t-ó*(*-l) 'his penis' > Ni *t-o?*(-k) || PCh **hl-ó?*(*-l) || PW **t-ó*(*-l^h)
- (54) PM **t-ó?*(*-j^h) 'its seed' > Mk *t-o?*(*-j) || PCh **hl-ó?* || PW **t-ó?*(*-j^h)
- (55) PM **púm* 'drum' > PCh **púm* || PW **púm*
- (56) PM **stá-'q* 'toothpick cactus (*Stetsonia coryne*)' > PCh **?stá-k* || PW **?istá-q*
- (57) PM **tlú'k* 'blind' > Ni *taklú'k* || PCh **t'lúk* || PW **tilúk^w*
- (58) PM **tós* 'snake' > Ni *tos* || PCh **tós*
- (59) PM **t'ún* 'hard' > Mk *t'un* || Ni *t'un* || PCh **t'ún* || PW **t'ún*
- (60) PM **t-ú'p* 'its nest' > Mk *t-up* || Ni *t-u'p* || PCh **hl-úp* || PW **t-úp*
- (61) PM **wVχ*, **wV-ts* 'large, fat' > Ni *-βå'x* || PCh **wúh*, **wú-s* || PW **wúx^w*, **wú-s*

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- (62) PM *[?]wá(?)x ‘stagnant water’ > PCh *hl-*< a >* wáh || PW *[?]wáχ
- (63) PM *X₁₃ó’k ‘palo santo (*Bulnesia sarmientoi*)’ > Ni xo’k || PCh *hók || PW *hók^w
- (64) PM *X₁₃ó’t ‘sandy place’ > Ni xo’t || PCh *hót || PW *hót
- (65) PM *[t]’á’t ‘to ask’ > Ni [t]’a’t || PCh *[t]’át || PW *[t]’át
- (66) PM *t-’í (*-l) ‘liquid, juice’ > Mk t-’i? (-l) || Ni t-’i? (-k) || PCh *t-’i? (*-l) || PW *t-’í (*-l^h)
- (67) PM *-?út ‘to urinate’ > Mk u^l / -?u^l || Ni [j]u^l / -?u^l || PCh *[t]’út || PW *[t]’út

Evidence for the ancient opposition between unaccented and accented monosyllables comes not only from ’Weenayek, but also from Chorote: in PM orthotonic monosyllables, the stress never moves to the suffix in Chorote, unlike what happens in enclinomena in examples such as (29)–(31).

- (68) Iyojwa’aja’ (Drayson 2009: 131, 132)
- hl-é? ‘her/his/its name’ → hl-éj-is ‘her/his/its names’
 - hl-óp ‘its nest’ → hl-óp-is ‘its nests’
- (69) Iyo’awujwa’ (Gerzenstein 1983: 125, 176, 176, 183)
- éj ‘yica bag’ → -éj-is ‘yica bags’
 - hl-úp ‘its nest’ → hl-úp-is ‘its nests’
 - hók ‘palo santo tree’ → hók-i? ‘palo santo trees’
 - tóxs ‘snake’ → tóxs-is ‘snakes’
- (70) Manjui (Carol 2018)
- át ‘drink.SG’ → -át-es ‘drink.PL’
 - éj? ‘name’ → -éj-is ‘names’
 - éj? ‘yica bag’ → -éj-is ‘yica bags’
 - ’mók ‘zorzal bird’ → ’mók-is ‘zorzal birds’
 - hók ‘palo santo tree’ → hók-ej ‘palo santo trees’
 - hót ‘sand.SG (small quantity of sand)’ → hót-ej ‘sand.PL (large patch of sand)’
 - hl-óp ‘its nest’ → hl-óp-is ‘its nests’
 - tóxs ‘snake’ → tóxs-is ‘snakes’

4 Word-level prosody

4.2 Disyllabic words

This section discusses the distinction between unaccented (“enclinomena”) and two types of accented (“iambic” and “trochaic”) disyllables of Proto-Mataguayan. All three types have clearly distinct reflexes in ’Weenayek (and, consequently, in Proto-Wichí): the reflexes of disyllabic enclinomena have two short vowels in that variety, iambic disyllables are reflected as words with a short vowel followed by a long one, and trochaic disyllables are reflected as words with a long vowel followed by a short one. In Chorote, the former two types (enclinomena and iambic disyllables) merge: both are reflected as disyllables with the stress falling on the final syllable. PM trochaic disyllables remain distinct in Chorote (and possibly in Nivaçle): they receive stress on the initial syllable.

4.2.1 [~]

Disyllabic enclinomena are reconstructed based on evidence from ’Weenayek: in that variety, a disyllabic word may lack long vowels altogether. Their cognates in Chorote and Nivaçle have default (final) stress.

- (71) PM **ɸajXo?* **‘coal’** > Ni *ɸajxo?* || PCh **hwa(h)jo-* || PW **xʷijho(?)*
- (72) PM **ji'jå?X₁₂* **‘jaguar’** > Ni *ji'jå'x* || PCh **2a'jåh* || PW **ha'jåχ*
- (73) PM **ji'lå?* **‘tree’** > Ni *ji'klå?* || PCh **2a'lå?* || PW **ha'lå*
- (74) PM **ji'no* **‘man’** > PCh **2i'nó?* || PW **hi'no*
- (75) PM **jit'å?* **‘vulture’** > Ni *jit'å?* || PCh **2at'å?* || PW **hat'å(?)*
- (76) PM **kowä'x* **‘hole’** > PCh **kowéh* || PW **k'owex*
- (77) PM **ntå(?)k* **‘two’** > PCh **nták* || PW **nitåkʷ*
- (78) PM **qati'ts* **‘star’** > Ni *kati's* || PCh **qatés* || PW **qates*
- (79) PM **tijå'χ* **‘to shoot, to throw’** > Mk *tija'χ* / -*tija'χ* || Ni *tijå'x* || PCh **[?i]tíjåh* || PW **tijåχ*
- (80) PM **titå'x* **‘to carry on one’s shoulders’** > Mk *tiło'x* / -*tiło'x* || Ni *titå'x* || PCh **[?i]tíhlåh* || PW **titåχ*
- (81) PM **t-uwa* **‘its termite house’** > Ni *t-uβa* || PW **<t>uwa*
- (82) PM **wije?* **‘caraguatá (*Bromelia serra*)’** > Ni *βije?* ~ *jije?* || PCh **wijé?* || PW **wuje(?)*
- (83) PM **wäle'k* **‘to walk’** > Mk -*<i>welki-* *met* **‘to limp’** || Ni *βaklē'tf* || PCh **[?i]wélek* || PW **weleq*

4.2 Disyllabic words

- (84) PM **X₁₃on-xaχ* ‘night’ > Ni <*xon>faχ* x || PCh *<*2a>h<n>áh* ~ *<*2å>h<n>áh* || PW *<*hon>aχ*
- (85) PM **t-’atå(?)* ‘fat’ > PCh **t-’ahlå?* || PW **t-’atå(?)*
- (86) PM **?at’e(?)t(s)* ~ **?at’ä(?)t(s)* ‘aloja drink’ > PCh **?at’és* || PW **hat’és*
- (87) PM **?atsXa(?)* ‘dorado’ > PCh **?asá?* || PW **?atsha(?)*
- (88) PM **t-’äxa’n* ‘meat’ > Mk *t-’ese’n* || Ni *t-’asxa’n* || PCh **t-’isá’n* || PW **t-’isa’n*

The same combination obtains when an unaccented moraic prefix is added to an unaccented monosyllabic root. The following roots typically show up with a moraic prefix:

- (89) PM *-*φom* ‘to throw, to push’ > PCh *[*2i*]hwóm-ah || PW *[*t*]x^wom
- (90) PM *[*ji*]kaχ ~ *[*ji*]kåχ ‘to take away’ > Mk [*j*]<*e>kaχ* || Ni [*ji*]tfaχ || PW *[*ji*]k^jåχ
- (91) PM *-*kå’s* ‘tail’ > Ni -*kå’s* || PCh *-*kås* || PW *-*kås*
- (92) PM *[*ji*]kå? ‘to be torn’ > PCh *[*2i*]kå? || PW *[*2i*]k^jå?
- (93) PM *-*kφe(?)* ‘ear’ > Mk -*kfi?* || Ni -*kφe?* || PW *-(*t*)-*k^we<j>* / *-(*t*)-*k^we-*‘arm, hand’
- (94) PM *-*ko(?)j* ‘hand, arm’ > Mk -*koj* || PCh *-*kój?*
- (95) PM *-*k’u* ‘horn, club’ > Mk -*k’u* || Ni -*k’u?* || PCh *-*k’ú?* || PW *-*k’u*
- (96) PM *[*ji*]låj ‘to withstand’ > Ni [*ji*]klåj || PCh *[*ji*]låj-eh || PW *[*ji*]låj
- (97) PM *-*lå?* ‘domestic animal’ > Ni -*klå?* || PCh *-*lå<hwah>* || PW *-*lå?*
- (98) PM *-*li’x* ‘language, word’ > Mk -*’lix<e?* || Ni -*’kli’f* || PCh *-*’lih*
- (99) PM *-*ka* ‘tool, skillful person’ > Ni -*tfa?* || PCh *-*k^já?* || PW *-*k^ja*
- (100) PM *-*tu’k* ‘yica bag, load’ > Mk -*tuuk* || Ni -*tu’k* || PCh *-*hlúk* || PW *-*tuuk^w*
- (101) PM *[*ji*]må ‘to sleep’ > Mk [*i*]ma? || Ni [*ji*]må? || PCh *[*2i*]må? || PW *[*2i*]må
- (102) PM *-*nji’x* ‘smell’ > Mk -*nji’x* || Ni -*nif* || PCh *-*níh* || PW *-*nix*
- (103) PM *-*pe(?)* ‘fat’ > Ni -<*a>pe?* || PCh *-*pe?* || PW *-*pe(?)*
- (104) PM *-*p’o’k* ~ *-*φ’o’k* ‘fence’ > Ni -*p’o’k* || PCh *-*p’ók* || PW *-*p’ok^w*
- (105) PM *-*p’o’t* ‘lid’ > Mk -*p’ot<o?* || Ni -*p’o’t* || PCh *-*p’ót* || PW *-*p’ot*
- (106) PM *-*så’t* ‘vein’ > Mk -<*2a>sa’t* || Ni -*så’t* || PCh *-*såt-* || PW *-*såt*
- (107) PM *-*su(?)* ‘vagina’ > Mk -*su?* || Ni -*su?* || PCh *-<*i>su?* || PW *-*su(?)*

4 Word-level prosody

- (108) PM *-tä(?)ts, *-täts-él ‘trunk, base’ > PCh *-tés (*-el) || PW *-tes, *-téts-el^h
- (109) PM *-te? ‘eye’ > Mk -t<o?> || PCh *-ta-té? || PW *-t(a)-te?
- (110) PM *[ji]tså(?)j ‘to spill’ > PCh *[?i]sáj? || PW *[?i]tsåj
- (111) PM *[ji]wo^hm ‘to throw’ > Mk [i]wu^hm || PCh *[?i]wóm-APPL || PW *[?i]wo^hm
- (112) PM *[ji](t)s'u(?) ‘to suck’ > PCh *[?i]ts'ú-APPL || PW *[hi]ts'u(?)
- (113) PM *-wät ‘place’ > Mk -wet || Ni -βat || PCh *-wét || PW *-wet
- (114) PM *-wo ‘neck’ > Mk -wo<nxe?> || Ni -βo? || PCh *-wó? || PW *-wo
- (115) PM *-wu(?)j ‘clothes, blanket’ > PCh *-wúj? || PW *-wuj
- (116) PM *-xa ‘price’ > Ni -fa? || PW *-ha
- (117) PM *...X₂₃a't ‘earth’ > Ni <kots>xa't || PCh *<2a>h<n>át ~ *<2å>h<n>át || PW *<hon>hat
- (118) PM *-X₁₃u'k ‘firewood’ > Ni -xu'k || PCh *(ʔítåh)-huk || PW *-huk^w

The following roots can occur with a zero 3.RLS prefix and form monosyllabic words, but they may also take a moraic unaccented prefix, and in this case they behave just like any other disyllabic enclinomena.

- (119) PM *tå't ‘to sprout’ > Mk ta't || Ni tå't || PCh *tátl || PW *tåtl
- (120) PM *ti'f ‘to suck breast’ > Mk tu'f/-tu'f || Ni ti'f || PCh *[?i]tíM || PW *tip
- (121) PM *tim ‘to swallow’ > Mk tim-xu? / -tim-xu? || Ni tim || PCh *[?i]tíM || PW *tim
- (122) PM *tis ‘to invite, to pay’ > Mk tis-ix / -tis-ix || Ni tis || PCh *[?i]tíS || PW *tis
- (123) PM *ti'x ‘to dig’ > Mk ti(?)x-APPL / -ti(?)x-APPL || Ni ti'f || PCh *[?i]tíh-ij? || PW *tiχ
- (124) PM *tux ‘to eat.TR’ > Mk tux / -tux || Ni tux || PCh *[?i]tíM || PW *tux^w

Note that disyllabic unaccented nouns become orthotonic in the plural form, even if the plural form has the same amount of syllables as the singular one. This is most clearly seen in 'Wéenhayek pairs of singular and plural nouns.

- (125) 'Wéenhayek (Claesson 2016)
- hi'no? ‘man’ → hi'nó-t ‘men’
 - x^wiço? ‘coal’ → x^wiçó-t ‘coals’
 - la-k^ju? ‘its horn’ → la-k^jú-t ‘its horns’
 - ha'lå? ‘tree’ → ha'lå-ç ‘trees’

4.2 Disyllabic words

- e. *qak^ja?* ‘medicine’ → *qak^já-l* ‘medicines’
- f. *?ats^ha?* ‘dorado’ → *?ats^há-ç* ‘dorados’
- g. *la-lå?* ‘her/his pet’ → *la-lå-ç* ‘her/his pets’
- h. *ta-te?* ‘her/his eye’ → *ta-té-ç* ‘her/his eyes’
- i. *k^jowex* ‘hole’ → *k^jow-áç* ‘holes’
- j. *towex* ‘pan; kind of drum’ → *tow-áç* ‘pans; drums’

We propose that the suffixes PM *-*l*, *-*j^h*, and *-*ts* contain an underlyingly accented vowel, which surfaces in the allomorphs *-*él*, *-*áj^h*, *-*ítς* (see §5.2). The accent is preserved even when the underlying vowel is elided.

4.2.2 $\overset{\sim}{-}$

Iambic disyllables are reconstructed based on evidence from 'Wéenhayek. Their reflexes in Chorote and Nivaçle also have default (final) stress and are thus indistinguishable from the reflexes of enclinomina.

- (126) PM **ɸa?*áj ‘algarrobo fruit (*Prosopis alba*)’ > Ni *ɸa?aj* || PCh **hwa?*áj? || PW **x^wa?*áj^h
- (127) PM **ɸi?*ját ‘cold weather, south wind’ > Ni *ɸi?*jat || PCh **hwi?*jét || PW **x^wi?*jét
- (128) PM **jijá?*ts ‘dew’ > Mk *ije?*ts || Ni *jija?*s || PCh **?ijés-tah* || PW **?ijás*
- (129) PM **jiná?*t ‘water’ > Ni *jiná?*t || PCh **?i?*nát || PW **?inát*
- (130) PM **k’alxó*(*-*ts*) ‘armadillo (*sp.*)’ > Mk *k’olo*^w || Ni *k’akxo*(-*s*) || PCh **k’ihló?*(*-*s*) || PW **k’anhóh*
- (131) PM **k’utX₂₃á?*n ‘thorn’ > Ni *k’utxa?*n || PCh **k’utá?*n || PW **k’uthá?*n
- (132) PM **mijó*(*-*l*) ‘savannah hawk’ > Mk *mijo*(-*l*) || Ni *mijo*(-*k*) || PCh **mijó?*(*-*l*) || PW **mijóh*
- (133) PM **påttséχ* ‘jabiru’ > Ni *påtsex* || PCh **påtsáh* || PW **påtsáχ*
- (134) PM **pätóχ* ‘to be deep’ > Ni [?a]patox || PCh *-*pítohw*ij? || PW **pitóx^w*
- (135) PM **pitéχ*, **pité-ts* ‘long’ > Ni *pitex*, *pite-s* || PW **pitáχ*, **pité-s*
- (136) PM **tsåhåq* ‘chajá bird’ > Mk *tsahaq* || PCh **såhåk* || PW **tsåhåq*
- (137) PM **tsänú?*k ‘duraznillo trees’ > Ni *tsanu?*k || PCh **sinúk* || PW **tsinúk^w*
- (138) PM **[n]åfé(?)t* ~ **[n]åfá(?)t* ‘to be ashamed’ > PCh **[n]åhwétl* || PW **<n>åx^wétl* ~ **<n>åx^wélh*

4 Word-level prosody

The same combination obtains when an unaccented moraic prefix is added to an accented monosyllabic root. The following roots typically show up with a moraic prefix:

- (139) PM **[ji]ɸáx* ‘to cut down’ > Mk *fex-inet-kiʔax* || Ni *[ji]ɸa᷑f* || PCh **[?i]hwáh-APPL*
 || PW **[?i]xʷáχ*
- (140) PM **[ji]ɸál* ‘to tell’ > Mk *n(i)-fel-im* || Ni *n(i)-ɸak / n(i)-ɸakl-* || PCh **[?i]hwél*
 || PW **[?i]xʷélh* / **[?i]xʷél-*
- (141) PM *-*ɸxúx*, *-*ɸxú-ts* ‘finger’ > Mk *-fux* || Ni *-ɸxux, -ɸxu-s* ‘toe’ || PCh *-*hwu-ké?*
 || PW *-*xʷúxʷ*, *-*xʷú-s*
- (142) PM *-*jáł* ‘breath’ > Ni *-jał* || PCh *-*jáł* || PW *-*jáł*
- (143) PM **[ji]já?* ‘to drink’ > Mk *<i>ja?* || Ni *[ji]já?* || PCh **[?i]já?* || PW **[?i]já?*
- (144) PM **[ji]ká(?)t* ‘to be red’ > PCh **[?i]káť* || PW **[?i]k᷑áť*
- (145) PM **[ji]kén* ‘to send’ > Mk *[j]<u>kin* || Ni *[ji]tsen* || PCh **[?i]kén* || PW **[?i]k᷑én*
- (146) PM **[ji]kú'ł* ‘to answer’ > Mk *[j]<e>ku'ł* || Ni *[ji]ku'ł* || PCh **[?i]kúhl-APPL*
 || PW **[ni]k'úł*
- (147) PM **k(?)utsá(?)X₁₂* ~ **k(?)utsé(?)χ* ‘cháguar (*Bromelia hieronymi*)’ > PCh **k'usáh*
 || PW **k'utsáχ*
- (148) PM **[ji]k'än* ‘to stretch out’ > Ni *[ji]tʃ'an* || PCh **[?i]k'én-APPL* || PW **[hi]k᷑én*
- (149) PM *-*k'ú-l* ‘horns, clubs’ > Mk *-k'u-l* || Ni *-k'u-k* || PCh *-*k'ú-l* || PW *-*k᷑ú-l^h*
- (150) PM **[ji]lán* ‘to kill’ > Mk *[ji]lan* || Ni *[ji]klán* || PCh **[?i]lán* || PW **[?i]lán*
- (151) PM **[ji]lá(?)t* ‘to feel’ > PCh **[?i]láť-ej^h* || PW **[?i]láť*
- (152) PM *-*léts* ‘offspring’ > Mk *-lits* || Ni *-kles* || PCh *-*lés* || PW *-*lés*
- (153) PM **[ji]lé'x* ‘to wash’ > Mk *[ji]lix-u'ł* ‘to clean’ || Ni *[ji]kle᷑f* || PCh **[?i]léh*
 || PW **[?i]léχ*
- (154) PM **[?a]lóχ*, **[?a]ló-ts* ‘many’ > Mk *<o>lo<ts>* || Ni *<?a>kłox* || PCh **[?a]łóh*
 || PW **<?a>ló<s>*
- (155) PM **[ji]lXón* ‘to roast’ > Ni *[ji]kxon* || PCh **[?i]hlón* || PW **[t]nhón*
- (156) PM **[ji]łá'łm* ‘to defecate’ > Mk *<i>ła'łm* || Ni *[ji]ła'łm* || PCh **[?i]hlá'łm* ||
 PW **[t]<a>ła'łm*
- (157) PM **[ji]łán* ‘to light fire’ > Mk *[ni]han-APPL* || Ni *[ji]łán* || PCh **[?i]hlán-APPL*
 || PW **[?i]łán-APPL*
- (158) PM *-*łé(?)t* ‘firewood’ > Mk *łit<u?>* || PCh *-*<a>hlét* ~ *-*<?a>hlét* ||
 PW *-*łét*

4.2 Disyllabic words

- (159) PM *-tú-j^h 'yica bags, loads' > Mk -tu-j || PCh *-hlúj-... || PW *-tú-j<is>
- (160) PM *-má̄'k, *-mhá̄-j^h 'powder, flour' > Ni -má̄'k, -mxá̄-j || PCh *-má̄k || PW *-mók^w, *-mhó-h
- (161) PM *-ná̄j^h 'to bathe' > Ni [βa]naj || PCh *[?i]ná̄j-APPL || PW *[?i]ná̄j^h
- (162) PM *[t]pá̄j 'to be bitter' > Ni [t'a]pá̄j || PCh *pá̄hj-i? || PW *[t]pá̄j
- (163) PM *[?i]pén ~ *[?i]pán 'to cook' > PCh *[?i]pén || PW *[?i]pén
- (164) PM *[t]píl 'to return hither' > Mk [t(e)]pil || Ni [t(a)]pik ~ [t(a)]pek || PW *[t]píl^h
- (165) PM *-qá̄-ts 'food.PL' > Mk -qa-ts || Ni -ká̄-s || PCh *-qá̄-s || PW *-qá̄-s>
- (166) PM *-qéj (*-its) 'costume' > Ni -kej (-is) || PCh *-qéj? (*-is) || PW *-qéj (*-is)
- (167) PM *-q'á(?)X₁₂ 'tongue' > PCh *-q'áh || PW *-q'áχ 'mouth'
- (168) PM *spú(?)p 'dove' > PCh *s³púp || PW *spúp
- (169) PM *[ji]-tXá(?)t 'to throw, to put' > PCh *[?i]tát-APPL || PW *[?i]thát
- (170) PM *-t'é-l 'tears' > Mk -t'i-l || Ni -t'e<kl>-is || PCh *-t'é<l>-is
- (171) PM *-t'ún 'hard' > Mk -t'un || Ni -t'un || PCh *-t'ún || PW *-t'ún
- (172) PM *-wá̄'k 'bad mood' > Mk -wak || Ni -βá̄'k || PCh *-wá̄k || PW *-wá̄k^w
- (173) PM *-wá̄'x, *-w(ä)x-áj^h 'burrow; anus' > Ni -βa'ʃ, -βaf-aj^h || PCh *-wéh || PW *-wéχ, -wh-áj^h
- (174) PM *-wó (*-ts) 'worm' > Ni -βo?(-s) || PCh *-wó? (*-s) || PW *-wó (*-s)
- (175) PM *-w(t)s'é (*-l) 'belly' > Ni -βts'e (-k) || PCh *-ts'é? (*-l) || PW *-ts'é (*-l^h)
- (176) PM *[ji]wán 'to see' > Mk [ji]wen || Ni [ji]βan || PCh *[?i]wén || PW *[hi]wén
- (177) PM *-xíj^h 'recipient' > Mk -xij || Ni -sij / -xij || PW *-híh
- (178) PM *[ji]wún 'to burn (vt.)' > PCh *[?i]wún || PW *[?i]wún
- (179) PM *[ji]X₁₃út 'to push' > Ni [ji]xut || PCh *[?i]hút || PW *[ji]hút

The same combination arises when an unaccented monosyllabic root takes an accented plural suffix, as in 'Wk ⁷wojís 'blood (plurale tantum)', derived from PM *(-)wo⁷j 'blood' by means of the plural suffix -is. For more examples, see (29)–(32) above.

4 Word-level prosody

4.2.3 \sim

Trochaic disyllables are reflected in the following way. In 'Weenhayek, they have a long vowel in their initial syllable and a short one in their final syllable. In Chorote, they have initial stress. In Nivaâle, they sometimes also have initial stress, quite atypical for the language (Gutiérrez 2015b), as in Ni *ʔóφo* (-s) 'dove' (Gutiérrez 2015b: 267), *t-áse* 'her/his daughter', *tútsxa* 'girl', *púta* 'tapeti rabbit', *títetʃ* 'plate', *fnáβáp* ~ *fnáβáp* 'spring', *rékλe* 'parrot' (Analía Gutiérrez, 2023, personal communication), or *nú?u* 'dog' (Campbell et al. 2020: 34), though variation has been attested. In addition, PM trochees that end in a glottal stop lose it in Nivaâle and Wichí – at least in its Lower Bermejeño variety, as documented by Nercesian (2014) – normally lose the word-final glottal stop, as in (180), (186), (214), (260), as described in §7.1.1.8 and §9.1.1.14. (257) has an irregular reflex in Nivaâle: not only does it irregularly reflect PM **ʔe* as *ji*, but it is also has final stress (Analía Gutiérrez, 2023, personal communication), which does not match the evidence from Chorote.

- (180) PM **t-á(-j^h)-xi?* (*-l) 'her/his mouth' > Mk *t-exi?* (-l) || Ni *t-afí* (-k) || PCh (?) **hl-á<aj?* || PW *t-áj-hi* (*-l^h)
- (181) PM **t-áwá?* (?) 'its flower' > Ni *t-afá* || PCh **hl-áwo?* || PW **t-áwo*
- (182) PM **t-áme(?)t* / *t-ámte-* 'her/his word' > PCh **hl-ámt-* || PW **t-ámet*, *t-ámte-s*
- (183) PM **t-áni's* 'its stinger' > Mk *t-ani's* || Ni *t-ánis* || PCh **hl-ánis* || PW (?) **t-á'ni*
- (184) PM **ápil* 'to return thither' > Mk *[w]apil* || Ni *[β]apek* || PCh **[j]ápil* || PW **[j]ápil^h*
- (185) PM **[j]áp'ä(?)t* ~ **[j]áph'ä(?)t* 'to burn' > Ni *[j]ap'at* || PCh **[j]áp'et* || PW **[j]áp'et*
- (186) PM **t-áse?* 'her/his daughter' > Mk *t-asi?* || Ni *t-áse* || PCh **hl-áse?* || PW **t-áse*
- (187) PM **t-á't* 'her/his drink' > Ni *t-å't* || PCh **hl-á't* || PW **t-åt*
- (188) PM **t-áte(?)* (*-j^h) 'her/his jar' > PCh **hl-áte?* (*-j^h) || PW **<^j>áte* (*-j^h)
- (189) PM **[j]áte(?)χ* 'to be fat' > Ni *[j]átex* || PCh **[j]átaħ* || PW **[j]átaχ*
- (190) PM **[j]ékfa'x* 'to bite' > Mk *[j]ikfe'x* || PCh **[j]ókwah* || PW **[j]ókʷaχ*
- (191) PM **t-éle(?)* ~ **t-äle(?)* (*-j^h) 'its inhabitant, inner' > PCh **hl-éle?* (*-j^h) 'its inhabitant, her/his intestine' || PW **t-éle* (*-j^h)

4.2 Disyllabic words

- (192) PM **ɸátsu*(?)χ, **ɸátshu-ts* ‘centipede’ > Ni *ɸatsux*, *ɸatsxu-s* || PCh **(h)wásuh*, **(h)wásu-s* || PW **xʷátsux*^w
- (193) PM **ɸílå*(?)*X₁₂* ‘pocote (*Solanum sp.*)’ > PCh **hwílåh* || PW **xʷílåχ*
- (194) PM **ɸétä*[?]*ts* ‘root’ > Mk *fitets* || PW **xʷétes*
- (195) PM **ɸínä*(?)χ ‘crab’ > Ni *ɸinax* || PCh **hwíneh*
- (196) PM **ɸkéna*(?)χ ‘north wind, north’ > Ni *ɸtſenax* || PCh **hwʷkénah*
- (197) PM **ɸtsána*(?)χ ‘suncho (*Baccharis sp.*)’ > Ni *ɸtsåanax* || PCh **sánah* || PW **xʷitsánaχ*
- (198) PM **t-í(t)s'i*(?) (*-l) ‘resin, sap’ > Ni *t-its'i* (-k) || PCh **hl-íts'i?* (*-l) || PW **t-íts'i*
- (199) PM **ká'lah*, **ká'la-ts* ‘lizard’ > PCh **ká'lah*, **ká'la-s* || PW **kʷá'lah*, **kʷá'la-s*
- (200) PM **k'ék'eh* ‘monk parakeet’ > Ni *tf'etſ'e* || PCh **kék'eh* || PW **kʷék'j'e*
- (201) PM **kójXa*(?)*t* ‘to be heavy’ > PCh **kóhjat-APPL* || PW **kójhat*
- (202) PM **ktá'nih* ‘Chaco tortoise’ > PCh **kitá'nih* || PW **kʷtá'nih*
- (203) PM **ktéta*(?) ~ **ktáta*(?) ‘white algarrobo fruit (*Prosopis elata*)’ > PCh **kitéta?* || PW **kʷtéta*
- (204) PM **k'ú(t)sta*(?)χ, **k'ú(t)sta-ts* ‘barn owl’ > Ni (?) *k'ustax*, *k'usta-s* ‘mockingbird’ || PCh **k'ústah*, **k'ústa-s* || PW **kʷústax*
- (205) PM **láp'ih* ~ **láp'ih* ‘snail’ > Ni *kláp'i* || PCh **láp'ih*
- (206) PM **lkéte* ‘squash’ > Mk *lekiti* || PCh **kéte?*
- (207) PM **lútse*(?)*x* ‘bow’ > PCh **lúseh* || PW **lútseχ*
- (208) PM **túm?a* ‘day’ > Ni *tum?a-* || PCh **hlúma?*
- (209) PM **tútsX₂₃a*(?) ‘girl’ > Ni *tutsxa* || PCh **hlúsa?* || PW **tútsha*
- (210) PM **níltsa*(?)*X₁₂*, **níltsX₁₃a-ts* ‘white-lipped peccary’ > PCh **<?ih>nílsah*, **<?ih>nílsa-s* || PW **nítsax*, **nítsha-s*
- (211) PM **níják*, **níjhå-j^h* ‘rope, cord’ > Mk *nijak*, *nijha-j* || PCh **níják*, **níjhå-j^h* || PW **níják^w*, **níjhå-j^h*
- (212) PM **nú?uh*, **nú?u-ts* ‘dog’ > Ni *nú?u* (-s) || PCh **nú?uh*, **nú?u-s*
- (213) PM **náji*^w, **nájx-a-j^h* ‘path’ > Ni *nájis*, *nájf-aj* || PCh **nájih*, **náhj-a-j^h* || PW **nájix*, **nájh-a-j^h*
- (214) PM **njánxte?* ‘tapeti rabbit, cavy’ > Mk *nijaxti?* || Ni *nånxate* || PCh **náhåte?* || PW **xʷnáte*

4 Word-level prosody

- (215) PM **[j]ókφe(?)*(*t*)*s* ~ **[j]ókφä(?)*(*t*)*s* ~ **[j]ékφe(?)*(*t*)*s* ~ **[j]ékφä(?)*(*t*)*s* ‘**to frighten**’ > PCh **[j]ókwes* || PW **[j]ókwes*
- (216) PM **pá̄jih* ‘**frog (Leptodactylus sp.)**’ > PCh **pá̄jih* || PW **pá̄jih*
- (217) PM **pátse(?)χ* ‘**fast, quick**’ > Ni *pátsex* || PCh **(-)pásah*
- (218) PM **pé̄ta(?)j* ‘**rain**’ > Mk *pítej* || PCh **péhlaj?* || PW **pé̄taj^h*
- (219) PM **kpéna(?)X₁₂* ~ **kpäna(?)X₁₂*, **kpénX₁₃a-ts* ~ **kpänX₁₃a-ts* ‘**orphan**’ > PCh **kpénah*, **kpéhna-s* || PW **k^jpénaχ*, **k^jpénha-s*
- (220) PM **púle(?)*(**-ts*) ‘**sky, cloud**’ > PCh **púle?*(**-s*) || PW **púle* (**-s* ~ **-tajis*)
- (221) PM **pútäh* ‘**tapeti rabbit**’ > Ni *puta* || PCh **púteh*
- (222) PM **qatsíwo(?)* ‘**limpkin**’ > PCh **qasíwo<?oh>* || PW **qatsíwo*
- (223) PM **sát'a(?)*(*t*)*s* ‘**parakeet**’ > Ni *sat'as* || PCh **sát'as* || PW **sát'as*
- (224) PM **stá̄fe(?)* ‘**Chaco chachalaca**’ > PCh **?stá̄hwe?* || PW **?istá̄x^we*
- (225) PM **sláqha(?)j* ‘**wild cat**’ > Ni *ʃklåkxaj* ~ *sklåkxaj* || PCh **s^olåhqaj?* ~ **s^olåhqåj?* || PW **silåqhåj*
- (226) PM **sténi(?)* ‘**white quebracho**’ > Mk *sitin-u'k* || PCh **?sténi?* || PW **?isté^wnih*
- (227) PM **s^owúlaχ*, **s^owúla-ts* ‘**anteater**’ > Ni *s^oβuklax*, *s^oβukla-s* || PCh **s^o?úlah*, **s^o?úla-s* || PW **súlaχ*
- (228) PM **táxχan* ‘**to thunder**’ > Mk *texen* || Ni *tafxen* || PW **t'áχan*
- (229) PM **tá̄tsna(?)X₁₂* ~ **tá̄tsne(?)χ* ‘**toad**’ > PCh **tásVnah* || PW **tá̄tnaχ*
- (230) PM **téwo(?)k* ~ **téwå(?)k* ‘**river**’ > Ni *toβok* ~ *toβåk* || PCh **téwok* ~ **téwåk* || PW **téwok^w*
- (231) PM **títe(?)k*, **títhe-j^h* ‘**plate**’ > Ni *(-)titetʃ*, *(-)titxe-j* || PCh **títek*, **tíhte-j^h*
- (232) PM **tkéna(?)X₁₂* ~ **tkäna(?)X₁₂*, **tkénX₁₃a-ts* ~ **tkänX₁₃a-ts* ‘**precipice; hill, mountain**’ > PCh **t^okénah*, **t^okéhna-s* || PW **tk^jénah*, **tk^jéhna-s*
- (233) PM **tóχ-APPL*, **tó-ts-APPL* ‘**far**’ > Mk *-toχ-ij*, *to-ts-ij* || Ni *tox-APPL* || PCh **tóh(w)-APPL*, **tó-ts-APPL* || PW **tóx^w-ej^h*
- (234) PM **túku(?)*(*t*)*s* ‘**ant**’ > Ni *tukus* || PCh **túkus*
- (235) PM **túsu(?)*(*t*)*s* ‘**lesser yellowlegs**’ > Ni *tusus* || PCh **túsus* || PW **túsus*
- (236) PM **tútse(?)χ* ‘**smoke**’ > PCh **túsah* || PW **tútsaχ*
- (237) PM **tsémłå(?)k* ~ **tsämlå(?)k* ‘**silk floss tree**’ > PCh **sémhłåk* || PW **tsémłåk^w*
- (238) PM **tsópha(?)* ‘**fruit of a shrub (*Lycium americanum*)**’ > PCh **sóhwa?* || PW **tsóx^wa(?)*

4.2 Disyllabic words

- (239) PM *tsóna(?) ‘red brocket’ > PCh *tsóna? || PW *tsó’nah
- (240) PM *ts’áts’ih, *ts’áts’i-l ‘rufous hornero’ > Mk ts’its’i (-l) || Ni ts’ats’i (-k) || PCh *sát’ih || PW *táts’i
- (241) PM *[j]útlå(?)χ ‘to be tired’ > Mk -utla(?)χ ‘breath’ || Ni [j]utlåx || PCh *[j]úhlåh
- (242) PM *wátå(?)χ ‘palo flojo fruit’ > Ni βåtlåx || PW *wátox^w
- (243) PM *wkína(?)X₁₂, *wkínX₁₃a-ts ‘metal’ > PCh *w^wkínah, *w^wkínha-s || PW *kínaχ, *k^jínha-ts
- (244) PM *wóna(?) ‘bala wasp honey; hat’ > PCh *wóna? || PW *wó’nah
- (245) PM *wóp’ih ~ *wóφ’ih ~ *móp’ih ~ *móφ’ih ‘white egret’ > PCh *wóp’ih || PW *móp’i
- (246) PM *wátshan ~ *wátsχan ‘to be healthy, alive’ > Ni βatsxan || PCh *wásá n || PW *wátshan
- (247) PM *wóså(?)q ~ *wóså(?)k ‘butterfly’ > Ni βosåk || PCh *wósåk
- (248) PM *xnáwå’p ‘spring’ > Mk xinawa’p || Ni snaβåp ~ snåβåp || PCh *náwop || PW *x^wnáwop
- (249) PM *Xmáwoh ‘fox’ > PCh *máwo-tah || PW *máwoh
- (250) PM *X₂₃wé’lah, *X₂₃wé’la-ts ‘moon’ > Ni xiβe’la(-s) || PCh *wé’lah, *wé’la-s || PW *wé’lah
- (251) PM *?átlu(?) ‘iguana’ > Ni ?atlu (-s) || PCh *?áhlu? (*-s) || PW *?átlu
- (252) PM *?ám?åh, *?ám?å-ts ‘rat’ > Ni ?am?å (-s) || PCh *?ám?ah ~ *?ám?åh, *?ám?a-s ~ *?ám?å-s || PW *?áma
- (253) PM *?áp’ā(?)χ ~ *?áφ’ā(?)χ ‘jararaca’ > Ni ?ap’ax || PCh *?áp’ah
- (254) PM *?áxa? ‘stork’ > Mk exe? maguari stock’ || PCh *?áha?jabiru’
- (255) PM *t-’áX₂₃te(?) (*-j^h) ‘her female breast’ > Ni t-’axte (-j) || PCh *t-’áhate? (*-j^h) || PW *t-’áte (*-j^h)
- (256) PM *?á’jteχ, *?á’jte-ts ‘to hurt’ > Mk a?taxχ, a?ti-ts || Ni ?å’jtex ~ ?å’βtex || PCh *?áj?tah-APPL, *-?áj?te-s-APPL || PW *?ájtaxχ, *?ájte-s
- (257) PM *?éja? (*-l) ‘mosquito’ > Mk ije? (-l) || Ni jija? || PCh *?éja? (*-l)
- (258) PM *?éle(?) ‘parrot’ > Ni ?ekle || PCh *?éle? || PW *?éle
- (259) PM *?ítå(?)χ, *?ítå-ts ‘fire’ > Ni ?itåx, ?ítå-s || PCh *?ítåh, *?ítå-s || PW *?ítåχ, *?ítå-s
- (260) PM *?óφo? (*-ts) ‘pigeon’ > Mk ofo? (-l) || Ni ?óφo (-s) || PCh *?óhwo? (*-s)

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- (261) PM *?*óna(?)χ* ‘my brother’ > Ni *zonax* || PCh *?*ónah*
- (262) PM *?*úl?áh*, *?*úl?á-ts* ‘dove’ > Ni *ukl?á(-s)* || PCh *?*úl?áh*, *?*úl?á-s*
- (263) PM **t-úlu(?)* ‘her/his urine’ > Ni *t-’ułu* || PCh **t-’uhlu?* || PW **t-’ułu*

Words of this structure are obtained whenever a monosyllabic morpheme with underlying accent (either a prefix or a root) is combined with another monosyllabic morpheme regardless of the underlying accentual properties of the latter. The following examples from 'Weenhayek instantiate the combination of a prefix with a long vowel ('Wk *nó-* ‘GNR’, *ʔá-* ‘2.Sp’) with a root with an underlying short vowel.¹

- (264) 'Weenhayek (Claesson 2016)

- a. *-lā?* ‘domestic animal’ → *’nó-lā?* ‘one’s domestic animal’
- b. *-tuk* ‘load, bag’ → *’nó-tuk* ‘one’s load, bag’
- c. *-k’u?* ‘horn, club’ → *’nó-k’u?* ‘one’s horn, club’
- d. *-k’ás* ‘tail’ → *’nó-k’ás* ‘one’s tail’
- e. *-nix* ‘smell’ → *’nó-nix* ‘one’s smell’
- f. *-p’ot* ‘lid’ → *’nó-p’ot* ‘one’s lid’
- g. *-kej?* ‘hand’ → *’nó-kej?* ‘one’s hand’
- h. *-ha?* ‘price’ → *’nó-ha?* ‘one’s price’
- i. *-’wet* ‘place, home’ → *’nó-’wet* ‘one’s place, home’
- j. *-huk* ‘firewood’ → *’nó-huk* ‘one’s firewood’
- k. *ʔis* ‘good’ → *ʔá-ʔis* ‘you are good’
- l. *nox^w* ‘good’ → *ʔá-nox^w* ‘you end up’

The following examples from 'Weenhayek instantiate the combination of a prefix with a long vowel ('Wk *nó-* ‘GNR’, *ʔá-* ‘2.Sp’) with a root with an underlying long vowel.²

- (265) 'Weenhayek (Claesson 2016)

¹Note that forms that arose thanks to Watkins’ law (§9.1.4) do not comply with these regularities in Wichí, since the domain for accent assignment excludes any material that precedes the erstwhile third-person prefix. Consequently, prefixes such as 'Wk *nó-* ‘GNR’ surface with a short vowel in forms such as *’no-t-áq* ‘one’s food’.

²Note that forms that arose thanks to Watkins’ law (§9.1.4) do not comply with these regularities in Wichí, since the domain for accent assignment excludes any material that precedes the erstwhile third-person prefix. Consequently, prefixes such as 'Wk *nó-* ‘GNR’ surface with a short vowel in forms such as *’no-t-ás* ‘one’s son’.

4.3 Words with three or more syllables

- a. *-mók* ‘powder’ → *’nó-mok* ‘one’s powder’
- b. *-ts’é?* ‘belly’ → *’nó-ts’e?* ‘one’s belly’
- c. *-qéj?* ‘costume’ → *’nó-qej?* ‘one’s costume’
- d. *-lés* ‘children’ → *’nó-les* ‘one’s children’
- e. *-jáł* ‘breath’ → *’nó-jáł* ‘one’s breath’
- f. *-q’áx* ‘mouth’ → *’nó-q’ax* ‘one’s mouth’
- g. *-wåk* ‘rage’ → *’nó-wåk* ‘one’s rage’
- h. *-tét* ‘fire’ → *’nó-tet* ‘one’s fire’
- i. *wúx^w* ‘big’ → *?á-wux^w* ‘you are big’
- j. *t’úŋ* ‘hard’ → *?á-t’uŋ* ‘you are hard’
- k. *?íŋ* ‘swollen’ → *?á-?íŋ* ‘you are swollen’
- l. *?júj?* ‘sharp’ → *?á-?júj?* ‘you are sharp’
- m. *tilúk* ‘blind’ → *?á-tiluk* ‘you are blind’

The following examples from 'Weenhayek instantiate the combination of a root with a long vowel with the plural suffix *-is*, whose vowel is underlyingly long, as seen in (29)–(32) above. For analogous examples from Chorote, see (68)–(70) above.

(266) 'Weenhayek (Claesson 2016)

- a. *t-éj?* ‘her/his name’ → *t-éj-is* ‘their names’
- b. *t-úp* ‘her/his nest’ → *t-úp-is* ‘their nests’

That way, we conclude that PM words composed of two (or more) morphemes with underlying accent preserve only the leftmost accent in the surface realization, whereas all accents to the right are deleted: **t- + *-ú’p + *-íts* results in **t-úp-íts* ‘their nests’, as opposed to **’woj?* + **-íts* → **’woj-íts* ‘blood.PL’, **t- + *-?áx + *-íts* → **t-’áx-íts* ‘their skins’.

4.3 Words with three or more syllables

In the surface representation of PM words composed of three or more syllables, there must be an accent falling somewhere within the trisyllabic window at the left edge of the stem.³ There is no evidence supporting the reconstruction of

³It is theoretically possible that in some exceptional cases the stress could be removed even farther from the left edge of the stem, as in Manjui *fi-p’ilixsáh* ‘I am poor’, where a trisyllabic

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trisyllabic (or longer) enclinomena. If a word is composed of morphemes with no underlying accents, a default accent is assigned to the peninitial syllable of the word. We start by discussing words with the accent falling on the postpeninitial syllable, or the third one counting from the left edge (§4.3.1), then words with the accent on the peninitial syllable (§4.3.2), and finally words with initial stress (§4.3.3).

4.3.1 $\sim\sim-$

In all likelihood, postpeninitial accent in Proto-Mataguayan was restricted to morphologically complex words. It is reconstructed primarily based on evidence from Iyo'awujwa' and Manjui, whereas Iyojwa'aja' and Wichi have innovated by retracting the accent to the peninitial syllable. As a consequence of that innovation, the stress in Iyojwa'aja' can synchronically fall on either syllable within the disyllabic – and not trisyllabic – window at the left edge of the word (Carol 2014a: 91–2).⁴ Likewise, in 'Weenayek long vowels usually occur within the disyllabic window at the left edge of the word, except for instances of noun incorporation (Claesson 1994: 9) and forms that arose thanks to Watkins' law (§9.1.4), such as '*no-t-’åx-k’á-tax* 'one's chickenpox' or '*no-t-ex^w-is* 'one's wings', where the domain for accent assignment excludes any material that precedes the erstwhile third-person prefix *t- / t’-*.

Words with postpeninitial accent are most commonly composed of an unaccented prefix and a root with an underlying accent on the second syllable, as in the following examples. Note that the accent retraction fed the deletion of the word-final glottal stop in unaccented syllables in Wichi (cf. §9.1.1.14), whereas in Nivâcle no accent retraction occurred, and the word-final glottal stop (if present in PM) remained – as in (270), (271), (274) –, unlike in trochees.

- (267) PM **-φapá(?)* 'shoulder' > PCh **-hwopó?* || PW **-x^wápo*

- (268) PM **-φapá-ke?* 'shoulder blade' > Ni *-φåpå-ke* || PCh **-hwopó-ke?*

root with a final accent receives an unaccented prefix. However, this combination is rare in the extreme, and we have been unable to identify evidence from other Mataguayan varieties that would support the antiquity of the pattern in question.

⁴Apparent violations of this restriction are observed in forms such as Ijw *kasts’aháne* 'we know it', *kasts’i/is* 'we are good', *?i’nahwél* 'you are ashamed'. This entails that when stress retraction applied in Iyojwa'aja, the first-person plural proclitic *kas=* was outside the respective domain, and that the insertion of *?i* in the prefixes of the shape *?in-* before vowels and glottal consonants had not yet occurred. The Proto-Chorote reconstructions of the aforementioned forms are as follows: PCh **kas ts-’ahán-eh* 'we know it', **kas ts-’is-is* 'we are good', **<n>ahwéł* 'you are ashamed'.

4.3 Words with three or more syllables

- (269) PM *-*ɸqató*(*-l) ‘elbow’ > Ni -(?V)ɸ*kato*(-k) || PCh *-*qató?*(*-l) || PW *-*qáto*(*-l^h)
- (270) PM *-*kilá?*(*-wot) ‘elder brother’ > Ni -*tsekla?*/ *tſikla-*(-βot) || PCh *-*kilá?*(*-wot) || PW *-*kjila*
- (271) PM *-*kitá?*(*-wot) ‘elder sister’ > Ni -*tſita?*(-βot) || PCh *-*kitá?*(*-wot) || PW *-*kjita*
- (272) PM *-*k’aló*(?)(*-ts) ‘cheek’ > PCh *-*k’aló?*(*-s) || PW *-*k’álo*(*-s)
- (273) PM *-*nX₂₃aq*(?)^{āt} ‘to snore’ > Ni [ta]nxakāt || PCh *[?i]hnåq’āt
- (274) PM *-*qalá?*(*-j^h) ‘leg’ > Ni -*kaklā?*(-j) || PCh *-*qa’lá?* ~ *-*qå’lå?*(*-j^h) || PW *-*qålå*(*-j^h)
- (275) PM *[ji]selān ‘to spank’ > Mk [j]<eq>*silan*‘to spank’ || PCh *[?i]selān‘to store’; *[?i]selān-eh‘to prepare’

The same stress pattern is found when an unaccented prefix is combined with an unaccented monosyllabic root and an accented suffix, as in the following plural forms.

- (276) PM *-*kås-él* ‘tails’ > Ni -*kå’s-ek* || PW *-*kjås-el^h*
- (277) PM *-*koj-áj^h* ‘hands, arms’ > Mk -*koj-ej* || PCh *-*koj-áj^h*
- (278) PM *-*lix-áj^h* ‘languages, words’ > Mk -*’lix-ej* || Ni -*’klif-aj* || PCh *-*’lih-áj^h*
- (279) PM *-*p’ot-és* ? ~ *-*p’ot-ós* ‘lids’ > Ni -*p’ot-os* || PCh *-*p’ot-és* || PW *-*p’ót-es*
- (280) PM *-*täts-él* ‘trunks, bases’ > PCh *-*tes-él* || PW *-*téts-el^h*

Finally, postpeninitial accent is found when a disyllabic enclinomenon receives a suffix with an underlying accent.⁵

- (281) PM **qatits-él* ‘stars’ > PCh **qates-él* || PW **qatéts-el^h*

As noted above, the postpeninitial accent pattern is reconstructed based on evidence from Iyo’awujwa’ and Manjui, and indirect evidence for its antiquity

⁵A few data remain problematic for our proposal. First of all, the plural form of Mj -(?i)jé’ñ ‘meat’ is -?iſén-is and not *-?iſen-éis, despite the fact that its PM etymon is reconstructed as an enclinomenon: PM *-?äſa’ñ, expected plural form *-?äſan-ís. Second, the root for ‘to stand’ behaves as iambic in ‘Weenhayek, as seen in the imperative ‘Wk *qasít* ‘stand!', but consistently has stem-initial stress in Iyo’awujwa’ and Manjui, as in Mj *ti-káſit* ‘s/he stands’. Since this is observed in only two lexemes, it is not possible to decide at present whether we are dealing with a true exception or with some sort of an additional restriction whereby the accent is retracted in inflected forms with person prefixes.

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comes from the failure of the final ? to be lost in Nivaclé, as in *Ni ji-tfita?* ‘my elder sister’, *?a-kaklå?* ‘your leg’ (Seelwische 2016: 56, 103). This counters the pattern established by Gutiérrez (2015b: 182–194), whereby in unsuffixed nouns with a (possessive) person index iambic feet are normally built from the left edge of the word, and consequently the second syllable of the root undergoes deglotalization in weak prosodic positions, as in (*finβó?*) ‘honey’ → (*ji-ʃín*)βo ‘my honey’ Gutiérrez (2015b: 186). Although we have no information on the position of the stress in forms such as *ji-tfita?* and *?a-kaklå?* in the variety of Nivaclé studied by Gutiérrez, the consistent presence of the word-final glottal stop in all inflected forms of these nouns indicates that they retain the final stress pattern of PM, quite atypically for Nivaclé: *ji-(tfitá?)*, *?a-(kaklå?)*. This prediction will need to be tested with native speakers of Nivaclé. At least in plurals, which in our account contain an accented suffix in PM, Nivaclé is explicitly reported to receive final stress, as in *ji-(klif-áj)* ‘my words’ Gutiérrez (2015b: 204). This fully conforms with our expectations.

4.3.2 $\sim\sim$

Peninitial accent is the most frequent pattern in polysyllabic words. It arises whenever the initial syllable lacks an underlying accent and the peninitial syllable carries one, regardless of the properties of all subsequent syllables. In addition, it comes about as the default accent pattern in words that lack any underlying accent within the trisyllabic window at the left edge.

Peninitial accent often arises when an unaccented prefix is attached to a disyllabic or longer stem (unless the stem itself carries an underlying accent on its second syllable, on which see §4.3.1). In order to recover the underlying accentual properties of any given stem, one needs to examine its behavior in absence of prefixes. However, many verbs and relational nouns do not ever occur without prefixes, and it is therefore not always possible to determine whether a given stem carries any underlying accent at all.

In a handful of cases, we can be fairly certain that the initial syllable of the stem carried an underlying accent. This can be seen in prefixless forms such as *Ijw lóxs'e* ‘bow’, *'náji* ‘path’, *tóxs'e* ‘smoke’; *I'w f'étis* ‘root’, *lóxse?* ‘bow’, *náji* ‘path’, *tóxsa* ‘smoke’; *Mj tóxsa* ‘smoke’, *póxsena* ‘bearded’; *Wk x'été* ‘root’, *lútsex* ‘bow’, *'nájix* ‘path’, *pásenax* ‘gilded catfish’, *tútsax* ‘smoke’, all of which show initial accent. The accent does not shift upon accretion of an unaccented prefix:

- (282) PM **(-)fétä'ts* ‘root’ > Mk *fitets* || Ni *-feta's* || PCh **-hwétus* || PW **(-)x'été*

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- (283) PM *(-)lútse²x, *(-)lútsxe-ts ‘bow’ > Ni *klutsef* / -*klutsef*, (-)lútsxe-s || PCh *(-)lúseh (*-es) || PW *(-)lútseχ, *(-)lútse-s
- (284) PM *(-)náji²x, *(-)nájx-aj^h ‘path’ > Ni *náji*²f, (-)nájx-aj / -náji²f || PCh *(-)nájih, *(-)nájh-aj^h || PW *(-)nájiχ, *(-)nájh-aj^h
- (285) PM *-pxúse?(*-j^h) ‘beard’ > Mk -<a>pxusi?(-j) || Ni -påse (-j) || PCh *-púse?(*-j^h) || PW *-påse (*-j^h)
- (286) PM *(-)tútse(?)χ ‘smoke’ > PCh *(-)túsah || PW *(-)tútsaχ

In yet other cases, there is evidence that the stem itself lacks an underlying accent. The stems listed below behave as enclinomena when used without a prefix: in Chorote they carry final stress (Ijw *k’ijé* ‘for’; Mj *k’owéh* ‘hole’, *?ijé?* ‘for’), in ‘Wenayek they lack long vowels (‘Wk *x^wiço?* ‘coal’, *k’owex* ‘hole’, *qak^ja?* ‘medicine’, *towex* ‘pan, kind of drum’), and in Nivaclé they fail to undergo deglottalization in the stem-final position, which suggests final stress (Ni *φajxó?* ‘coal’, *k’utsá*²x ‘old’). Note that when such stems combine with a monomoraic prefix in Nivaclé, the coda of the stem-final syllable deglottalizes, suggesting peninitial stress (Ni *ɸájxo* ‘its charcoal’, *ji-táβaf* ‘my abdominal cavity’). In (287) and (292), we list the allomorphs without the deglottalization effect in Nivaclé, which occur with the prefixes *βat-* ‘indefinite possessor’ and *kas-* ‘our’.

- (287) PM *-φájXo? (*-l) ‘coal’ > Ni -φajxo? (-k) || PW *-x^wíjho (*-l^h)
- (288) PM *-kówä²x ‘hole’ > PCh *-kóweh || PW *-k’óweχ
- (289) PM *-k’ója(?) ‘before, for’ > Ni -k’ója || PCh *-k’ója? || PW *-k^j’ója
- (290) PM *-k’útsaχ ‘old’ > PCh *-k’úsah || PW *-k^j’útsaχ
- (291) PM *-qáka (*-l) ‘medicine’ > PCh *-qáka? (*-l) || PW *-qák^ja (*-l^h)
- (292) PM *-táwä²x, *-táwxä-ts ‘(abdominal) cavity’ > Mk -tawe²x, -tawxe-ts || Ni -táβa²f, -táβxa-s || PCh *-tóweh || PW *-tóweχ

This strongly suggests that Proto-Mataguayan did not tolerate enclinomena of more than two syllables: if an unaccented prefix was added to a disyllabic enclinomenon, a default accent was assigned to the initial syllable of the stem (the peninitial syllable of the word). In fact, Nivaclé, Chorote, and Wichí still show synchronically active alternations in accent placement, exemplified below.

- (293) Nivaclé (Gutiérrez 2015b: 184, 186, 211–212, 272)
- samük* ‘excrement’ → *ji-sámuk* ‘my excrement’
 - klesá* ‘knife’ → *ji-klésa* ‘my knife’

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- c. *jinβó?* ‘honey’ → *ji-jínβo* ‘my honey’
 - d. *jiktsú’k* ‘silk floss tree’ → *?a-β-iktsuk* ‘your canoe (made of the wood of a silk floss tree)’
 - e. *titó’x* ‘s/he carries it on her/his shoulders’ → *xa-tíłox* ‘I carry it on my shoulders’
 - f. *βaklé’tf* ‘s/he walks’ → *xa-βákletf* ‘I walk’
 - g. *βåmkå?* ‘s/he washes’ → *xa-βå’mkå* ‘I wash’
 - h. *ɸajxó?* ‘charcoal’ → *ɬ-ɸájxo* ‘its charcoal’
- (294) Iyojwa’aja’ (Carol 2014a: 92)
- a. *k’ijé* ‘for’ → *si-k’jóje* ‘for us’
 - b. *?apé?e?* ‘above’ → *si-típe?e* ‘above us’
 - c. *k’ahwéh* ‘below’ → *si-k’áhwe* ‘below us’
- (295) Manjui (Carol 2018, Hunt 1994)
- a. *?ijé?* ‘for’ → *hi-?jóje?* ‘for her/him’
 - b. *?apé?e?* ‘above’ → *hi-tépe?e?* ‘on top of it’
 - c. *kihwíjh* ‘below’ → *fi-kéihwi* ‘below us’
- (296) ‘Weenhayek (Claesson 2016: 65, 85, 94, 124, 173, 306, 317, 420, 472)
- a. *towex* ‘pan; kind of drum’ → *la-tówex* ‘its hole’
 - b. *k’owex* ‘hole’ → *la-k’ówex* ‘its center’
 - c. *qawaq* ‘belt’ → *la-qáwaq* ‘its belt’
 - d. *xʷíco?* ‘coal’ → *la-xʷíco?* ‘its coal’
 - e. *qak’ja?* ‘medicine’ → *la-qák’ja?* ‘its medicine’
- In a great number of disyllabic stems, it is impossible to determine whether their initial syllable carries an underlying accent or not, since these stems never occur without a prefix. Some examples are shown below. Note the loss of the word-final glottal stop in an unaccented syllable in Nivaèle and Wichí in (301), (304), (307), (311), (315), (318), (325), as described in §7.1.1.8 and §9.1.1.14.
- (297) PM *-ɸáji’x ‘right’ > Mk -feji’x¹left’ || Ni -ɸaji’s || PCh *-hwíjah
- (298) PM *-ɸá-’mat ‘disease’ > Mk <eq>fe-’met || Ni -ɸa-’mat || PCh *-hwá-’mat
- (299) PM *[?i]ɸá(t)s’uŋ ‘to spit’ > PCh *[?i]hwáts’uŋ-APPL || PW *[?i]xʷáts’uŋ
- (300) PM *-ɸálits ‘daughter-in-law, sister-in-law’ > Mk -felits || Ni -ɸaklís<?a>‘sister-in-law’ || PCh *-hwélis‘daughter-in-law’

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- (301) PM *-ɸáɬ?u?(*-ts) 'son-in-law, brother-in-law' > Mk -felu?(-ts) || Ni -ɸakl?u(-s) 'brother-in-law' || PCh *-hwílu? ~ -hwélu?(*-s) 'son-in-law'
- (302) PM *-ɸítä(?)k 'dream' > PCh *-hwíhlek || PW *-xʷíteq
- (303) PM *-ɸítan 'to dream' > PCh *[ʔi]hwíhan || PW *[t]xʷíhan
- (304) PM *(-)håqke? 'well' > Mk haqqi? 'river' || Ni -xåke 'dry well' || PCh *-hååke? 'artificial well'
- (305) PM *-kéjå(?) (f.), *-kéjåts (m.), *-ké(j)tså-ts (pl.) 'grandchild' > PCh *-kéjå?, *-kéjås, *-kétsås || PW *-k'éjå, *-k'éjås, *-k'étsås
- (306) PM *-kíphah, *-kípha-ts 'neighbor' > Mk -kífe(-ts) || Ni -tſípha(-s) || PCh *-kíhwah, *-kíhwa-s
- (307) PM *-k'åxe? (*-l) 'arrow' > Mk -qaxi?(-l) || Ni -k'åxe || PCh *-k'åhe? (*-l) || PW *-k'åhe (*-l^b)
- (308) PM *-k'älphah 'spouse' > Ni -tſ'akpha || PCh *-k'élhwah || PW *-k'éxʷah
- (309) PM *[ji]k'åsaχ ~ *[ji]k'åseχ 'to divide' > Mk [j]<a>k'esaχ || PCh *[ʔi]k'ésah || PW *[hi]k'ésax
- (310) PM *-k'íníx, *-k'íñxi-ts 'younger brother' > Mk -k'íníx || Ni -tſ'íniʃ || PCh *-k'ính, *-k'íhni-s || PW *-k'íñiχ, *-k'íñhi-s
- (311) PM *-k'íñχå? ~ *-k'íñxå?(*-wot) 'younger sister' > Mk -k'íñχa? ~ -k'íñxa? || Ni -tſ'íñxå (-βot) || PCh *-k'íhnå?(*-wot) || PW *-k'ínhå
- (312) PM *[ji]nxiʷwän 'to smell' > Mk [ji]nxiʷwen || PCh *[ʔi]hníʷwen
- (313) PM *-pák'o 'heel' > PCh *-pók'o? || PW *-pák'o
- (314) PM *-pás-e^at 'lip' > Ni -pás<e^at> || PCh *-pás<at> ~ *-pás<åt> || PW *-pás<et>
- (315) PM *[ji]péj-a? 'to hear' > Mk [ji]pij-e? || Ni [ji]pej-a || PCh *[ʔi]péj-a?
- (316) PM *[t]pó?ex 'to be full' > Mk [to]po?ox || Ni [to]po?x || PCh *[t^b]pó-eh || PW *[t]pó-jeχ
- (317) PM *[ji]pónit-ex 'to fill' > Mk [j]<o>pon-het-ix || Ni [ji]pont-eʃ || PCh *[ʔi]pónit-eh || PW *[ʔi]tá-ponit-eχ
- (318) PM *[ji]qáku? 'to distrust' > Mk [je]qeku? || Ni [ji]kaku || PCh *[ji]qáku? || PW *[ji]qák^bu-APPL
- (319) PM *-qáwa(?)q 'belt, band' > PCh *-qáwak || PW *-qáwaq
- (320) PM *-qá?tu(?) 'yellow' > PCh *-qá?tu? || PW *qá?tu

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- (321) PM *[*t*]qáñhan ‘to fish with a hook’ > Mk [*ta*]<*qa*>*qanhen* || PCh **[t^ə]qáhnán* || PW **[t]qáñhan*
- (322) PM *-qótso(?) ‘node’ > PCh *-qóso-ke? || PW *-qótso
- (323) PM *-támte?(*-ts) ‘daughter-in-law’ > Ni -támte<?e>(-s) || PCh *-támte?(*-s)
- (324) PM *[*ni*]-táñfá(‘)l-APPL ‘to know, to be acquainted’ > Ni [*ni*]táñfakl-APPL || PCh **[?i]táñwel*-APPL || PW *-táñwel-APPL/ *-táñvh-APPL
- (325) PM *-tátse?(*-j^h) ‘eyelash’ > Mk -tetsi?(-j) || Ni -tátse(-j) || PCh *-táse?(*-j^h)
- (326) PM *-témä(‘)k ~ *-tämä(‘)k, *-témh-aj^h ~ *-tämh-aj^h ‘bile’ > PCh *-témek, *-téhm-aj^h || PW *-témeq, *-témh-aj^h
- (327) PM *-t’íle?(*-j^h) ‘rheum’ > Mk -t’ili?(-j) || Ni -t’iklé(-j) || PCh *-t’íle-
- (328) PM *-tséwte(?) (*-j^h) ‘tooth’ > Ni -tseβte(-j) || PW *-tsóte(*-j^h)
- (329) PM *-wóle(?) ‘leaf, hair, feather’ > PCh *-wóle? || PW *-wóle
- (330) PM *-xájk’u(?) (*-l) ‘egg’ > Ni -sajk’u(-k) || PCh 3 *hl-éjk’u?(*-l) || PW *-t-ík’u(*-l^h)
- (331) PM *-xáte’k, *-xáthe-j^h ‘head’ > Ni -sate’tʃ, -satxe-s || PCh *-hétek, *-héhte-j^h || PW *-t-éteq, *-t-éthe-j^h
- (332) PM *-X₁₃úsek ~ *-X₁₃úšák ‘temperance’ > PCh *-húsek || PW *-húseq

Peninitial accent also obtains when an unaccented prefix is attached to an accented monosyllabic stem followed by a suffix (either accented or not).

- (333) PM *[*ji*]ká^ət-APPL ‘to fall’ > Ni [*ji*]kå^ət-APPL || PW *[*ni*]k^já^ət-APPL
- (334) PM *[*t*]kú^əm-APPL ‘to grab; to work’ > Mk [*te*]ku^əm-APPL || Ni [*t*a]ku^əm-APPL || PCh **[?i]kúm*-APPL || PW **[t]k^jú(‘)m*-APPL
- (335) PM *-kút-ex ‘to meet’ > Mk [*w(e)*]kut-ix-u^ət || Ni [*βa*]kut-es || PCh **[?i]kút-eh* || PW *-k^jút-eχ
- (336) PM *[*ji*]p’ó-APPL ~ *[*ji*]φ’ó-APPL ‘to cover’ > Ni [*ji*]p’o-APPL || PCh **[?i]p’ó*-APPL || PW **[hi]p’ó*-APPL
- (337) PM *-qéj-its ‘costumes’ > Ni -kej-is || PCh *-qéj-is || PW *-qéj-is
- (338) PM *-wój-its ‘blood.PL’ > PCh *(-)wój-is || PW *-wój-is
- (339) PM *[*ji*]X₁₃án-ex ‘to know’ > PCh *-<[j]a>hán-eh || PW **[ji]hán-eh*

A combination of an (unprefixed) iambic root and a suffix is also expected to result in peninitial accent. Note that the Chorote reflex in (342) is reconstructed based on the Iyo’awujwa’ reflex *itán-is*, attested in Gerzenstein (1983: 132), whereas

4.3 Words with three or more syllables

Manjui shows an irregular rightward stress shift: *?it'en-éis* 'thorns'. The Iyo'awujwa' datum is considered more conservative because it fits better with the rest of the comparative data.

- (340) PM **ɸa?*áj-*u*?*k*, **ɸa?*áj-*ku*-*j*? **'algarrobo tree (*Prosopis alba*)** > Ni *ɸa?*aj-*<j>uk* || PCh **hwa?*áj-*uk*, **hwa?*áj-*ku*-*j*? || PW **x*?áj-*uk*, **x*?á-*k*?*u*-*j*?
- (341) PM **jin*á^t-*its* **'water.PL'** > Ni *jin*á^t-*is* || PCh **i*?*n*á^t-*es* || PW **i*ná^t-*es*
- (342) PM **k'ut*X₂₃án-*its* **'thorns'** > Ni *k'ut*xan-*is* || PCh **k'ut*án-*is* || PW **k*?*uth*án-*is*
- (343) PM **tsáháq*-*its* **'chajá birds'** > Mk *tsahaq*-*its* || PCh **sáháq*-*es* ? ~ **sáháq*-*is*

Finally, peninitial stress is found in a number of unprefixed trisyllabic roots. It is preserved in all derivatives and inflected forms.

- (344) PM **sil*ó?*táɸ*V ? ~ **siw*ó?*táɸe* **'Caatinga puffbird'** > PCh **sil*ó?*táhw*V? || PW **siw*ótáx^w*e*
- (345) PM **xunxátaχ* **'tusca fruit'** > Mk *xunxetaχ* || Ni *xunfataχ* || PCh **i*hnáta^h || PW **xnhátaχ*
- (346) PM **xunxáta-(ju)*?*k* **'tusca tree'** > Mk *xunxete-*?*k* || Ni *xunfata-juk* || PCh **i*hnáta-*k* || PW **xnháte-q*
- (347) PM **xunxáta-kat* **'tusca grove'** > Mk *xunxete-ket* || Ni *xunfata-tsat* || PCh **i*hnáta-*kat*
- (348) PM *(*?*a)X₁₃útsa(?)χ, *(*?*a)X₁₃útsha-ts **'crested caracara'** > Ni *xutsax*, *xutsxa-s* || PCh *(*?*a)húsah, *(*?*a)húsa-s || PW **?*ahútsaχ, **?*ahútsha-s
- (349) PM **?*aqáje*k* **'wild honey'** > Ni *?*akájet*f* || PW **?*aqáje*q*
- (350) PM **?*aX₁₃áje(?)χ **'mistol fruit'** > Ni *?*axájex || PCh **?*ahájah || PW **?*ahájaχ
- (351) PM **?*aX₁₃áj-*u*?*k*, **?*aX₁₃áj-*ku*-*j*? **'mistol tree'** > Ni *?*axáj-*uk*, *?*axáj-*ku*-*j* || PCh **?*aháj-*uk*, **?*aháj-*ku*-*j*? || PW **?*aháj-*uk*^w
- (352) PM **?*åsk'ála(?)χ **'widower'** > Ni *?*åstf'aklax || PCh **?*åsk'élah
- (353) PM **?*uwále(?)χ ? ~ **C'uwále(?)χ* **'puma'** > Ni <xum>*p'ubatex* || PCh **k'uwáhlah* || PW **?*owálaχ ? ~ **C'owálaχ*
- (354) PM **?*vlá?ah, **?*vlá?a-ts **'lesser grison'** > Mk *ile* || Ni *?*aklá?a(-s) || PCh **?*elá?ah, **?*elá?a-s ? ~ **?*alá?ah, **?*alá?a-s || PW **?*ilá?ah

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4.3.3 $\sim\sim$

Initial accent in polysyllabic words occurs whenever the initial syllable is lexically specified as accented. This is especially common in roots. In such cases, Chorote retains initial accent, and 'Weenayek has a long vowel in the initial syllable and short vowels in all other syllables (sometimes the peninitial vowel is syncopated).⁶

- (355) PM *ké \acute{t} χa-ju k , *ké \acute{t} χa-jku- $^{j^h}$ 'red quebracho' > Mk *ke \acute{t} le-jku-* || Ni *tse \acute{t} xa-juk*, *tse \acute{t} xa-ku-j* || PCh *kéhla-juk / *kéhla-jku- || PW *k'él-ju k , *k'él-k'ju- $^{j^h}$
- (356) PM *látseni(?) 'chañar fruit' > PCh *létseni? || PW *létse'nih
- (357) PM *látsen-*u* k 'chañar plant' > Mk <xu>letsin-*u* k || PCh *léseni-*k* || PW *létsen-*uk* w
- (358) PM *lóta-(ju) k 'tree for making bows' > Ni *klota*<tf> || PCh *lóta-juk || PW *lóte<q>
- (359) PM *"*l*ájX₂₃VnåX₁₃å 'Azara's night monkey' > Ni *klajxenåxå* || PCh *"*l*éhjanåhå-ke?
- (360) PM *pxúse-naχ 'bearded; gilded catfish' > Ni *påse*<nx> 'gilded catfish' || PCh *púse<nah>, *púse<hna>-s 'bearded' || PW *pásenaχ, *pásenha-s 'gilded catfish'
- (361) PM *"*j*éjxåts-han 'to teach' > Mk [*j*]ixats<hen> || Ni [*j*]ejxats-xan / -?ejxats-xan || PCh *"*j*éjåhås<an>
- (362) PM *tsópha-taχ 'fruit of a shrub (*Lycium americanum*)' > Mk *tsofe-tax* || Ni *tsoφ-tax*
- (363) PM *tsópha-ta-(ju) k 'shrub (*Lycium americanum*)' > Mk *tsofe-te-k* || Ni *tsoφ-ta-juk* || PW *tsóx w a-t-uk w
- (364) PM *wák'a-ju k , *wák'a-jku- $^{j^h}$ 'guayacán' > Mk *wek'e-ju* k , *wek'e-jkw-i* || PCh *wák'a-juk, *wák'a-jku- $^{j^h}$ || PW *wák'ja-*juk* w , *wák'ja-*kju*- $^{j^h}$
- (365) PM *wósitseχ 'black algarrobo fruit (*Prosopis nigra*)' > Mk *ositsax* || Ni *βaitse* || PW *wósotsax

⁶The position of the stress in the Nivaclé reflexes of the words of this type is not documented in Gutiérrez (2015b). Since the language requires a primary stress within a disyllabic window at the right edge of a prosodic word, we predict that PM polysyllabic words with initial stress are reflected with a final (default) stress in Nivaclé, as described for trisyllabic nouns by Gutiérrez (2015b: 165). Analía Gutiérrez (2023, personal communication) reports that our prediction is in fact borne out for many of these forms, though not all of them are documented in her corpus, with the proviso that the examples with an initial heavy (CVC) syllable carry a secondary initial stress (Gutiérrez 2019b: 34, 55).

4.3 Words with three or more syllables

- (366) PM *wósits-*u*’*k* ‘black algarrobo tree (*Prosopis nigra*)’ > Mk osits-*u*’*k* || Ni βaitse-*juk* || PCh *wósis-*uk* || PW *wósots-*uk*^w
- (367) PM *wósak’*V*(*)t* ‘red-crested cardinal’ > PCh *wós^ə*k’at* || PW *wósak’*it*
 ~ *wósak’*ut*
- (368) PM *wánXåłåχ, *wánXåłå-ts ‘rhea’ > Mk waałax || Ni βánxåłåx, βánxåłå-s
 || PCh *wánhlåh, *wánhlå-s || PW *wá’nłåχ, *wá’nłå-s
- (369) PM *xéłå-*ju*’*k* ‘tree (sp.)’ > Ni seklå-*juk* || PCh *hél-ek || PW *hél-ek^w
- (370) PM *ʔálu-*ta*χ, *ʔálu-*ta*-*ts* ‘iguana’ > Ni ʔálu-*tax*, ʔálu-*ta*-*s* || PCh *ʔáhlu-*tah*,
 *ʔáhlu-*ta*-*s* || PW *ʔálu-*ta*χ, *ʔálu-*ta*-*s*
- (371) PM *ʔáwu(C)tseχ ‘peccary’ > Ni ʔabuktsex ~ ʔaboktsex || PCh *ʔáwusah ||
 PW *ʔáwutsaχ
- (372) PM *ʔál(V)tse(*)χ*, *ʔál(V)tse-*ts* ‘cháguar (*Deinacanthus urbanianum*)’ > Ni ʔáktsex,
 ʔáktse-s || PCh *ʔál^ə*sah*, *ʔál^ə*se-s* || PW *ʔáletsaχ
- (373) PM *ʔánhajex ‘wild bean (*Capparis retusa*)’ > Mk anhejaχ || Ni ʔánxajex ||
 PCh *ʔóhnajah || PW *ʔánhjaχ
- (374) PM *ʔánitih ‘wasp (sp.)’ > Ni ʔániⁱ || PCh *ʔánitih
- (375) PM *[j]éjxåts-han ‘to teach’ > Mk [j]ixats<hen> || Ni [j]ejxats-xan / -ejxats-xan
 || PCh *[j]éjähås<an>
- (376) PM *[j]óp’ale(*?*) ‘to hiccup’ > Ni [j]op’aklē / -op’aklē ‘to choke’ || PCh *[j]óp’ale?
 || PW *[j]óp’le
- (377) PM *t-’ó’thale(*?*) ~ *t-’ó’thåle(*?*) ‘heart’ > PCh *t-’óhtale? ~ *t-’óhtåle? ||
 PW *t-’ótle

At present, we have found no evidence for reconstructing accented prefixes for Proto-Mataguayan, though prefixes with an underlying long vowel do exist in ‘Weenhayek (for example, ’Wk ’nó- ‘GNR’, ʔá- ‘2.Sp’). In the latter language, such prefixes always keep their long vowel and shorten all subsequent vowels in a given phonological word (except in innovative forms that arose thanks to Watkins’ law and that are therefore not reconstructible to Proto-Mataguayan), regardless whether the stem is underlyingly unaccented, as in (378a)–(378d), trochaic, as in (378e)–(378h), or iambic, as in (378i)–(378k).

- (378) ’Weenhayek (Claesson 2016)
- k’owex* ‘hole’ → ’nó-*k’owex* ‘one’s center’
 - x^wiço?* ‘coal’ → ’nó-*x^wiço?* ‘one’s coal’

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- c. *qak'ja?* 'medicine' → *'nó-qak'ja?* 'one's medicine'
- d. *t^halák* 'old' → *?á-t^halák* 'you are old'
- e. *'nájix* 'path' → *'nó-'nájix* 'one's path'
- f. *x^wétes* 'root' → *'nó-x^wetes* 'one's root'
- g. *tútsax* 'smoke' → *'nó-tutsax* 'one's smoke'
- h. *k^jóçet* 'heavy' → *?á-k^jóçet* 'you are heavy'
- i. *x^wi^jét* 'cold' → *'nó-x^wi^jet* 'one's cold'
- j. *'woj-ís* 'blood' → *'nó-'woj-is* 'one's blood'
- k. *pitáx* 'long, tall' → *?á-pitax* 'you are tall'

One can therefore conclude that if Proto-Mataguayan had prefixes with an underlying accent, it most likely overrode any underlying accents located further to the right.

4.4 Conclusions

Above we have seen that the position of stress in Chorote and the distribution of long vowels in 'Weenhayek can be rather neatly explained by positing word-level accent for Proto-Mataguayan. Nivaâle and Lower Bermejeño Wichí also show traces of an erstwhile word-level accent, whereby word-final glottal stops are lost if there is an accent in a non-final syllable (this deglottalization process is fed by accent retraction in Wichí, but not in Nivaâle). It is quite likely that some of the reconstructed PM patterns actually survive in some varieties of Nivaâle, a topic worthy of further research.

We have also seen that the position of the word-level accent in Proto-Mataguayan can be determined by examining the underlying accentual properties of individual morphemes. Any morpheme can have or lack an underlying accent. The left-most underlying accent is the one that appears in the surface realization, whereas all subsequent accents are deleted. If no morpheme in a given mono- or disyllabic word contains an underlying accent, the entire word surfaces as unaccented. Longer words cannot surface as unaccented, and if all morphemes in a given polysyllabic word are specified as unaccented, a default accent is inserted in the peninitial syllable.

The derivation of the surface accent in PM from the underlying accentual properties of its morphemes, as well as the reflexes of the PM accentual patterns in the contemporary languages, are shown in Table 4.1.

4.4 Conclusions

Table 4.1: PM accent patterns

PM (underlying)	PM (surface)	Ni	I'w/Mj	Ijw	'Wk	LB
~	~	-	-	-	~	
-	-	-	-	-	-	
~~	~~	~-	~-	~-	~~	
~_	~_	~_	~_	~_	~_	
~ / --	~	~ (-? → Ø) ~	~	~	~	-? → Ø
~~	~~	~~ (?)	~~	~~	~~	-? → Ø
~~ / ~~~ / ~--	~~	~~ (-? → Ø)	~~	~~	~~	-? → Ø
~~ / ~-- / ~- / ---	~~	~~ (?)	~~	~~	~~	-? → Ø

The pattern whereby the surface accent (ictus) placement is determined based on the underlying accentual properties of individual morphemes by means of a rule (or a set of rules) is by no means exclusive to Mataguayan. Similar systems, where morphemes are underlyingly specified as dominant (underlyingly accented) or recessive (lacking an underlying accent) – among other possibilities, such as preaccenting or postaccenting – are documented in a diverse set of languages, including the Uto-Aztecán languages Cupeño (Hill & Hill 2006, Alderete 1999) and Choguita Rarámuri (Caballero 2011, Caballero & Carroll 2015); the Salishan language Nleʔkepmxcín (also known as Thompson) and other closely related languages (Thompson & Thompson 1992, Coelho 2002); the Saharan language Dazaga (Dybo 1995); the Northwest Caucasian languages Abkhaz, Abaza, and Ubykh (Spruit 1985, Dybo 2000, Borise 2021); the Macro-Jé language Chiquitano (Nikulin 2022); and are possibly best known from a number of Indo-European languages (Kiparsky & Halle 1977), particularly those of the Balto-Slavic branch (Lithuanian, Old Prussian, Slovincian, Slovene, Bosnian-Croatian-Serbian, Bulgarian, Ukrainian, Belarusian, Russian, and some Rusyn dialects), as analyzed by a number of authors (Zaliznjak 1985, Melvold 1989, Dybo 2000, Kushnir 2019). Proto-Mataguayan is similar to languages such as Dazaga and Old Russian in that the stress falls on the leftmost underlyingly accented mora, overriding all subsequent underlying accents (unlike in Chiquitano, where the rule operates from right to left, or in Abkhaz, where the final accent in the leftmost sequence of accented morphemes makes it to the surface). However, it differs from these languages in that enclitics (words where all morphemes are underlyingly unaccented) do not receive a default initial stress, but rather acquire a default peninitial accent in polysyllabic words (and, in Chorote and Nivaçle, also in di-

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syllabic ones), like in Choguita Rarámuri. This combination of features makes Mataguayan particularly interesting from a cross-linguistic perspective.

5 Phonotactics and processes

This short chapter presents an overview of the Proto-Mataguayan phonotactics and of the most important phonological processes that occurred synchronically in the protolanguage. The processes discussed in this chapter quite likely result from sound changes that took place before the disintegration of Proto-Mataguayan. Internal reconstruction of pre-Proto-Mataguayan remains beyond the scope of this book (see [Campbell & Grondona 2007](#) for an early attempt).

5.1 Phonotactics

This section surveys the restrictions on Proto-Mataguayan onsets ([§5.1.1](#)), codas ([§5.1.2](#)), and nuclei ([§5.1.3](#)). It does not take into account syllables composed of a single syllabic coronal consonant, such as *t , $^*\eta$, $^*\tau$; these are discussed in [§2.6](#).

5.1.1 Onsets

Onsets are obligatory in most Mataguayan languages, including Nivaclé ([Gutiérrez 2016a: 5](#)), Iyojwa’aja’ ([Carol 2014a: 90](#)), ’Weenhayek ([Claesson 1994: 3](#)), and Lower Bermejeño Wichí ([Nercesian 2014: 97](#)). This was also the case in Proto-Mataguayan. As discussed in [§2.1.6](#), some roots can start with a vowel in Proto-Mataguayan, but a glottal stop is inserted before that vowel unless the root takes a consonant-final prefix. For example, the root PM $^*-\acute{e}j$ ‘name’ starts with a vowel, as seen in its inflected forms such as $^*j-\acute{e}j$ ‘my name’ or $^*t-\acute{e}j$ ‘her/his name’, but when it combines with the zero allomorph of the second-person prefix, the outcome is $^*\emptyset-?-\acute{e}j$ ‘your name’, with an inserted $^?$. At the stem–suffix boundary, the hiatus-avoiding strategies are more diverse. Some suffixes simply lose their initial vowel following a vowel-final stem (compare PM $^*ji-koj-\acute{a}j^h$ ‘my hands’ and $^*ji-lá-ji^h$ ‘my domestic animals’). For other suffixes, it is more difficult to ascertain their PM allomorphy pattern, because the behavior of their reflexes differs across Mataguayan. For example, the form provisionally reconstructed as PM $^*[t]pó?-ex$ ‘it is full’, where the applicative suffix is added to a vowel-final stem, is reflected as Mk $[to]pó?-ox$, Ni $[ta]pó?-x$, Ijw $[ti]pó-ji$, Mj $[ta]pó-we$, and PW $[t]pó-jeχ$, with full translaryngeal assimilation in Maká, suffix vowel loss in

5 Phonotactics and processes

Nivaclé, *j*-epenthesis in Iyojwa’aja’ and Wichí, and *w*-epenthesis in Manjui (and Iyo’awujwa’). The reconstruction of the allomorphy patterns of such suffixes awaits further research.

A number of complex onsets can be reconstructed for Proto-Mataguayan, with the onset patterns being quite permissive. Possible combinations include sequences of a fricative and a stop (**ɸk*, **ɸts*, **sk*, **st*, **Xp*); a fricative and a sonorant (**sl*, **s’w*, **xn*, **Xw*); a stop and a sonorant (**tl*); a stop and a fricative (**kɸ*, **kh*, **ph*, **px*); a sonorant and a stop (**lk*); two sonorants (**nj*); a fricative, a stop, and a sonorant (**stw*). For Proto-Chorote–Wichí, sequences of two stops are also reconstructed (**kp*, **kt*, **tk*). This list is probably not exhaustive.

Other consonant clusters occurred word-internally in Proto-Mataguayan, but it is difficult to determine whether they were tautosyllabic or heterosyllabic. It is often the case that Chorote and Wichí show a tautosyllabic reflex of a given cluster, as in PM **k’utX₂₃á’n* > PW **k^ju.thá’n* ‘thorn’; PM *-*ʔaqhu’ts* ~ *-*ʔaqhú’ts* > PCh *-*ʔa.qús* ‘knee’. The Nivaclé reflexes of such clusters are heterosyllabic, as in Ni *k’ut.xa’n* ‘thorn’ (Gutiérrez 2015b: 124); this is also the case in Maká at least for the clusters of the shape *Ch*, as in Mk *wi.taq.huts* ‘one’s knee’ (Gerzenstein 1989: 21, fn. 3).¹ We are inclined to think that some or all of these clusters were originally tautosyllabic, as suggested by the fact that they commonly occur morpheme-initially and word-initially; the Nivaclé and Maká syllabification would then be innovative. The issue requires further research.

5.1.2 Coda

Any plain (non-glottalized) consonant, with the possible exception of **w*,² could occur as a simplex coda, though some codas are quite rare word-internally (**ʔ* occurred in very few words, such as *-*qáʔtu(?)* ‘yellow’, and the coda **h* was likely banned word-internally altogether). The coda PM **q* is reconstructed only following low vowels (PM **a* or **å*), whereas the coda PM **k* seems to have been ruled out following PM **a*.

Complex codas are not allowed in any Mataguayan language, including Maká (Gerzenstein 1989: 58), Nivaclé (Gutiérrez 2016a: 5), Iyojwa’aja’ (Carol 2014a: 90), ‘Weenhayek (Claesson 1994: 3), and Lower Bermejeño Wichí (Nercesian 2014).

¹Based on the cognates in Nivaclé and Chorote, we suspect that the Maká form given by Gerzenstein (1989: 21, fn. 3) is a mistranscription for *wi.taq.hu’ts*. See Chapter 10 for details.

²PM **w* is reconstructed root-finally in PM *[*tjk’áw-APPL* ‘to hold in one’s arms, to hug’ and *-*å’w-APPL* ‘to be’, but these roots are typically followed by applicative suffixes, meaning that their final consonants may have been always syllabified as parts of onsets of the subsequent syllable.

5.1 Phonotactics

98), with two exceptions involving glottal consonants. First of all, Nivaâle has preglottalized codas, analyzed as sequences of the type $*/?C/$ in Gutiérrez (2015b, 2016c).³ As discussed in §2.3, some of these correspond to glottalized codas in Manjui and Wichí, where at least Claesson (1994) analyzes them as underlying sequences of a sonorant and a glottal stop. We reconstruct preglottalized codas to Proto-Mataguayan and follow Gutiérrez (2015b, 2016c) in analyzing them as underlying sequences of the type $*/?C/$, though we chose to represent them as $*/?C/$ for aesthetic reasons. Another type of complex coda, which occurs only before a pause, involves sequences of a non-nasal sonorant (PM $*j$ or $*w$) and a $*h$, represented as $*j^h$ and $*l^h$ in this book. These are best preserved in Chorote, where Carol (2014a: 88) analyzes them as sequences of a sonorant and a so-called “unstable /h/” (at least in the Iyojwa’aja’ variety, “unstable /h/” can also follow nasal sonorants, though such possibility is not reconstructed for PM). Synchronously, the “unstable /h/” in Carol’s (2014a) terminology is a kind of /h/ that is deleted word-medially, and in Chorote it may occur both as a part of a complex coda and as a simplex coda, as in *máh* / *má-* ‘go!’. We also reconstruct $*j^h$ and $*l^h$ for Proto-Wichí (note that PW $*l^h$ continues both PM $*l$ and $*l^h$ word-finally), which are reflected as voiceless consonants ζ , ℓ in some Wichí varieties and as voiced *j*, *l* in others (§9.2.1.7).

Glottalized stops cannot ever be followed by a consonant or pause at the surface in any Mataguayan language, including Maká (Gerzenstein 1989: 58) and Lower Bermejeño Wichí (Nercesian 2014: 98). In Nivaâle, however, a first stop in a consonant cluster may receive underlying specification as [constricted glottis], which surfaces as creaky voice in the preceding vowel (1).

(1) Nivaâle (Gutiérrez 2016a: 6)

- a. -kåts’ex [-qa'ts'ex]
-diarrhea
‘diarrhea’
- b. -kå?tsxe-nax [-qgtsxe'nax]
-diarrhea-RES
‘person that has diarrhea’

We assume that Proto-Mataguayan behaved just like Nivaâle in this regard. If an underlying glottalized stop came to occur before a consonant, it apparently no longer surfaced as ejective but rather as preglottalized (see §5.2.6 for more

³In fact, Gutiérrez (2015b, 2016c) provides evidence that /?/ is parsed as belonging to the nucleus in the rhymes of the type /V?C/ in Nivaâle.

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details). Underlying glottalized consonants are not reconstructed in the word-final position, where preglottalized codas can be found instead. We are not aware of any evidence that would suggest that glottalized onsets and preglottalized codas are related in any way.

5.1.3 Nuclei

The nucleus position in Proto-Mataguayan was filled by any of its seven vowels, though we have not found evidence for reconstructing the vowel $^*\ddot{a}$ word-finally (or preceding a word-final *h). In addition, as described in §2.6, coronal consonants (at least *l , *n and *t) could occur as nuclei, as most clearly seen in preconsonantal allomorphs of certain prefixes.

5.2 Consonantal and vocalic stems

A very important feature of the morphophonology of the Mataguayan languages is the fact that consonant-final stems may suffer changes if a morpheme is added to their right. These alternations most characteristically occur in plural formation and in compounding, but not with other types of affixes, such as applicatives. In what follows, we use the labels **consonantal stem** for the allomorph that shows up if no suffix is present and **vocalic stem** for the allomorph that shows up before certain suffixes. The alternation patterns are summarized in Table 5.1. Note that only guttural (that is, velar, uvular, or glottal) stem-final consonants are subject to alternations other than metathesis, such as truncation or weakening, an observation we owe to an anonymous reviewer of this book.

Furthermore, multiple plural suffixes have two allomorphs, one that starts with a vowel and combines with consonantal stems, and another one that starts with a consonant and combines with vocalic stems.

- (2) PM $^*-(\dot{a})j^h$ ‘PL’ > Mk $-(e)j$ || Ni $-(a)j$ || PCh $^*-(\dot{a})j^h$ || PW $^*-(\dot{a})j^h$
- (3) PM $^*-(\dot{e})l$ ‘PL’ > Mk $-l$ || Ni $-(e)k$ || PCh $^*-(\dot{e})l$ || PW $^*-(\dot{e})l^h$
- (4) PM $^*-(i)ts$ ‘PL’ > Mk $-(i)ts$ || Ni $-(i)s$ || PCh $^*-(i)s$ || PW $^*-(i)s$

5.2.1 Glottal truncation in suffixation

PM $^*?-$ and *h -final stems always form their vowel stems by deleting the glottal consonant altogether. Similar rules have been explicitly described for Maká by Gerzenstein (1989: 70–71) and for Nivaclé by Gutiérrez (2015b: 271–272) and Gutiérrez (2020: 285).

5.2 Consonantal and vocalic stems

Table 5.1: Consonantal and vocalic stems

subsection	consonantal stem	vocalic stem
§5.2.1	*-CV?	*-CV-
§5.2.1	*-CVh	*-CV-
§5.2.2	*-CVχ	*-CV-
§5.2.2	*-CVχ	*-ChV-
§5.2.3	*-CVk	*-ChV-
§5.2.4	*-FVk	*-FV-
§5.2.5	*-C ₁ VC ₂	*-C ₁ C ₂ V-
§5.2.6	*-C ₁ ’VC ₂	*- ’C ₁ C ₂ V-
§5.2.7	*-C ₁ VC ₂	no vocalic stem

C = consonant, F = fricative, V = vowel

Some examples of PM *?-final stems follow. Note that when a plural suffix is enclosed in parentheses in our notation, it attaches directly to the stem if the stem ends in a vowel, but replaces the stem-final ? if the stem ends in it, that is, the notation “Mk -ki?(-j)” is to be read as “SG -ki?, PL -ki-j”.

- (5) PM *-á? (*-j^h) ‘fruit’ > Mk 3 -t-e? (-j) || Ni -a? (-j) || PCh 3 *hl-á? (*-j^h) || PW *-t-á? (*-j^h)
- (6) PM *-á(-j^h)-xi? (*-l) ‘mouth’ > Mk -exi? (-l) || Ni -afí (-k) || PCh (?) *-á<aj?> || PW *-t-áj-hi (*-l^h)
- (7) PM *φajXo?, *φajXó-l / *-φájXo? (*-l) ‘coal’ > Ni (-)φajxo? (-k) || PCh *hwa(h)jo- || PW *xʷijho?, *xʷijhó-l^h / *-xʷíjho (*-l^h)
- (8) PM *φánha? ~ *φánha? (*-j^h) ‘locust’ > Mk <e>fenhe? (-j) || Ni φanxa (-j)
- (9) PM *-φáł?u? (*-ts) ‘son-in-law, brother-in-law’ > Mk -felu?(-ts) || Ni -φakl?u(-s) ‘brother-in-
|| PCh *-hwílu? ~ -hwélu? (*-s) ‘son-in-law’
- (10) PM *ji’lá?, *ji’lá-j^h ‘tree’ > Ni ji’klá? (-j) || PCh *?a’lá? (*-j^h) || PW *ha’lá, *ha’lá-j^h
- (11) PM *(-)jipku? (*-l) ‘hunger’ > Mk (-)jipku? (-l) || Ni jipku? / -jipku (-k)
- (12) PM *jit’á?, *jit’á-l ‘vulture’ > Ni jit’á? (-k) || PCh *?at’á? (*-l) || PW *hat’á? (?)
- (13) PM *-ke? (*-j^h) ‘feminine’ > Mk -ki? (-j) || Ni -tse / -ke (-j) || PCh *-ke? (*-j^h) || PW *-k^je (*-j^h)

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- (14) PM *-k^hiláʔ(*-wot) 'elder brother' > Ni -t^hefk^hlaʔ/t^hik^hla-(-βot) || PCh *-kiláʔ(*-wot) || PW *-k^híla
- (15) PM *-kitáʔ(*-wot) 'elder sister' > Ni -t^hsitaʔ(-βot) || PCh *-kitáʔ(*-wot) || PW *-k^híta
- (16) PM *-k'ínxåʔ ~ *-k'ínxåʔ(*-wot) 'younger sister' > Mk -k'ínx^haʔ ~ -k'ínx^ha || Ni -t^hinxå(-βot) || PCh *-k'íhnåʔ(*-wot) || PW *-k'ínhå
- (17) PM *-låʔ, *-låʔ-j^h 'domestic animal' > Ni -klåʔ(-j) || PCh *-lå<hwah> || PW *-låʔ, *-låʔ-j^h
- (18) PM *(-)laʔ, *(-)lǻ-ts 'louse' > Mk -<ij>teʔ(-ts) || Ni -laʔ(-s) || PCh *-hlåʔ(*-s) || PW *-laʔ
- (19) PM *-óʔ(*-j^h) 'seed' > Mk 3 t-oʔ(-j) || PCh *-óʔ || PW *-t-óʔ(*-j^h)
- (20) PM *-pe(?), *-pé-l 'fat' > Ni -<a>peʔ(-k) || PCh *-péʔ(*-l) || PW *-pe(?)
- (21) PM *-pxúseʔ(*-j^h) 'beard' > Mk -<a>pxusiʔ(-j) || Ni -påse(-j) || PCh *-púseʔ(*-j^h) || PW *-påse(*-j^h)
- (22) PM *-qalåʔ(*-j^h) 'leg' > Ni -kaklåʔ(-j) || PCh *-qa'låʔ ~ *-qå'låʔ(*-j^h) || PW *-qålå(*-j^h)
- (23) PM *-tåmteʔ(*-ts) 'daughter-in-law' > Ni -tåmte<?e>(-s) || PCh *-tåmteʔ(*-s)
- (24) PM *-tåtseʔ(*-j^h) 'eyelash' > Mk -tetsiʔ(-j) || Ni -tåtse(-j) || PCh *-tåseʔ(*-j^h)
- (25) PM *-teʔ, *-té-j^h 'eye' > Mk -t<oʔ>(-j) || PCh *-ta-téʔ(*-j^h) || PW *-t(a)-teʔ(*-j^h)
- (26) PM *-t(á)koʔ(*-l) 'face' > Mk -tko<jek> || Ni -takoʔ(-k) || PCh *-tókoʔ(*-l) || PW *-ták^ho(*-l^h)
- (27) PM *-t(á)ko-seʔ(*-j^h) 'eyebrow' > Mk -tko-siʔ(*-j) || PCh *-tóko-seʔ(*-j^h) || PW *-ták^ho-se(*-j^h)
- (28) PM *-t'íleʔ(*-j^h) 'rheum' > Mk -t'iliʔ(-j) || Ni -t'ikl^he(-j) || PCh *-t'íle-
- (29) PM *t'isåʔ ~ t'isåʔ(*-l) 'cream-backed woodpecker (*Campephilus leuco-pogon*)' > Mk t'isaʔ(-l) || Ni t'isåʔ(-k) || PCh *t'isåʔ(-l)
- (30) PM *-tséwte(?)(*-j^h) 'tooth' > Ni -tseβte(-j) || PW *-tsóte(*-j^h)
- (31) PM *-wóʔ(*-ts) 'expert' > Mk -woʔ(-ts) || Ni -βoʔ(-s) || PCh *-wóʔ(*-s) || PW *-wóʔ(*-s)
- (32) PM *-wliʔ ~ *-wliʔ, *-wli-ts 'rib' > Mk -wetliʔ(-ts) || Ni -βli / -βtiʔ(-s) || PCh *-hlí<s>
- (33) PM *xéjåʔ(*-l) 'bat' > Mk xajaʔ(-l) || Ni sejaʔ(-k) || PCh *<?a>héjaʔ(*-l)
- (34) PM *?éjaʔ(*-l) 'mosquito' > Mk ijeʔ(-l) || Ni jijaʔ || PCh *?éjaʔ(*-l)

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- (35) PM *ʔóphi? (*-ts) ‘pigeon’ > Mk ofo? (-l) || Ni ʔóphi (-s) || PCh *ʔóhwo? (*-s)

Some examples of PM *h-final stems are shown below. In this case, only Chorote and (rarely) Wichí show any trace of an original alternation, because word-final PM *h was lost in Maká, Nivaclé, and in some cases in Wichí (see §2.1.12).

- (36) PM *-φah, *-φa-ts ‘companion’ > Mk -fe (-ts) || Ni -φa (-s) || PCh *-hwah, *-hwa-s || PW *-xʷah, *-xʷa-s
- (37) PM *ká’lah, *ká’la-ts ‘lizard’ > PCh *ká’lah, *ká’la-s || PW *ká’lah, *ká’la-s
- (38) PM *-kíφah, *-kíφa-ts ‘neighbor’ > Mk -kife (-ts) || Ni -tſiφa (-s) || PCh *-kíhwah, *-kíhwa-s
- (39) PM *nú?uh, *nú?u-ts ‘dog’ > Ni nú?u (-s) || PCh *nú?uh, *nú?u-s
- (40) PM *ts’áts’ih, *ts’áts’i-l ‘rufous hornero’ > Mk ts’its’i (-l) || Ni ts’ats’i (-k) || PCh *sát’ih || PW *táts’i
- (41) PM *X₂₃wé’lah, *X₂₃wé’la-ts ‘moon’ > Ni xiβe’la (-s) || PCh *wé’lah, *wé’la-s || PW *wé’lah
- (42) PM *ʔám?āh, *ʔám?ā-ts ‘rat’ > Ni ʔam?ā (-s) || PCh *ʔám?ah ~ *ʔám?āh, *ʔám?ā-s ~ *ʔám?ā-s || PW *ʔáma
- (43) PM *ʔúl?āh, *ʔúl?ā-ts ‘dove’ > Ni ʔukl?ā (-s) || PCh *ʔúl?āh, *ʔúl?ā-s
- (44) PM *ʔvlá?ah, *ʔvlá?a-ts ‘lesser grison’ > Mk ile || Ni ʔaklá?a (-s) || PCh *ʔelá?ah, *ʔelá?a-s ~ *ʔalá?ah, *ʔalá?a-s || PW *ʔilá?ah

5.2.2 Behavior of stem-final *χ in suffixation

PM *χ-final stems typically form their vowel stems by deleting the uvular fricative altogether. They always select for the plural suffix *-ts.

- (45) PM *jiʔixåtaχ, *jiʔixåta-ts ‘ocelot’ > Mk iʔixataχ, iʔixate-ts || Ni jixåtax, jixåta-s
- (46) PM *k’ú(t)staχ, *k’ú(t)sta-ts ‘barn owl’ > Ni (?) k’ustax, k’usta-s ‘mockingbird’ || PCh *k’ústah, *k’ústa-s || PW *k’ústax
- (47) PM *[ʔa]lóχ, *[ʔa]ló-ts ‘many’ > Mk <o>lo<ts> || Ni <ʔa>klox || PCh *[ʔa]’lóh || PW *<ʔa>ló<s>
- (48) PM *pitéχ, *pité-ts ‘long’ > Ni pitex, pite-s || PW *pitáχ, *pité-s
- (49) PM *sʷwúlaχ, *sʷwúla-ts ‘anteater’ > Ni s’buklax, sβuklā-s || PCh *sʷʔúlah, *sʷʔúla-s || PW *súlax

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- (50) PM *-taχ, *-ta-ts ‘pseudo’ > Mk -taχ, -te-ts || Ni -tax, -ta-s || PCh *-tah, *-ta-s || PW *-taχ, *-ta-s
- (51) PM *tóχ-APPL, *tó-ts-APPL ‘far’ > Mk -toχ-ij, to-ts-ij || Ni tox-APPL || PCh *tóh(w)-APPL, *tó-ts-APPL || PW *tóx^w-ej^h
- (52) PM *w̄χ, *w̄-ts ‘large, fat’ > Ni -βā^wχ || PCh *wúh, *wú-s || PW *wúx^w, *wú-s
- (53) PM *wánXåłåχ, *wánXåłå-ts ‘rhea’ > Mk waałax || Ni βånxåłåx, βånxåłå-s || PCh *wånhlåh, *wånhlå-s || PW *wå'nłåχ, *wå'nłå-s
- (54) PM *?å'lå-taχ, *?å'lå-ta-s ‘Argentine boa’ > Ni ?å'klå-tax, ?å'klå-ta-s || PCh *?å'lå-tah > ~ *?å'lå-tah, *?å'lå<ta>-s ~ *?å'lå<ta>-s || PW (?) *lá<taχ>
- (55) PM *?ål(V)tse(?)χ, *?ål(V)tse-ts ‘cháguar (*Deinacanthus urbanianum*)’ > Ni ?åktsex, ?åktse-s || PCh *?ål'sah, *?ål'se-s || PW *?åletsax
- (56) PM *?ítå(?)χ, *?ítå-ts ‘fire’ > Ni ?itåx, ?itå-s || PCh *?ítåh, *?ítå-s || PW *?ítåχ, *?ítå-s

Yet other PM *χ-final stems form their vowel stems by converting *-Vχ into *-hV-. They too select for the plural suffix *-ts.

- (57) PM *φátsu(?)χ, *φátshu-ts ‘centipede’ > Ni φatsux, φatsxu-s || PCh *(h)wásuh, *(h)wásu-s || PW *x^wátsux^w
- (58) PM *(-)k'útsaχ, *(-)k'útsha-ts ‘old’ > Mk k'utsaχ, k'utshe-ts || Ni k'utsa^wx, k'utsxa-s || PCh *-k'úsah, *-k'úsa-s || PW *-k'útsax
- (59) PM *(?)wánaχ, *(?)wánha-ts ‘piranha’ > Mk wanaχ, wanhe-ts || Ni βåanax, βånxå-s
- (60) PM *(?)aX₁₃útsa(?)χ, *(?)aX₁₃útsha-ts ‘crested caracara’ > Ni xutsax, xutsxa-s || PCh *(?)a húsah, *(?)a húsa-s || PW *?ahútsax, *?ahútsha-s

5.2.3 Velar weakening

PM *k-final stems typically form their vowel stems by converting *-V_k into *-hV-.⁴ Similar rules have been described for Maká by Gerzenstein (1989: 72–73) and for Nivaclé by Campbell & Grondona (2007: 9–10). In Lower Bermejeño Wichí,

⁴If the application of the rule would result in an illicit consonant cluster, *-V_k can change to *-VhV instead. No clear instances of this avoidance strategy have been reconstructed so far, but its traces have been preserved in various languages: compare Nivaclé *takluk*, *takluhu-j* ‘blind’ (Seelwische 2016: 248), ‘Wk *la-p'ok*, *la-p'óho-q* ‘its fence’ (Claesson 1994: 80), Lower Bermejeño Wichí *la-wék^w*, *la-wehe-j* ‘its owner’ (Nercesian 2014: 192).

5.2 Consonantal and vocalic stems

Nercesian (2014: 192) analyzes stem-final *-k^w* and *-eq* as suffixes precisely because they alternate with *-hV-* in plurals (as in LB *nijok^w*, *niço-j* ‘rope’); a similar stance is taken in Carol (2014b) regarding Iyojwa’aja’ pairs such as *?imóhsik*, *?imóhse-l* ‘devil, deity’, *-étik*, *-éte-l* ‘head’. We believe that these alternations are best understood as phonological rather than morphological.

- (61) PM **phinåk*, **phinhå-j^h* ‘tobacco’ > Mk *finak*, *finha-j* || Ni *phinåk*, *phinxå-j*
- (62) PM *-*må’k*, *-*mhǻ-j^h* ‘powder, flour’ > Ni *-må’k*, *-mxå-j* || PCh *-*måk* || PW *-*mók^w*, *-*mhó-j^h*
- (63) PM *(-)*nijåk*, *(-)*níjhå-j^h* ‘rope, cord’ > Mk (-)*nijak*, (-)*nijha-j* || Ni *-nijåk*, *-nijxå-j* || PCh **nijåk*, **níjhå-j^h* || PW **níjåk^w*, **níjhå-j^h*
- (64) PM *-*témä(’k)* ~ *-*tämä(’k)*, *-*témh-aj^h* ~ *-*tämh-aj^h* ‘bile’ > PCh *-*témek*, *-*téhm-aj^h* || PW *-*témeq*, *-*témh-aj^h*
- (65) PM **títe(’k)*, **títhe-j^h* ‘plate’ > Ni (-)*titetʃ*, (-)*titxe-j* || PCh **títek*, **tíhte-j^h*
- (66) PM *-*xäte’k*, *-*xäthe-j^h* ‘head’ > Ni *-fate’ʃ*, *-fatxe-s* || PCh *-*hétek*, *-*héhte-j^h* || PW *-*t-éteq*, *-*t-éthe-j^h*

It is quite possible that whenever the application of the velar weakening resulted in a cluster of a glottalized stop and **h*, the former became a preglottalized coda, a phenomenon known from vocalic stems with metathesis and glottal reallocation (§5.2.6). However, we know of no relevant examples reconstructible to Proto-Mataguayan.⁵

Note that PM **k* does not simply fricativize to the homorganic **x*: forms such as Mk (-)*nijha-j* ‘ropes, cords’ (with the glottal consonant *h*) as well as Ni (-)*titxe-j* ‘plates’, *-fatxe-s* ‘heads’ (with the consonant *x* in a palatalizing environment) clearly show that PM **h* has to be reconstructed in these cases. Compare this to the following examples of PM **x*-final stems, where a velar fricative is unequivocally reconstructed in both the consonantal and in the vocalic stems (related by metathesis, see §5.2.5), as evidenced by the velar reflex *x* in Maká and by the palatalized reflex *ʃ* in Nivácle.

- (67) PM *(-)*lútse’x*, *(-)*lútsxe-ts* ‘bow’ > Ni *klutseʃ* / -*klutseʃ*, (-)*klutsə-s* || PCh *(-)*lúseh* (*-*es*) || PW *(-)*lútseχ*, *(-)*lútse-s*

⁵Synchronously, velar weakening combined with glottal reallocation has been marginally attested in Nivácle by Seelwische (2016: 182), who documents Ni *nap’uk*, *na’pxu-j* ‘ashes used as salt; soda’. The existence of the plural form *na’pxu-j* is, however, not confirmed by Analía Gutiérrez (2023, personal communication). In addition, elsewhere Seelwische (2016: 177) himself documents the vocalic stem of *nap’uk* as *na’pku-*, without the velar weakening process. Unless this is a mistake on Seelwische’s (2016) part, we may be dealing here with dialectal variation.

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- (68) PM *-na²x ~ *-ná²x / *-nxa- ~ *-nxá- ‘nose’ > Mk -ne²x / -nxé- || Ni -na²ʃ, -nfa-s || PCh *-hná<tVwoh> || PW *-nh<us>
- (69) PM *(²)náji²x, *(²)nájx-aj^h ‘path’ > Ni náji²f, (²)nájf-aj / -²náji²f || PCh *(²)nájih, *(²)náhj-aj^h || PW *(²)nájiχ, *(²)nájh-aj^h
- (70) PM *-táwá²x, *-táwxä-ts ‘(abdominal) cavity’ > Mk -tawe²x, -tawxe-ts || Ni -tåβa²ʃ, -tåβxa-s || PCh *-tóweh || PW *-tóweχ

Some PM *k-final stems, all of which have a rounded vowel preceding the velar stop, are lexically specified for not undergoing the velar weakening process. Instead, they undergo metathesis (§5.2.5) or lack a vocalic stem altogether (§5.2.7).

- (71) PM *-(j)uk, *-(j)ku-j^h ‘tree (suffix)’ > Mk -(j)uk, -(j)kw-i || Ni -(j)uk, -ku-j || PCh *-(j)uk, *-(j)ku-j^h || PW *-(j)uk^w, *-k^ju-j^h
- (72) PM *²mók (*-its) ‘zorzar bird (*Turdus sp.*)’ > Mk mok (-its) || Ni mok (-is) || PCh *²mók (*-is)
- (73) PM *tänúk (*-its) ‘feline’ > Mk tenuk (-its) || Ni tanuk (-is) || PCh *tinúk (*-is)
- (74) PM *tsänú²k ‘duraznillo trees’ > Ni tsanu²k, tsanku-j || PCh *sinúk, *sinúku-j
- (75) PM *ɸts-u²k ‘palm (*Copernicia alba*)’ > Mk fits-uk, fis-kw-i || Ni ɸts-u²k / ɸts-uk-i- || PCh *hwis<úk>, hwis<úk^j>u-j^h || PW *x^wits<uk^w>

One could suspect that at some stage, before the divergence of Proto-Mataguayan into the daughter languages, these stems ended in a uvular stop (PM *q). Recall from §2.1.5 that synchronically PM *q in a coda position can only be preceded by a low vowel (PM *a or å). Therefore, one can tentatively reconstruct a sound change whereby the Pre-Proto-Mataguayan rhymes *-oq and *-uq yielded Proto-Mataguayan *-ok and *-uk. Velar weakening would have arisen only in those stems that ended in a *-k – but not in *-q – in Pre-Proto-Mataguayan.

5.2.4 Ban on *h after fricatives

Whenever velar weakening (§5.2.3) would result in a sequence of a Proto-Mataguayan fricative and *h, the glottal fricative does not surface altogether. If the velar weakening process operated “normally”, one would expect the vocalic stem of nouns such as *-t²u²k ‘yica bag, load’ to have been *²-thu-, but the reflexes in the daughter languages rather point to *-t²u-. Some examples follow.

- (76) PM *-t²i²k ~ *-t²i²k, *-t²i²-j^h ‘thread’ > Ni -t²i²tʃ, -t²i²-j<is> || PCh *-hlík, *-hlí-j^h

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- (77) PM *-*tu*^h*k*, *-*tlú*-*j*^h ‘yica bag, load’ > Mk -*tu*^h*k*, -*tu*-*j* || Ni -*tu*^h*k* || PCh *-*hlúk*, *-*hlúj*-... || PW *-*tluk*^w, *-*tlú*-*j*-*is*
- (78) PM *-*X₁₃u*^h*k*, *-*X₁₃ú*-*j*^h ‘firewood’ > Ni -*xu*^h*k*, -*xu*-*j* || PCh *(*ʔítåh*)-*huk* || PW *-*huk*^w, *-*hú*-*j*-*is*

We take this as evidence that synchronically sequences of a fricative and **h* were banned in Proto-Mataguayan, possibly due to a Pre-Proto-Mataguayan sound change **Fh* > **F*, where *F* stands for any fricative. Note that the sequences **ph*, **th*, **sh*, **xh*, **χh*, or **hh* are not reconstructed anywhere in the lexicon.

5.2.5 Metathesis

Stems that end in an obstruent may form their vocalic allomorph by means of metathesis of the final two segments of the stem. Similar rules have been described for Maká (plant names) by Gerzenstein (1989: 74) and for Nivaçle by Gutiérrez (2015b: 272–274). The latter author also claims that the metathesis in Nivaçle is driven by two requirements, namely, the avoidance of complex codas and the satisfaction of the Syllable Contact Law (Murray & Vennemann 1983), whereby “sonority should not rise across a syllable boundary (from an obstruent to a sonorant)” (Gutiérrez 2020: 295). Note that preglottalized codas undergo deglottalization upon metathesizing, as in (81), (86), (87); this is still synchronically the case in Maká and Nivaçle.

- (79) PM *-*åq*, *-*qá*-*ts* ‘food’ > Mk -*aq*, -*qa*-*ts* || Ni -*åk*, -*kå*-*s* || PCh *-*åk*, -*qá*-*s* || PW *-*t*-*åq*, *-*qá*-*s*
- (80) PM *-*äf*, *-*fä*-*ts* ‘wing’ > Mk 3 *t*-*ef*, *te*-*fe*-*ts* || Ni -*a**f*, -*a**f**a*-*s* || PCh *-*hw*-*és* || PW *-*t*-*ex*^w
- (81) PM *-*ɸu*^h*t* ~ *-*ɸú*^h*t*, *-*ɸtú*-*ts* ‘flatulence’ > Mk -*ftu*-*ts* || Ni -*ɸu*^h*t*, -*ɸtu*-*ts* || PCh *-*hw*^h*út*
- (82) PM *-(*j*)*uk*, *-(*j*)*ku*-*j*^h ‘tree (suffix)’ > Mk -(*j*)*uk*, -(*j*)*kw*-*i* || Ni -(*j*)*uk*, -*ku*-*j* || PCh *-(*j*)*uk*, *-(*j*)*ku*-*j*^h || PW *-(*j*)*uk*^w, *-*k^ju*-*j*^h
- (83) PM *-*kéjåts* (m.), *-*ké(j)tså*-*ts* (pl.) ‘grandchild’ > PCh *-*kéjås*, *-*kétsås* || PW *-*k^jéjås*, *-*k^jétsås*
- (84) PM *-*k'ínix*, *-*k'ínx*-*ts* ‘younger brother’ > Mk -*k'ínix* || Ni -*tf'ínif* || PCh *-*k'ínih*, *-*k'íhni*-*s* || PW *-*k^jínix*, *-*k^jính*-*s*
- (85) PM *-*(-)lútse*^h*x*, *-*(-)lútsxe*-*ts* ‘bow’ > Ni *klutsef*/-*klutse*^h*f*, *(-)klutsfe*-*s* || PCh *-*(-)lúseh*(*-*es*) || PW *-*(-)lútse*^w, *-*(-)lútse*-*s*

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- (86) PM *-na²x ~ *-ná²x / *-nxa- ~ *-nxá- ‘nose’ > Mk -ne²x / -nxé- || Ni -na²ʃ, -nfa-s || PCh *-hná< *tVwoh* || PW *-nh<us>
- (87) PM *-táwá²x, *-táwxä-ts ‘(abdominal) cavity’ > Mk -tawe²x, -tawxe-ts || Ni -tába²ʃ, -táβxa-s || PCh *-tóweh || PW *-tóweχ
- (88) PM *-táts-u²k, *-táts-ku-j^h ‘trunk’ > Ni -tats-uk, -tas-ku-j || PCh *(-)tés-uk, *-tés-ku-j^h

In some idiosyncratic cases, vocalic stems formed by means of metathesis select for the vowel-initial allomorph of the plural suffix, and the final vowel of the vocalic stem is therefore deleted. Synchronously, the resulting pattern has been described as vowel syncope.

- (89) PM *(-)náji²x, *(-)nájx-aj^h ‘path’ > Ni náji²ʃ, (-)nájʃ-aj / -náji²ʃ || PCh *(-)nájih, *(-)náhj-aj^h || PW *(-)nájiχ, *(-)nájh-aj^h
- (90) PM *-wá²x, *-w(ä)x-áj^h ‘burrow; anus’ > Ni -βa²ʃ, -βaf-aj^h || PCh *-wéh || PW *-wéχ, -wh-áj^h

At least in Nivaçle, the metathesis rule does not apply if it would result in an illicit consonant cluster: the vowel is copied instead, so that the stem-final consonant appears flanked by identical vowels in the vocalic stem, as in Ni *xot*, *xoto-j* ‘sandy place’ (Gutiérrez 2015b: 277). Even though similar alternations were found in other languages, as in Iwj *t-’ák*, *t-’aká-’l* ‘rope’ (Carol 2014a: 92), Mj *hi-hwétus*, *hi-hwétusu-j* ‘its root’ (Carol 2018), we have not been able to reconstruct any clear case of a PM lexeme that would follow such a pattern.

5.2.6 Metathesis and glottal reallocation

The pattern described in this subsection must have been quite rare in Proto-Mataguayan. It arises when the application of metathesis (§5.2.5) would result in a consonant cluster whose first member is a glottalized stop. In this case, the stop surfaces as preglottalized rather than ejective, as in Ni -kåts’ex ‘diarrhea’ and -kå²tsxe-nax ‘person that has diarrhea’ (Gutiérrez 2015b: 227).⁶ This pattern has been preserved only in Nivaçle, but it is evidently quite archaic.

Consider the following pair of nouns, both of which are securely reconstructible to Proto-Mataguayan. The derivational relation between them is not productive, but it is possible to speculate that the latter member of the pair contains

⁶Since in Nivaçle only prosodically prominent syllables allow for a glottal or preglottalized coda, no preglottalization surfaces in forms such as Ni *ʔap’ax*, *ʔapxa-* ‘jararaca’ (Gutiérrez 2015b: 273).

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a fossilized masculine suffix *k , added to the vocalic stem of the former (with metathesis and glottal reallocation).

- (91) PM $^*t'ox \sim ^*t'óx$ ‘aunt’ > Ni $-t'ox$ || PCh $^*‐i‐t'óh$ || PW $^*‐i‐t'ox$
- (92) PM $^*‐txo'k \sim ^*‐txó'k$, $^*‐txóko-wot$ ‘uncle’ > Mk $-txo'k$ || Ni $-txo'k$, $‐txóko-βot$ || PCh $^*‐i‐tók$, $^*‐i‐tóko-wot$ || PW $^*‐i‐thok^w$

The [constricted glottis] feature in the initial consonant of the term for ‘uncle’ can be seen in Nivaclé forms where stress falls on the prefix, such as *ji-ká-‐txok* ‘my brother-in-law’ (Gutiérrez 2015b: 191). In forms such as Ni *ji-‐txó'k* ‘my uncle’, no preglottalization is found, because Nivaclé systematically deglottalizes the codas in all prosodically weak syllables. In other languages, there are no traces of the [constricted glottis] feature in the term for ‘uncle’ (in stark contrast with the term for ‘aunt’). Recall from §2.3 that Maká and Nivaclé are the only languages that retain the contrast between preglottalized and plain obstruent codas. That way, the obvious solution is to reconstruct the vocalic stem of PM $^*t'ox \sim ^*t'óx$ as PM $^*‐txo‐ \sim ^*‐txó‐$, where metathesis is combined with the reallocation of the [constricted glottis] feature to the left. The Maká term for ‘uncle’ is regrettably not attested in our sources that distinguish between plain and preglottalized codas. Other Nivaclé stems that show the phenomenon in question, such as the pair Ni *nap'uk* ‘ashes used as salt; soda’ and *na'pku-tax* ‘salt’ (Seelwische 2016: 177, 182), lack known cognates in other Mataguayan languages.

5.2.7 Absence of a vocalic stem

Not all consonantal stems have a vocalic counterpart. Some of them remain unaltered before any suffixes, with the proviso that preglottalized codas deglottalize when they resyllabify as the onset of the next syllable before certain affixes (for example, the plural form of $^*k'utX_{23}á'n$ ‘thorn’ is reconstructed as $^*k'utX_{23}án-its$).⁷

Some suffixes have dedicated allomorphs that co-occur with consonantal stems. For example, the plural suffixes surface as $‐áj$, $‐íts$, and $‐él$ after consonants.⁸

⁷Only a subset of vowel-initial affixes behaves like this. Others can attach to stems that end in a preglottalized coda without triggering deglottalization, as in *ji-pe'j-a?* ‘s/he hears’.

⁸In fact, some authors, such as Nercesian (2014: 190) for Lower Bermejeno Wichí and Gutiérrez (2015b: 274-8) for Nivaclé, have described the vowels appearing in such allomorphs as epenthetic. Note, however, that different suffixes show up with different vowels in Proto-Mataguayan, a fact that makes us think that the vowels in question are part of the underlying representation of the suffix. Of course, innovations in individual Mataguayan languages and dialects have altered the picture in some cases. For instance, in Nivaclé the allomorphs $‐íts$ and

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Other suffixes have only one allomorph. In Nivaclé and Chorote, an epenthetic vowel may occur between a consonantal stem and a consonant-initial suffix: *Ni βosokl-[i]tax* ‘big butterfly’, *t-up-[i]tsat* ‘group of nests’, *p’ok-[i]βaf* ‘mark of an arrow’ (Gutiérrez 2015b: 68–9); *Ijw wi’jít-[i]p* ‘winter’, *hi-’wét-[i]hwa* ‘her/his neighbor’ (Carol 2014b). It is as of yet unclear whether the vowel epenthesis strategy was employed in Proto-Mataguayan, since some Mataguayan varieties lack it: compare ‘Wk *xʷitsúk-tax* ‘kind of palm’, *ha-’wét-xʷah* ‘your neighbor’ (Claesson 2016: 56, 172), with no vowel epenthesis.

The following nouns are reconstructed as lacking a vocalic stem, as seen in the respective plural forms.

- (93) PM *-áj̥j, *-áj̥-is ‘yica bag’ > Ni -ḁj̥, -aj̥-is || PCh *-éj̥?(*-is) || PW *-t-éj̥(*-is)
- (94) PM *-éj̥(*-its) ‘name’ > Mk -ij(-its) || Ni -ej̥(-is) || PCh *-éj̥?(*-is) || PW *-t-éj̥(*-is)
- (95) PM *jinḁ́t, *jinḁ́t-its ‘water’ > Ni *jinḁ́t*, *jinḁ́t-is* || PCh *i’nḁ́t(*-es) || PW **zinḁ́t*(*-es)
- (96) PM *-kḁ́s, *-kḁ́s-él ‘tail’ > Ni -kḁ́s, -kḁ́s-ek || PCh *-kḁ́s || PW *-k̥ḁ́s, *-k̥ḁ́s-el^h
- (97) PM *-koj̥(‘)j (*-áj^h) ‘hand, arm’ > Mk -koj̥(-ej̥) || PCh *-kój̥?, *-koj̥-áj̥^h
- (98) PM *k’utX₂₃ḁ́n, *k’utX₂₃án-its ‘thorn’ > Ni *k’utxḁn*, *k’utxan-is* || PCh *k’utḁ́n, *k’után-is || PW *k̥j’uthḁ́n, *k̥j’uthán-is
- (99) PM *lo̥p ~ *ló̥p, *lop-íts ~ *lóp-its ‘winter’ > Mk *lo̥p*, *lop-its* || Ni *k̥lop̥p*, *k̥lop-is* || PCh *lóp || PW *lop ~ *lóp
- (100) PM *-li̥x, *-li̥x-áj̥^h ‘language, word’ > Mk -’li̥x<e?> || Ni -’k̥li̥j̥, -’k̥li̥f-aj̥ || PCh *-li̥h, *-li̥h-áj̥^h
- (101) PM *mók (*-its) ‘zorzal bird (*Turdus sp.*)’ > Mk *mok* (-its) || Ni *mok* (-is) || PCh *mók (*-is)
- (102) PM *pétḁ(‘)j, *pétḁj-its ‘rain’ > Mk *pi̥tej* (-its) || PCh *péhlaj̥? || PW *pétḁj̥, *pétḁj̥-is
- (103) PM *qati̥ts, *qatits-él ‘star’ > Ni *kati̥s* || PCh *qatés, *qates-él || PW *qates, *qatéts-el^h
- (104) PM *-qej̥(*-its) ‘costume’ > Ni -kej̥(-is) || PCh *-qéj̥?(*-is) || PW *-qéj̥(*-is)
- (105) PM *sálḁ́(‘)l, *sálál-its ‘middle-sized cicada’ > Mk *sala(‘)l*, *salal-its* || Ni *sákl̥-åkl̥-åk* (-is)
- (106) PM *slḁ́qha(‘)j, *slḁ́qhaj̥-its ‘wild cat’ > Ni *sklåkxaj* ~ *sklåkxaj* (-is) || PCh *s̥låhqḁj̥ ~ *s̥låhqḁj̥?(*-is) || PW *silåqhåj̥

*-él are reflected as -ik-/ek, -is/-es, with the choice of the vowel depending on the dialect, on the preceding consonant, and even on the lexeme, with some inter- and intra-speaker variation (Gutiérrez 2015b).

5.3 Allomorphs of prefixes

- (107) PM **stwú[?]n*, **stwún-its* ‘king vulture’ > Ni *staθu[?]n*, *staθun-is* || PCh *[?]*stúu[?]n*, *[?]*stúun-is* || PW **ʔistíwin*
- (108) PM **tänük* (*-its) ‘feline’ > Mk *tenuk* (-its) || Ni *tanuk* (-is) || PCh **tinük* (*-is)
- (109) PM *-*tä[?]ts*, *-*täts-él* ‘trunk, base’ > PCh *-*tés* (*-el) || PW *-*tes*, *-*téts-el^h*
- (110) PM **tós* (*-its) ‘snake’ > Ni *tos* (-is) || PCh **tós* (*-is)
- (111) PM **tsäháq* (*-its) ‘chajá bird’ > Mk *tsahaq* (-its) || PCh **sähák*, **säháq-es*
? **säháq-is* || PW **tsäháq*
- (112) PM *-*ú[?]p*, *-*úp-its* ‘nest’ > Mk 3 *t-up* (-its) || Ni -*u[?]p*, *-up-is* || PCh *-*úp* (*-is)
|| PW *-*t-úp* (*-is)
- (113) PM *[?]*wá(?)x*, *[?]*wáx-aj^h* ‘stagnant water’ > PCh **hl-x?**wáh* (*-aj^h) || PW *[?]*wáχ*, *[?]*wáh-aj^h*
- (114) PM **...X₂₃a[?]t* (*-its) ‘earth’ > Ni <*kots>xa[?]t*, <*kots>xat-is* || PCh **<?a>h<n>át*
~ **<?å>h<n>át* (*-es) || PW **<hon>hat*, **<hon>hát-es*
- (115) PM *-*?åx* (*-its) ‘skin, bark’ > Mk *-?ax* (-its) || Ni *-?åx* (-is) || PCh *-*?åh*,
**-?åh-és* || PW *-*t-?åχ*, *-*t-?åh-és*
- (116) PM *-*?äsx[?]a[?]n*, *-*?äsxán-its* ‘meat’ > Mk *-?ese[?]n*, *-?esen-its* || Ni *-(?a)sxa[?]n*,
-(?a)*sxan-is* || PCh *-*?isá[?]n*, *-*?isán-is* || PW *-*t-?isa[?]n*, *-*t-?isán-is*

5.3 Allomorphs of prefixes

Many prefixes display an allomorphy pattern whereby a moraic allomorph is used before stems that start with a supraglottal consonant, and a non-moraic allomorph occurs with stems that begin with a vowel or a glottal stop (in which case the prefix coalesces with the glottal stop). Homophonous prefixes follow identical allomorphy patterns in Proto-Mataguayan.

For details, see Chapter 10 and the discussion in §2.6.

5.4 Irregular verbs

A very limited number of Proto-Mataguayan verbs are reconstructed as having an alternation between low vowels and **i*, where the vowel **i* appears after prefixes of the shape **j-* (including 3.A/S_I.RLS and 1.A/S_A.IRR).

- (117) PM 1 **h-åk*, 2 **t-äk*, 3 **[j]ik*; CISL **n-äk* ‘to go away’ > Mk 1 *h-ak*, 2 *t-ak*,
3 *ik*; CISL *n-ek* || Ni 1 *x-åk*, 2 *t-åk*, 3 *[j]itf*; CISL *n-atf* || PCh 1 *?åk*, 2 **hl-ék*
|| PW 2 **t-eq*, 3 **[j]iq*; CISL **n-eq*

5 Phonotactics and processes

Table 5.2: PM alternating prefixes

	before C	before V	before ?
1.POSS, 1.A/S _A .IRR, 3.A/S _I .RLS	*ji-	*j-	*"j-
2.POSS, 2.A/S _A .IRR	*?a-	*∅-	*∅-
3.POSS, 2.A/S _A .RLS	*ɿ-	*ɿ-	*ɿ'-
2.S _P /P.RLS, 3.A/S.IRR	*ɳ-	*n-	*"n-
3.S _T	*t̪-	*t̪-	*t̪'-
1.A/S _A .RLS	*ha-	*h-	*k̪'-

- (118) PM *-åp, 3 *'[j]ip ‘to cry’ > Mk -ap, 3 ip || Ni -ap, 3 [j]ip || PCh *[j]áp || PW *'[j]ip

- (119) PM *-ɿá(?)l, 3 *'[j]i(?)l ‘to die’ > PCh *[j]á(?)l || PW *'[j]il^h

In the latter two cases, Chorote has generalized the allomorph with a low vowel, and Wichí the one with a high vowel.

6 Maká

This chapter deals with the historical phonology of Maká [maca1260], including the development of its consonants (§6.1), vowels (§6.2), and prosody (§6.3) from the PM stage to Maká.

In what follows, we rely on Gerzenstein's (1994) grammatical description (which incorporates most of her 1989 findings) and on Gerzenstein's (1999) dictionary. However, these sources do not faithfully represent the glottalized sonorants and the preglottalized codas; for these sounds, we rely on Wycliffe's Bible translations, on Braunstein's (1987) work, and on recently published materials in Maká (Unu'ueiki Patricia 2011, Paraguay 2020, 2022). The consonantal inventory we assume for Maká is given in Table 6.1. The status of the ejective fricatives is dubious; they have been alternatively analyzed as sequences of plain fricatives and a glottal stop (Gerzenstein 1994). Note that we apply Gutiérrez's (2015b) analysis of the Nivaclé preglottalized codas as complex codas to the Maká preglottalized codas, and do not posit a set of preglottalized stops and fricatives; therefore, Maká *fe't* 'fire' is analyzed as /fe?t/. The vocalic inventory we assume for Maká includes only five vowels, /i e a o u/.

Table 6.1: Maká consonants

	labial	dental	alveolar	velar	uvular	glottal
plain stops	p	t	ts	k	q	?
ejective stops	p'	t'	ts'	k'	q'	
plain fricatives	f	ɸ	s	x	χ	h
(ejective fricatives)	(f')	(ɸ')	(s')	(x')		
plain approximants	w	l		j		
glottalized approximants	ʷw	ʷl		ʷj		
plain nasals	m	n				
glottalized nasals	ʷm	ʷn				

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6.1 Consonants

Maká is conservative in that it has retained most Proto-Mataguayan consonants intact.

6.1.1 PM $^*\phi$

One minor (and unconditioned) sound change has transformed PM $^*\phi$, reconstructed as a bilabial fricative, into Mk *f*, explicitly stated to be articulated as labiodental by Gerzenstein (1989: 30). For examples, see §2.1.7.

In the variety of Maká attested by Demersay (1860: 456) under the name ‘Lengua’, the sound in question is mostly represented as *<fu>*, as in *<fuêté>* ‘fire’, *<hiafué>* ‘teeth’, *<hicfué>* ‘ear’ (modern Maká *fe't*, *—, ji-kfi?*), suggesting that it was articulated as [ɸ] or [fʷ] in that variety.

6.1.2 Loss of the word-initial glottal stop

Another innovation is the loss of the word-initial glottal stop, which was not contrastive in that position in Proto-Mataguayan in any case (it is reconstructed as an epenthetic segment inserted before words that would otherwise begin with a vowel). Gerzenstein (1989: 26–27, 49) is not explicit on whether word-initial *?* actually contrasts with zero in Maká synchronically: although she documents forms such as *?aftil* ‘you are orphan’, in the vast majority of cases word-initial (non-phonemic) glottal stops of other Mataguayan languages correspond to zero in Maká.

6.1.3 PM *h

Finally, the glottal fricative PM *h has been lost word-finally in Maká, and *h* no longer occurs in that position synchronically (Gerzenstein 1989: 34). This includes PM $^*j^h$, $^*l^h$.

- (1) PM $^*-(á)j^h$ ‘**PL**’ > Mk *-(e)j* || Ni *-(a)j* || PCh $^*-(á)j^h$ || PW $^*-(á)j^h$
- (2) PM $^*-ej^h$ ‘**APPL:DISTAL**’ > Mk *-ij* || Ni *-ej* || PCh $^*-ej^h$ || PW $^*-ej^h$
- (3) PM $^*-\phi ah$, $^*-\phi a-ts$ ‘**companion**’ > Mk *-fe (-ts)* || Ni *-φa (-s)* || PCh $^*-hwah$, $^*-hwa-s$ || PW $^*-x^w ah$, $^*-x^w a-s$
- (4) PM $^*-\kíφah$, $^*-\kíφa-ts$ ‘**neighbor**’ > Mk *-kife (-ts)* || Ni *-tſiφa (-s)* || PCh $^*-kíhwah$, $^*-kíhwa-s$
- (5) PM *måh ‘**go!**’ > Mk *ma* || Ni *må* || PCh *måh || PW *måh

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- (6) PM *-sáq'ál^h, *-sáq'ál-its 'soul, spirit' > Mk (?) -si[?]nq'ál(-its) || Ni -såk'åkl^hit> || PCh *-såq'ål^h, *-såq'ål-is
- (7) PM *ts'áts'ih, *ts'áts'i-l 'rufous hornero' > Mk ts'its'i (-l) || Ni ts'ats'i (-k) || PCh *sát'ih || PW *táts'i
- (8) PM *-xíj^h 'recipient' > Mk -xij || Ni -sij / -xij || PW *-híh
- (9) PM *?Vlá?ah, *?Vlá?a-ts 'lesser grison' > Mk ile || Ni ?aklá?a(-s) || PCh *?elá?ah, *?elá?a-s ~ *?alá?ah, *?alá?a-s || PW *?ilá?ah

6.1.4 PM *ji

The sequence PM *ji is reflected as *ji* or *i* in Maká, with no clear distribution. Gerzenstein (1989: 36–37) states that the sequence /ji/ surfaces as [ji] in Maká.

- (10) PM *jijá'ts 'dew' > Mk *ije'ts* || Ni *jija's* || PCh *?ijés-tah || PW *?ijás
- (11) PM *(-)jipku? (*-l) 'hunger' > Mk (-)jipku? (-l) || Ni *jipku?* / -jipku (-k)
- (12) PM *jixå(?) ~ *jixå(?) 'to be true' > Mk *ixa* || Ni *jixå?* || PCh *?ihá<wet>
- (13) PM *ji?ixåtaχ, *ji?ixåta-ts 'ocelot' > Mk *i?ixataχ*, *i?ixate-ts* || Ni *jixåtax*, *jixåta-s*

The third-person active prefix (PM *ji-) is also variably reflected as *ji-* or *i-* in Maká: *ji-lan* 'kills', *ji-li'x-xu?* 'cleans', *ji-nxi'wen* 'smells', *ji-pi'je?* 'hears', *ji-su?un* 'loves', *ji-tit* 'sews', *ji-?wen* 'sees', *ji-t'ix* 'says', *ji-wef* 'is tired', but *i-ma?* 'sleeps', *i-wu'm* 'pushes, throws', *i-k* 'goes', *i-p* 'cries'.

6.1.5 Destiny of glottalized sonorants

Although our main sources on Maká (Gerzenstein 1989, 1994, 1999) do not attest any traces of glottalization in sonorants, more recent publications suggest that Maká has actually preserved the preglottalized sonorant onsets of PM, at least word-internally. These are spelt as <'w>, <'l>, <'y>, <'m>, <'n> in Wycliffe's Bible translations, in Unu'unei ki Patricia (2011), and in Paraguay (2020, 2022). Some examples follow.

- (14) PM *-?lix-áj^h 'languages, words' > Mk -?lix-ej || Ni -?klif-aj || PCh *-?lih-áj^h
- (15) PM *-?mat 'negative quality, physical defect' > Mk -?met || Ni -?mat || PCh *-?mat
- (16) PM *[ji]nxi'wän 'to smell' > Mk [ji]nxi'wen || PCh *[?i]hni'wen

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- (17) PM *[*ji*]pé[?]*j-a?* ‘to hear’ > Mk [*ji*]pi[?]*j-e?* || Ni [*ji*]pe[?]*j-a* || PCh *[*ji*]pé[?]*j-a?*
- (18) PM *-whá[?]*ja?* ‘spouse’ > Mk -*whe*[?]*je?* || Ni -*xa*[?]*ja* || PCh *-hwá[?]*ja?*
- (19) PM *[*t*]wha[?]*já-?*[?]*j* ‘to marry’ > Mk [*te*]whe[?]*je-j* || Ni [*t*]xa[?]*ja-?*[?]*j* || PCh *[*t*][?]hwa[?]*jé-?*[?]*j* || PW *[*t*]wháje[?]*j*
- (20) PM *[*ji*][?]wān ‘to see’ > Mk [*ji*][?]wen || Ni [*ji*][?]βan || PCh *[*ji*][?]wén || PW *[*hi*][?]wén
- (21) PM *-[?]wät ‘place’ > Mk -[?]wet || Ni -[?]βat || PCh *-[?]wét || PW *-[?]wet
- (22) PM *-[?]wli[?] ~ *-[?]wlí[?], *-[?]wlí-ts ‘rib’ > Mk -[?]weli[?](-ts) || Ni -[?]βli[?] / -[?]βti[?](-s) || PCh *-hlí[?]*s*

Word-initially, however, glottalized sonorants are not attested. We surmise that PM glottalized sonorants underwent deglottalization in that environment.

- (23) PM *[?]nátu(h), *[?]nátu-ts ‘day, world’ > Mk *ne*tu(-ts) || Ni *na*tu(-s) || PCh *[?]náhl<ikis> ~ [?]náhl<ikes>‘midday’
- (24) PM *[?]wánXátláχ, *[?]wánXátlá-ts ‘rhea’ > Mk *wa*aláχ || Ni βánxátláx, βánxátlá-s || PCh *[?]wánhlåh, *[?]wánhlå-s || PW *wá[?]nłáχ, *wá[?]nłá-s
- (25) PM *-[?]wV[?]t ~ *-[?]wV[?]t ‘to climb’ > Mk *we*[?]t || Ni βá[?]t || PCh *[*ji*][?]wút || PW *[*t*][?]wut ~ *[*t*][?]wút

6.1.6 Destiny of preglottalized codas

Although our main sources on Maká (Gerzenstein 1989, 1994, 1999) do not attest any traces of glottalization in codas, more recent publications suggest that Maká has actually preserved most preglottalized codas of PM with no modifications. In Wycliffe’s Bible translations, in Unu’unei ki Patricia (2011), and in Paraguay (2020, 2022) codas spelt as <’C> (in the practical orthography) occur abundantly precisely in words whose PM etyma are reconstructed with a glottalized coda; some examples are given below.

- (26) PM *[*n*]a[?]t ~ *[*n*]ä[?]t ‘to burn’ > Mk [*n*]e[?]t-xu[?] || Ni [*ji*]<*n*>-a[?]t
- (27) PM *t-áni’s ‘its stinger’ > Mk t-*ani*’s || Ni t-áni[?]s || PCh *hl-áni[?]s || PW (?) *t-á[?]ni
- (28) PM *t-á[?]s ‘her/his son’ > Mk t-*a*[?]s || Ni t-á[?]s || PCh *hl-á[?]s || PW *t-á[?]s
- (29) PM *[*j*]ékfa[?]x ‘to bite’ > Mk [*j*]ikfe[?]x || PCh *[*j*]ókwah || PW *[*j*]ók[?]ax
- (30) PM *-fáji[?]x ‘right’ > Mk -*fe*ji[?]x[?]left’ || Ni -*faji*[?]f || PCh *-hwíjah
- (31) PM *φa[?]t ~ *φá[?]t ‘fire’ > Mk *fe*[?]t || PCh *hwát
- (32) PM *[*j*?]*is{a/á/e}*[?]χ ~ *[*j*?]*is{á/á/é}*[?]χ ‘sand’ > Mk *isa*[?]χ || PCh *?*isáh* ~ *?*isáh*

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- (33) PM **[ji]kaχ* [?] ~ **[ji]kåχ* ‘to take away’ > Mk *[j]<e>kaχ* || Ni *[ji]tſaχ* || PW **[ji]k^jåχ*
- (34) PM **[ji]kút* ‘to answer’ > Mk *[j]<e>ku^jt* || Ni *[ji]ku^jt* || PCh **[?i]kúhl-APPL* || PW **[ni]k^jút*
- (35) PM **[wa]kumaχ* ‘to run’ > Mk *[we]kumaχ* || Ni *[βa]kumaχ*
- (36) PM **[t]kú^jm-APPL* ‘to grab; to work’ > Mk *[te]ku^jm-APPL* || Ni *[t'a]ku^jm-APPL* || PCh **[?i]kúm-APPL* || PW **[t]k^jú(?)m-APPL*
- (37) PM **[ji]k'ásəχ* ~ **[ji]k'ásəχ* ‘to divide’ > Mk *[j]<a>k'esaχ* || PCh **[?i]k'ésah* || PW **[hi]k'ésax*
- (38) PM **lo^jp* ~ **ló^jp*, **lop-íts* ~ **lóp-its* ‘winter’ > Mk *lo^jp*, *lop-its* || Ni *klo^jp*, *klop-is* || PCh **lóp* || PW **lop* ~ **lóp*
- (39) PM **[ji]tå^jm* ‘to defecate’ > Mk *<i>tå^jm* || Ni *[ji]tå^jm* || PCh **[?i]hlå^jm* || PW **[t]<a>tå^jm*
- (40) PM *-*tåwä^jx*, *-*tåwxä-ts* ‘(abdominal) cavity’ > Mk *-tawe^jx*, *-tawxe-ts* || Ni *-tåβa^js*, *-tåβxa-s* || PCh *-*tóweh* || PW *-*tóweχ*
- (41) PM **ti^jφ* ‘to suck breast’ > Mk *tu^jf/-tu^jf* || Ni *ti^jφ* || PCh **[?i]tíM* || PW **tip*
- (42) PM **phå^jm* ‘up’ > Mk *-phå^jm* || PCh **p^jhå^jm* || PW *-*phå* / **phåm-*
- (43) PM **tå^jt* ‘to sprout’ > Mk *ta^jt* || Ni *tå^jt* || PCh **tå^jt* || PW **tå^jt*
- (44) PM **[ji]wo^jm* ‘to throw’ > Mk *[i]wu^jm* || PCh **[?i]wóm-APPL* || PW **[?i]wo^jm*
- (45) PM *-^jwV^jt ~ *-^jwV^jt ‘to climb’ > Mk *we^jt* || Ni *βå^jt* || PCh **[?i]wút* || PW **[t]^jwu^jt* ~ **[t]^jwút*
- (46) PM **(X₁₃on-)-xaχ*, **(X₁₃on-)-xáh-aj^h* ‘night’ > Mk *<na>xaχ* || Ni *<xon>fa^jx*, *<xon>fa^jx-aj* || PCh **<?a>h<n>áh* ~ **<?å>h<n>áh* || PW **<hon>aχ*, **<hon>áh-aj^h*
- (47) PM **xnáwå^jp* ‘spring’ > Mk *xinawa^jp* || Ni *fnaβåp* ~ *fnåβåp* || PCh **náwop* || PW **xnáwop*
- (48) PM **t-äsx^ja^jn* ‘meat’ > Mk *t-ese^jn* || Ni *t-asxa^jn* || PCh **t-isá^jn* || PW **t-isa^jn*

There are also a few exceptions.

- (49) PM **(-)*φéta^jts ‘root’ > Mk *fitets* || Ni *-φeta^js* || PCh *-*hwéetus* || PW **(-)*x^wétes
- (50) PM **φts-u^jk* ‘palm (*Copernicia alba*)’ > Mk *fits-uk* || Ni *φts-u^jk* || PCh **hwis<úk>* || PW **x^wits<uk^w>*
- (51) PM **ti^jt* ‘to spin, to sew’ > Mk *[ji]ti^jt* || Ni *ti^jt* || PCh **[j]<á>ti^jt*

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- (52) PM *-ú[?]p, *-úp-its ‘nest’ > Mk 3 -t-up (-its) || Ni -u[?]p, -up-is || PCh *-úp (*-is) || PW *-t-úp (*-is)
- (53) PM *-wá[?]k ‘bad mood’ > Mk -wak || Ni -βá[?]k || PCh *-wá[?]k || PW *-wá[?]k^w
- (54) PM *?a[?]nqo[?]k ‘paralytic’ > Mk onqok || Ni ?a[?]nko[?]k

The coda *-j is reflected as j in Maká.

- (55) PM *ti[?]j ‘to weave’ > Mk tij / -tij || Ni ti[?]j
- (56) PM *t[?]á[?]j ‘to sound, to have voice’ > Mk t[?]aj || Ni t[?]á[?]j
- (57) PM *[t]wha[?]já[?]j ‘to marry’ > Mk [te]whe[?]je-j || Ni [t]xa[?]ja[?]j || PCh *[t[?]]hwa[?]je<j?> || PW *[t]wháje<j>

6.1.7 Glottal insertion in monosyllables

In some cases, word-final glottal stops in Maká appear not to reconstruct to Proto-Mataguayan, as evidenced by the Lower Bermejeño Wichí cognates (where no glottal stop is found). We suggest that Maká underwent ?-epenthesis in roots of the shape (C)V (shared with Nivaâle, see §7.1.1.9).

- (58) PM *-e, *-é-l ‘thorn’ > Mk 3 -t-i? || Ni -e?(-k) || PCh 3 *hl-é? (*-l) || PW *-t-e
- (59) PM *-k'u, *-k'ú-l ‘horn, club’ > Mk -k'u?(-l) || Ni -k'u?(-k) || PCh *-k'ú?(*-l) || PW *-k^ju, *-k^j'ú-l^h
- (60) PM *[ji]må ‘to sleep’ > Mk [i]ma? || Ni [ji]må? || PCh *[?i]må? || PW *[?i]må
- (61) PM *-?í (*-l) ‘liquid, juice’ > Mk 3 -t-i? (-l) || Ni -?i? (-k) || PCh *-?í? (*-l) || PW *-t-í (*-l^h)

6.1.8 Fricative + *χ

In Maká, Proto-Mataguayan clusters of the shape “fricative + *χ” have lost the uvular fricative.

- (62) PM *-ɸχúx, *-ɸχú-ts ‘finger’ > Mk -fux || Ni -ɸxux, -ɸxu-s ‘toe’ || PCh *-hwu-ké? || PW *-x^wúx^w, *-x^wú-s
- (63) PM *kéłχa-ju[?]k, *kéłχa-jku-j^h ‘red quebracho’ > Mk kele-jku- || Ni tsełxa-juk, tsełxa-ku-j || PCh *kéhla-juk / *kéhla-jku- || PW *k^jéł-juk^w, *k^jéł-k^ju-j^h
- (64) PM *táxχan ‘to thunder’ > Mk texen || Ni tafxen || PW *t'áχan
- (65) PM *-?äsχa[?]n, *-?äsχán-its ‘meat’ > Mk -ese[?]n, -esen-its || Ni -(?a)sxa[?]n, -(?a)sxan-is || PCh *-?isá[?]n, *-?isán-is || PW *-t-’isa[?]n, *-t-’isán-is

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As a result, clusters such as $f\chi$, $t\chi$, $s\chi$, $x\chi$, $\chi\chi$ are synchronically illicit in Maká (Gerzenstein 1989: 60–61).

6.1.9 Other consonant clusters

Word-initially, the following consonant clusters are synchronically licit in Maká: ph , tsx , tsh , qh , $k'w$, hw , $t\bar{w}$ (Gerzenstein 1989: 58). Other consonant clusters reconstructed for PM have been mostly resolved by means of an epenthetic *i*. We have identified examples involving PM $^*\phi ts$, $^*n\bar{j}$, *nx , *st , and *xn .

- (66) PM $^*\phi ts-u^k$ ‘palm (*Copernicia alba*)’ > Mk *fits-uk* || Ni $\phi ts-u^k$ || PCh $^*hwis<\bar{u}k>$ || PW $^*x^wits<uk^w>$
- (67) PM $^*\eta\text{-}x\acute{a}te?(-l)$ $\overset{?}{\sim} \eta\text{-}x\acute{a}ti?$ ‘dream, sleepiness’ > Mk *-nixati?(-l)* || Ni *nxåte(-k)* || PCh $^*i hn\acute{a}ti?$ || PW $^*nah\acute{a}ti^1$
- (68) PM $^*n\acute{a}nxte?$ ‘tapeti rabbit, cavy’ > Mk *nijaxti?* || Ni *nånxate* || PCh $^*n\acute{a}h\acute{a}te?$ || PW $^*n\acute{a}te$
- (69) PM $^*st\acute{e}ni?$ ‘white quebracho’ > Mk *sitin-u^k* || PCh $^*?^a st\acute{e}ni?$ || PW $^*i st\acute{e}ni^1$
- (70) PM $^*xn\acute{a}wå^p$ ‘spring’ > Mk *xinawa^p* || Ni *fnaβåp* ~ *fnåβåp* || PCh $^*n\acute{a}wop$ || PW $^*n\acute{a}wop$

Maká also employs *e*-epenthesis to resolve stem-initial clusters whose first member is a non-nasal sonorant.

- (71) PM $^*(-)lk\acute{a}(?)t$ ‘nasal mucus, cold’ > Mk *-leke(?)t* || PCh $^*k\acute{e}t$ || PW $^*k^j\acute{e}t-ta\chi$, $^*k\acute{e}t-ta-s$
- (72) PM $^*lk\acute{e}t$ ‘squash’ > Mk *lekiti* || PCh $^*k\acute{e}te?$
- (73) PM $^*-\text{-}w\acute{t}i?$ \sim $^*-\text{-}w\acute{t}i?$, $^*-\text{-}w\acute{t}i-ts$ ‘rib’ > Mk $-\text{-}w\acute{t}i?(-ts)$ || Ni $-\beta\acute{t}i$ / $-\beta\acute{t}i?(-s)$ || PCh $^*-h\acute{t}i<s>$

Word-internally, many more clusters are allowed (Gerzenstein 1989: 59–63). Nevertheless, there are several gaps, and some of them likely result from sound changes specific to certain clusters, such as PM $^*l?$ > Mk *l*, PM $^*s^?w$ > Mk *sV?*, and PM $^*(?)wt$ > Mk *t*. Most of these PM clusters are reconstructed based on evidence from Nivaçle.

¹Synchronously, Mk *-nixati?* is a relational stem, meaning that the sequence *-nix-* is in fact found in word-medial position in this noun. The epenthesis of *i* must thus have occurred at a stage when *-nixati?* was still an absolute stem, as are its cognates in other Mataguayan languages.

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- (74) PM *-ɸállu?(*-ts) ‘son-in-law, brother-in-law’ > Mk -*felu*?(-ts) || Ni -*ɸakl̪u*(-s)‘brother-in-law’
|| PCh *-hwílu? ~ -hwélu?(*-s)‘son-in-law’
- (75) PM *[ji]s’wun ~ *[ji]s’wún ‘to like, to love’ > Mk [ji]su?un || Ni [ji]s’βun ||
PCh *[i]s’?ún
- (76) PM *-tí’wte? ‘heart’ > Mk -*liti*? || Ni -*ti*’βte

At least one of these changes – PM *(?)*wt* > Mk *t* – has resulted in a synchronically active alternation in Maká, whereby the syncopated allomorph of the reflexive prefix *-wet-* is *-t-* rather than *-*wt-* (Gerzenstein 1994: 114), as shown in (77).

- (77) a. Ø-wet-xili-nen-*te*
3-REFL-dirty-CAUS-REFL
's/he soils herself/himself'
- b. *te*-wet-xili-nen-*te* ~ *te*-t-xili-nen-*te*
2.ACT-REFL-dirty-CAUS-REFL
'you soil yourself'

In some cognate sets, **mt* and **mq* appear to have yielded *nt* and *nq* in Maká. It is uncertain whether this sound change is regular, as the sequences *mt* and *mq* are synchronically licit in Maká, as in *somtaχ* ‘kind of fruit (*Harrisia bonplandii*)’, *jamqaχ* ‘buff-necked ibis (*Theristicus caudatus*)’. However, words that contain them tend to lack a known Mataguayan etymology.

- (78) PM *sámto? ‘foreigner’ > Mk *sonto*? || Ni *samto*
- (79) PM *samto’k ~ *samtó’k ‘bamboo’ > Mk *sonto’k* || Ni *samto’k*
- (80) PM *wå’mqå? ‘to wash oneself’ > Mk *wa’nqa*? || Ni βåmqå? / -βå’mqå

6.1.10 Syllabic consonants

In Maká, the syllabic consonants of Proto-Mataguayan evolve in the same way as the syllables of the structure **Ca* or **Cā*: they yield *Ce*, with the vowel harmonizing to *a* or *o* if the next syllable contains a low vowel. This includes the third-person possessive and the second-person active realis prefixes (PM *-*t-* before consonants), the third-person active unrealis prefix (PM *-*η-* before consonants), and the third-person T-class realis prefix (PM *-*t-* before consonants).

- (81) Maká (Gerzenstein 1994: 85, 148)

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- a. ḫe-k’inix
3.POSS-younger_brother
'his/her younger brother'
- b. ḫe-fejejki?
2.ACT-rotate
'you rotate'
- c. ne-t-fejejki?
3.ACT.IRR-3_T-sleep
'(that) s/he rotate'
- d. te-fejejki?
3_T-rotate
's/he rotates'

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6.2.1 Maká vowel shift

A notable sound change involving vowels in Maká is the vowel shift, whereby PM **e* changed to Mk *i* (thus merging with PM **i* > Mk *i*), PM **a* and **ä* changed to Mk *e*, and PM **å* changed to Mk *a* in most positions.

This shift must have occurred at a relatively late date, since earlier registers of Maká (co-)dialects often show <*a*> and <*e*> where contemporary Maká has <*e*> and <*i*>, respectively. In the following examples, forms marked as “Towothli” are from Barbrooke Grubb’s data collected in 1913 (cited *apud* Hunt 1915); those marked as “Enimagá”, “Guentusé”, and “Lengua” are from Aguirre (1793) (cited *apud* Peña 1898).

- (82) Towothli <hual> > modern Maká *xuwel* ‘moon’
- (83) Towothli <sahat> > modern Maká *sehets* ‘fish’
- (84) Guentusé <sèehà>, Lengua <saha>, Towothli <saha> > modern Maká *sehe?*
'earth'
- (85) Towothli <hutan> > modern Maká *h-uten* ‘I hate’
- (86) Towothli <wotak> > modern Maká *wote-k* ‘achiote tree’
- (87) Enimagá <egualé>, Lengua <gualé>, Towothli <iwali> > modern Maká *iweli?*
'water'
- (88) Towothli <witlapinak> > modern Maká *wit-lepin-ek* ‘salt’

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- (89) Towothli <hekōf> > modern Maká *xikaf* ‘fan’
 (90) Towothli <selel> > modern Maká *ts’ilil* ‘bee sp.’
 (91) Towothli <peno> > modern Maká *pinu?* ‘bee sp.’
 (92) Towothli <oita> > modern Maká *ute* ‘stone’

6.2.1.1 PM *e, *i > Mk i

The following examples show that PM *e changed to Mk i, except before the uvular fricative *χ (on which see §6.2.1.4).

- (93) PM *-áse? ‘**daughter**’ > Mk -asi? || Ni -áse || PCh *-áse? || PW *-t-áse
 (94) PM *-e, *-é-l ‘**thorn**’ > Mk 3 t-i? || Ni -e?(-k) || PCh 3 *hl-é? (*-l) || PW *-t-e
 (95) PM *-éj(*-its) ‘**name**’ > Mk -ij(-its) || Ni -ej(-is) || PCh *-éj?(*-is) || PW *-t-éj(*-is)
 (96) PM *-ej^h ‘**APPL:DISTAL**’ > Mk -ij || Ni -ej || PCh *-ej^h || PW *-ej^h
 (97) PM *[j]ékfa^wx ‘**to bite**’ > Mk [j]ikfe^wx || PCh *[j]ókwah || PW *[j]ókwax
 (98) PM *(-)φełek ~ *-éłe- ~ *-ełé- ‘**mortar**’ > Mk (-)fitik || Ni -φełets || PCh *(-)hwVhlek
 || PW *x^wéłeq
 (99) PM *(-)φétá^wts ‘**root**’ > Mk fitets || Ni -φeta^ws || PCh *-hwéetus || PW *(-)x^wétes
 (100) PM *(-)háqke? ‘**well**’ > Mk haqqi? ‘**river**’ || Ni -xáke ‘**dry well**’ || PCh *-háake? ‘**artificial well**’
 (101) PM *[ji]kén ‘**to send**’ > Mk [j]<u>kin || Ni [ji]tsen || PCh *[?i]kén || PW *[?i]kén
 (102) PM *-ke?(*-j^h) ‘**feminine**’ > Mk -ki?(-j) || Ni -tse / -ke (-j) || PCh *-ke?(*-j^h)
 || PW *-k^je (*-j^h)
 (103) PM *-kφe(?) (*-j^h) ‘**ear**’ > Mk -kfi?(-j) || Ni -kφe?(-j) || PW *-(t-)k^we<j> /
 *-(t-)k^we- ‘**arm, hand**’
 (104) PM *-k’áxe?(*-l) ‘**arrow**’ > Mk -qaxi?(-l) || Ni -k’áxe || PCh *-k’áhe?(*-l)
 || PW *-k^j’áhe (*-l^h)
 (105) PM *k’uhate-nha? ‘**pacu fish**’ > Mk <i>k’uheti-nhe?(-j) || Ni k’unxate<nx>(-j)
 (106) PM *lätsen-u’k ‘**chañar plant**’ > Mk <xu>letsin-u’k || PCh *léseni-k || PW *lëtsen-uk^w
 (107) PM *-lëts ‘**offspring**’ > Mk -lits || Ni -k^hles || PCh *-lës || PW *-lës
 (108) PM *[ji]lé^wx ‘**to wash**’ > Mk [ji]lix-u’^w ‘**to clean**’ || Ni [ji]k^hle^ws || PCh *[?i]léh
 || PW *[?i]léχ
 (109) PM *lkéte ‘**squash**’ > Mk lekiti || PCh *kéte?

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- (110) PM *(-)té(?)t ‘firewood’ > Mk *lit<u?>* || PCh *-*?a>hlét* ~ *-*?å>hlét* || PW *-tét
- (111) PM *-tí’wte? ‘heart’ > Mk -titi? || Ni -ti’βte
- (112) PM *me(?) ~ *mé(?) ‘otter’ > Mk mi? || Ni me? || PCh *mé?
- (113) PM *njánxte? ‘tapeti rabbit, cavy’ > Mk *nijaxti?* || Ni *nånxate* || PCh *nåhåte? || PW *nåte
- (114) PM *[ji]péj-a? ‘to hear’ > Mk [ji]pij-e? || Ni [ji]pej-a || PCh *[?i]péj-a?
- (115) PM *péla(?)j, *péłaj-its ‘rain’ > Mk *piłej* (-its) || PCh *péhlaj? || PW *péłaj^h, *péłaj-is
- (116) PM *-pxúse?(*-j^h) ‘beard’ > Mk -*a>pxusi?*(-j) || Ni -påse(-j) || PCh *-púse?(*-j^h) || PW *-påse (*-j^h)
- (117) PM *[ji]selán ‘to spank’ > Mk [j]<eq>*silan* ‘to spank’ || PCh *[?i]selán ‘to store’; *[?i]selán-eh ‘to prepare’
- (118) PM *sténi(?) ‘white quebracho’ > Mk *sitin-u’k* || PCh *sténi? || PW *isté’nih
- (119) PM *-tátse?(*-j^h) ‘eyelash’ > Mk -*tetsi?*(-j) || Ni -tåtse(-j) || PCh *-tåse?(*-j^h)
- (120) PM *-t(á)ko-se?(*-j^h) ‘eyebrow’ > Mk -*tko-si?*(*-j) || PCh *-tóko-se?(*-j^h) || PW *-ták^jo-se (*-j^h)
- (121) PM *-t’é-l ‘tears’ > Mk -t’i-l || Ni -t’e<kl>-is || PCh *-t’é<l>-is
- (122) PM *[ji]t’ex ‘to say’ > Mk [ji]t’ix || Ni [ji]t’ef
- (123) PM *-t’ile?(*-j^h) ‘rheum’ > Mk -t’ili?(-j) || Ni -t’ikle(-j) || PCh *-t’ile-
- (124) PM *waben ~ *wäpen ‘to be ashamed’ > Mk *wepin* || Ni βapen
- (125) PM *(?)wåse? ‘cloud’ > Mk *wasi?* || Ni βåse?
- (126) PM *wåle’k ‘to walk’ > Mk -*i>welki-’met* ‘to limp’ || Ni βakle’tf || PCh *[?i]wélek || PW *weleq
- (127) PM *wé’l=a? ‘one’ > Mk <e>*wi’l-e?* || Ni βé’l<a> / -’βé’l<a>
- (128) PM *-xéle? ‘dirt’ > Mk -*xili?* || Ni -sekle
- (129) PM *?åfte’l ‘orphan’ > Mk *afti’l* || Ni ?åfte’k
- (130) PM *[j]éjxåts-han ‘to teach’ > Mk [j]ixats<hen> || Ni [j]ejxats-xan / -ejxats-xan || PCh *[j]éjåhås<an>

The only instance of an irregular reflex is given below.

- (131) PM *xéjå?(*-l) ‘bat’ > Mk *xaja?*(-l) || Ni *sejå*(-k) || PCh *-*a>héja?*(*-l)

For examples of PM *i being retained as Mk i, see §3.1.

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6.2.1.2 PM *a, *ä > Mk e

Both PM *a and *ä normally changed to Mk e (except before the uvular fricative *χ, on which see §6.2.1.4, and before syllables that contain Mk a or o, on which see §6.2.1.5). Note that these two phonemes also merged in Nivaçle (§7.1.2). The following examples show the development of PM *a.

- (132) PM *-(á)j^h **PL** > Mk -(e)j || Ni -(a)j || PCh *-(á)j^h || PW *-(á)j^h
- (133) PM *-á(-j^h)-xi? (*-l) **‘mouth’** > Mk -exi?(-l) || Ni -asi (-k) || PCh (?) *-á<aj?> || PW *-t-áj-hi (*-l^h)
- (134) PM *-á? (*-j^h) **‘fruit’** > Mk 3 t-e? (-j) || Ni -a? (-j) || PCh 3 *hl-á? (*-j^h) || PW *-t-á? (*-j^h)
- (135) PM *-[j]ékfa'x **‘to bite’** > Mk [j]ikfe'x || PCh *[j]ókwah || PW *[j]ókʷax
- (136) PM *-φah, *-φa-ts **‘companion’** > Mk -fe (-ts) || Ni -φa (-s) || PCh *-hwah, *-hwa-s || PW *-xʷah, *-xʷa-s
- (137) PM *-φájí'x **‘right’** > Mk -fejí'x^h**‘left’** || Ni -φají'f || PCh *-hwíjah
- (138) PM *-φá-^hmat **‘disease’** > Mk <eq>fe-^hmet || Ni -φa-^hmat || PCh *-hwá-^hmat
- (139) PM *φa^ht ~ *φá^ht **‘fire’** > Mk fe^ht || PCh *hwát
- (140) PM *-[j]φá'x **‘to cut down’** > Mk fex-inet-ki?ax || Ni [j]φa'f || PCh *[?i]hwáh-APPL || PW *[?i]xʷáχ
- (141) PM *jijá'ts **‘dew’** > Mk ije'ts || Ni jija's || PCh *?ijés-tah || PW *?ijás
- (142) PM *-kat **‘collective of plants’** > Mk -ket || Ni -tsat / -kat || PCh *-kat || PW *-k'at (*-at after *kʷ, *q)
- (143) PM *kétlχa-ju'k, *kétlχa-jku-j^h **‘red quebracho’** > Mk ketle-jku- || Ni tsełxa-juk, tsełxa-ku-j || PCh *kéhla-juk / *kéhla-jku- || PW *k'él-jukʷ, *k'él-k'u-j^h
- (144) PM *-kíφah, *-kíφa-ts **‘neighbor’** > Mk -kife(-ts) || Ni -tsíφa(-s) || PCh *-kíhwah, *-kíhwa-s
- (145) PM *k'unhate-nha? **‘pacu fish’** > Mk <i>k'unheti-nhe?(-j) || Ni k'unxate<nx>(-j)
- (146) PM *lama(h) ~ *läma(h) (*-m) **‘to be smooth’** > Mk le:me, leme-m || Ni kłama<m>
- (147) PM *(-)tla?, *(-)tla-ts **‘louse’** > Mk -<ij>te?(-ts) || Ni -tla?(-s) || PCh *-hlá?(*-s) || PW *tla?
- (148) PM *ma **‘interrogative particle’** > Mk me || PCh *ma
- (149) PM *-^hmat **‘negative quality, physical defect’** > Mk -^hmet || Ni -^hmat || PCh *-^hmat

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- (150) PM *-na²x ~ *-ná²x / *-nxa- ~ *-nxá- ‘**nose**’ > Mk -ne²x / -nx²e- || Ni -na²f, -nfa-s || PCh *-hná<tVwoh> || PW *-nh<us>
- (151) PM *²nálu(h), *²nálu-ts ‘**day, world**’ > Mk ne²lu(-ts) || Ni na²lu(-s) || PCh *²náhl<ikis> ~ *náhl<ikes>‘**midday**’
- (152) PM *pé²la(²)j, *pé²laj-its ‘**rain**’ > Mk pi²lej (-its) || PCh *péhlaj? || PW *pé²laj^h, *pé²laj-is
- (153) PM *qa ‘**in order to**’ > Mk qe || Ni ka || PCh *qa
- (154) PM *[t]qáñhan ‘**to fish with a hook**’ > Mk [ta]<qa>qanhen || PCh *[t²]qáñnan || PW *[t]qáñhan
- (155) PM *tana(h) ~ *täna(h) ‘**standing, vertical**’ > Mk te:ne, tene-m || Ni tana
- (156) PM *táx²an ‘**to thunder**’ > Mk texen || Ni tafxen || PW *t’áxan
- (157) PM *tsófa-ta-(ju)²k ‘**shrub (*Lycium americanum*)**’ > Mk tsofe-te-k || Ni tsof-ta-juk || PW *tsóx^wa-t-uk^w
- (158) PM *wák’á-ju²k, *wák’á-jku-j^h ‘**guayacán**’ > Mk wek’e-ju²k, wek’e-jkw-i || PCh *wák’á-juk, *wák’á-jku-j^h || PW *wák’á-a-juk^w, *wák’á-a-k^wu-j^h
- (159) PM *xunxáta² ‘**tusca fruit**’ > Mk xunxeta² || Ni xunxata² || PCh *?ihnáta² || PW *xnháta²
- (160) PM *xunxáta-(ju)²k ‘**tusca tree**’ > Mk xunxete-²k || Ni xunxata-juk || PCh *?ihnáta-k || PW *xnháte-q
- (161) PM *xunxáta-kat ‘**tusca grove**’ > Mk xunxete-ket || Ni xunxata-ts²at || PCh *?ihnáta-kat
- (162) PM *?aɸu ~ *aɸú ‘**woman**’ > Mk eɸu || PCh *yahwú?
- (163) PM *?áxa? ‘**stork**’ > Mk exet²maguari stock’ || PCh *?áha²jabiru’
- (164) PM *?ánhaje² ‘**wild bean (*Capparis retusa*)**’ > Mk anheja² || Ni ?ánxajex || PCh *?ohnajah || PW *?ánhja²
- (165) PM *-?äsxa²n, *-?äsxán-its ‘**meat**’ > Mk -?ese²n, -?esen-its || Ni -(?a)sxa²n, -(?a)sxan-is || PCh *-?isá²n, *-?isán-is || PW *-t-’isa²n, *-t-’isán-is
- (166) PM *?éja? (*-l) ‘**mosquito**’ > Mk ije?(-l) || Ni jija? || PCh *?éja? (*-l)
- (167) PM *²[j]éjxáts-han ‘**to teach**’ > Mk [j]ixats<hen> || Ni [j]ejxats-xan / -ejxats-xan || PCh *²[j]éjähás-<an>
- (168) PM *?Vlá?ah, *?Vlá?a-ts ‘**lesser grison**’ > Mk ile || Ni ?aklá?a(-s) || PCh *?elá?ah, *?elá?a-s ~ *?alá?ah, *?alá?a-s || PW *?ilá?ah

Only two examples instantiate what seems to be an irregular reflex of PM *a in Maká: a in (169) and i in (170).

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- (169) PM **nk'a* 'new' > Mk *i'nk'a* || Ni *nitʃ'a* || PCh **ŋk'á?* || PW **nek^ja* ~ **nék^ja* ~ **nek^je* ~ **né**k^je*

- (170) PM **ts'áts'ih*, **ts'áts'i-l* 'rufous hornero' > Mk *ts'its'i* (-*l*) || Ni *ts'ats'i* (-*k*) || PCh **sát'ih* || PW **táts'i*

The following examples show the development of PM *ä.

- (171) PM *-ä ϕ , *-phi-*ts* 'wing' > Mk 3 *t*-*ef*, *te*-*fe*-*ts* || Ni -*a* ϕ , -<*a*>*fa*-*s* || PCh *-*hw*-*és* || PW *-*t*-*ex*^w
- (172) PM **n-äk* 'to come' > Mk *n-ek* || Ni *n-atʃ* || PW **n-eq*
- (173) PM **[j]än* 'to put' > Mk *[j]en*-*APPL* || Ni *[j]an* || PCh **[j]én* || PW **[j]én*
- (174) PM **[ji]φál* 'to tell' > Mk *n(i)-fel-im* || Ni *n(i)-fak* / *n(i)-fakl̪* || PCh **[?i]hwél* || PW **[?i]xʷélh* / **[?i]xʷél-*
- (175) PM *-*φálits* 'daughter-in-law, sister-in-law' > Mk *-felits* || Ni *-fakl̪is* <?a> 'sister-in-law' || PCh *-*hwélis* 'daughter-in-law'
- (176) PM *-*φál?u?*(*-*ts*) 'son-in-law, brother-in-law' > Mk *-felu?*(-*ts*) || Ni *-fakl̪?u?*(-*s*) 'brother' || PCh *-*hwílu?* ~ *-*hwélu?*(*-*s*) 'son-in-law'
- (177) PM *(-)*φétá'ts* 'root' > Mk *fitets* || Ni *-φeta's* || PCh *-*hwétus* || PW *(-)*xʷétes*
- (178) PM **[ji]k'än* 'to stretch out' > Ni *[ji]tʃ'an* || PCh **[?i]k'én*-*APPL* || PW **[hi]k'én*
- (179) PM **[ji]k'ásəχ* ~ **[ji]k'áseχ* 'to divide' > Mk *[j]<a>k'esaχ* || PCh **[?i]k'ésah* || PW **[hi]k'ésaχ*
- (180) PM **látsen-u* *k* 'chañar plant' > Mk <*xu*>*letsin-u* *k* || PCh **léseni-k* || PW **létsen-uk*^w
- (181) PM *(-)*lká(?)t* 'nasal mucus, cold' > Mk *-leke(?)t* || PCh **kétl* || PW **k'ét-taχ*, **k'ét-ta-s*
- (182) PM **mät* 'hither, nearby' > Mk *met* 'nearby' || PCh **mét* 'hither'
- (183) PM **[ji]nxi'wän* 'to smell' > Mk *[ji]nxi'wen* || PCh **[?i]hni'wen*
- (184) PM *-*táwəχ*, *-*táwxä-ts* '(abdominal) cavity' > Mk *-taweχ*, *-tawxe-ts* || Ni *-täβəʃ*, *-täβxa-s* || PCh *-*tóweh* || PW *-*tóweχ*
- (185) PM **tänük*(*-*its*) 'feline' > Mk *tenuk*(*-*its*) || Ni *tanuk*(*-*is*) || PCh **tinúk*(*-*is*)
- (186) PM **wäk* 'all' > Mk *we:k* || Ni *-βatʃ* || PCh *-*wek* || PW *-*weq*
- (187) PM **wäle'k* 'to walk' > Mk *-<i>welki-* *met* 'to limp' || Ni *βakl̪e'ʃ* || PCh **[?i]wélek* || PW **wéleq*
- (188) PM **[ji]wän* 'to see' > Mk *[ji]wen* || Ni *[ji]βan* || PCh **[?i]wén* || PW **[hi]wén*

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- (189) PM *-²wät ‘place’ > Mk -²wet || Ni -²βat || PCh *-²wét || PW *-²wet
- (190) PM *[t]²ä(‘)k ‘to eat.INTR’ > Mk [t]²ek || PW *[t]²eq
- (191) PM *?omhatäk ~ *?omhätäk ‘queen palm fruit’ > Mk omhetek || Ni ?omxatatf
- (192) PM *-?äsχa²n, *-?äsχán-its ‘meat’ > Mk -?ese²n, -?esen-its || Ni -(?a)sxa²n, -(?a)sxan-is || PCh *-?isá²n, *-?isán-is || PW *-t-’isa²n, *-t-’isán-is

Finally, in the following examples in absence of diagnostic cognates from Chorote and Wichí it is impossible to decide between the reconstruction of PM *a or *ä.

- (193) PM *[n]a²t ~ *[n]ä²t ‘to burn’ > Mk [n]e²t-xu? || Ni [ji]<n>-a²t
- (194) PM *-ata(‘)x ~ *-ä- ‘food’ > Mk -ete(‘)x || Ni -ataf
- (195) PM *fánha? ~ *fánha?(*-j^h) ‘locust’ > Mk <e>fenhe?(-j) || Ni fanxa (-j)
- (196) PM *faxyi(‘)j ~ *fäxi(‘)j ‘green ameiva’ > Mk fexij || Ni fasij
- (197) PM *[t]k’an ~ *[t]k’än ‘to obey’ > Mk [te]k’en ‘to respect’ || Ni [t(a)]tf’an
- (198) PM *lama(h) ~ *läma(h)(*-m) ‘to be smooth’ > Mk le:me, leme-m || Ni kłama<m>
- (199) PM *ma’la²l ~ *-ä- ‘agile’ > Mk me’le²l ‘to move’ || Ni makłā²k
- (200) PM *(-)nawan ~ *-ä- ‘hook’ > Mk newen || Ni -naβan
- (201) PM *qapa(‘)p ~ *-ä- ‘dwarf’ > Mk qep<ep>e(‘)p || Ni kapap ‘dwarf dog’
- (202) PM *-sa²x ~ *-sä²x ‘leaf’ > Mk 3 t-e-se²x || Ni -sa²ʃ
- (203) PM *tana(h) ~ *täna(h) ‘standing, vertical’ > Mk te:ne, tene-m || Ni tana
- (204) PM *tsaqaq ~ *-ä- ‘plant (sp.)’ > Mk tseqeq || Ni tsakak
- (205) PM *waf ~ *wäf ‘to be tired, to die’ > Mk [ji]wef || Ni βaf
- (206) PM *?åthajex ~ *?åthäjex ‘molle fruit’ > Mk athejaχ || Ni ?åtxajex

6.2.1.3 PM *å > Mk a

The following examples show that PM *å changed to Mk a, with very few exceptions.

- (207) PM *[j]åfti(‘)t ‘to spin’ > Mk [j]afti(‘)t || Ni [j]åfti²t
- (208) PM *n-åjin ‘to go first’ > Mk [wa]<th>ajin || Ni n-åjin || PCh *[?i]<n>åjin
- (209) PM *h-åk ‘I go away’ > Mk h-ak || Ni x-åk || PCh *?åk
- (210) PM *n-åm ‘to arrive’ > Mk n-am || Ni n-am || PCh *n-åm || PW *<n>åm

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- (211) PM **[t]’án* ‘to shout’ > Mk (?) *[t]’an* ‘to win’ || Ni *[t]’án* || PCh **[t]’án* || PW **[t]’án*
- (212) PM *-áni’s ‘stinger’ > Mk 3 *t-ani’s* || Ni 3 *t-áni’s* || PCh 3 **hl-áni’s* || PW (?) 3 **t-á’ni*
- (213) PM *-áp ‘to cry’ > Mk *-ap* || Ni *-ap* || PCh **[j]áp*
- (214) PM *-ápił ‘to return thither’ > Mk *[w]apił* || Ni *[β]apek* || PCh **[j]ápił* || PW **[j]ápiłh*
- (215) PM *-åq, *-qå-ts ‘food’ > Mk *-aq*, *-qa-ts* || Ni *-åk*, *-kå-s* || PCh *-åk, *-qå-s* || PW *-t-åq, *-qå<s>
- (216) PM *-å’s ‘son’ > Mk *-a’s* || Ni *-å’s* || PCh *-ås || PW *-t-ås
- (217) PM *-áse? ‘daughter’ > Mk *-asi?* || Ni *-åse* || PCh *-áse? || PW *-t-åse
- (218) PM **[n]åt* ~ **[n]åt* ‘to bleed’ > Mk *[n]at-xu?* || Ni *[n]åt* || PCh **<n>åt-* || PW **<n>åt-* ~ **<n>åt-*
- (219) PM **[j]åtsi(?)j* ‘to spill’ > Mk *[j]atsij-xu?* || Ni *[j]åtsij*
- (220) PM **phinåk*, **finhå-j^h* ‘tobacco’ > Mk *finak*, *finha-j* || Ni *phinåk*, *phinxå-j*
- (221) PM *(-)håqke? ‘well’ > Mk *haqqi?* ‘river’ || Ni *-xåke* ‘dry well’ || PCh *-hååke? ‘artificial well’
- (222) PM **[ji]jå?* ‘to drink’ > Mk *<i>ja?* || Ni *[ji]jå?* || PCh **[?i]jå?* || PW **[?i]jå?*
- (223) PM **jixå(?)* ~ **jixå(?)* ‘to be true’ > Mk *ixa* || Ni *jixå?* || PCh **ihå<wet>*
- (224) PM **ji?ixåtaχ*, **ji?ixåta-ts* ‘ocelot’ > Mk *i?ixataχ*, *i?ixate-ts* || Ni *jixåtax*, *jixåta-s*
- (225) PM **khåt* ‘cactus’ > Mk *khat-u’k* || Ni *kxat* || PCh **kåhåt* || PW **k’åhåt*
- (226) PM *-k’åxe? (*-l) ‘arrow’ > Mk *-qaxi? (-l)* || Ni *-k’åxe* || PCh *-k’åhe? (*-l) || PW *-k’åhe (*-l^h)
- (227) PM *-k’ínxå? ~ *-k’ínxå? (*-wot) ‘younger sister’ > Mk *-k’inxå?* ~ *-k’inxå?* || Ni *-tfinxå (-bot)* || PCh *-k’ihnå? (*-wot) || PW *-k’ínhå
- (228) PM **[ji]lån* ‘to kill’ > Mk *[ji]lan* || Ni *[ji]klån* || PCh **[?i]lån* || PW **[?i]lån*
- (229) PM **låttsiki-ju’k* ‘willow’ > Mk *lattsiki-ju’k* || Ni *klåtsiki-juk*
- (230) PM **[ji]tå’m* ‘to defecate’ > Mk *<i>tå’m* || Ni *[ji]tå’m* || PCh **[?i]hlå’m* || PW **[t]<a>tå’m*
- (231) PM **[ji]tåán* ‘to light fire’ > Mk *[ni]tan-APPL* || Ni *[ji]tåán* || PCh **[?i]hlåán-APPL* || PW **[?i]tåán-APPL*
- (232) PM **[ji]må* ‘to sleep’ > Mk *[i]ma?* || Ni *[ji]må?* || PCh **[?i]må?* || PW **[?i]må*

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- (233) PM **máh* ‘go!’ > Mk *ma* || Ni *må* || PCh **máh* || PW **måh*
- (234) PM *(*-nijåk*, *(*-nijhå-j* ‘rope, cord’ > Mk *(-nijak*, *(-nijha-j* || Ni *-nijåk*, *-nijxå-j* || PCh **nijåk*, **nijhå-j* || PW **nijåk*ʷ, **nijhå-j*ʰ
- (235) PM **njánxte?* ‘tapeti rabbit, cavy’ > Mk *nijaxti?* || Ni *nånxate* || PCh **nåhåte?* || PW **nåntåte*
- (236) PM *-*pås*(-*e*’*t*) ‘lip’ > Mk *-pas* || Ni *-pås<e’t>* || PCh *-*pås<at>* ~ *-*pås<åt>* || PW *-*pås<et>*
- (237) PM **phå’m* ‘up’ > Mk *-pha’m* || PCh **påhå’m* || PW *-*phå* / **phåm-*
- (238) PM *[*t*]*qåhan* ‘to fish with a hook’ > Mk [*ta*]<*qa>qanhen* || PCh *[*t*º]*qåhanan* || PW *[*t*]*qåhan*
- (239) PM **sålå(?)l*, **sålål-its* ‘middle-sized cicada’ > Mk *sala(?)l*, *salal-its* || Ni *såkl<åkl>åk*(-*is*)
- (240) PM *-*så’t* ‘vein’ > Mk *-<?a>sa’t* || Ni *-så’t* || PCh *-*såt-* || PW *-*såt*
- (241) PM *[*ji*]*selåñ* ‘to spank’ > Mk [*j*]<*eq>silan* ‘to spank’ || PCh *[*ji*]*selåñ* ‘to store’; *[*ii*]*selåñ-eh* ‘to prepare’
- (242) PM **sijå(?)χ*, **sijåχ-is* ‘fish (sp.)’ > Mk *sija(?)χ*, *sijaχ-its* || Ni *sijåx* (-*is*)
- (243) PM **tå’t* ‘to sprout’ > Mk *ta’t* || Ni *tå’t* || PCh **tåt* || PW **tåt*
- (244) PM **t’å’j* ‘to sound, to have voice’ > Mk *t’aj* || Ni *t’å’j*
- (245) PM **tijå’χ* ‘to shoot, to throw’ > Mk *tija’χ* / -*tija’χ* || Ni *tijå’x* || PCh *[*ji*]*tijåh* || PW **tijåχ*
- (246) PM **t’iså?* ~ *t’iså?* (*-*l*) ‘cream-backed woodpecker (*Campephilus leuco-pogon*)’ > Mk *t’isa?*(-*l*) || Ni *t’iså?*(-*k*) || PCh **t’iså?*(-*l*)
- (247) PM **tsåhåq* (*-*its*) ‘chajá bird’ > Mk *tsahaq*(-*its*) || PCh **såhåk*, **såhåq-es* ~ **såhåq-is* || PW **tsåhåq*
- (248) PM *[*j*]*útlå(?)χ* ‘to be tired’ > Mk *-utla(?)χ* ‘breath’ || Ni [*j*]*utlåx* || PCh *[*j*]*úhlåh*
- (249) PM *-*wå’k* ‘bad mood’ > Mk *-wak* || Ni *-βå’k* || PCh *-*wák* || PW *-*wák*ʷ
- (250) PM *(*wå’na*χ, *(*wå’na*χ-*ts*) ‘piranha’ > Mk *wana’χ*, *wanhe-ts* || Ni *βåanax*, *βånxå-s*
- (251) PM *(*wå’*s ‘sky’ > Mk *wa’s* || Ni *βå’s*
- (252) PM *(*wåse?* ‘cloud’ > Mk *wasi?* || Ni *βåse?*
- (253) PM **wåñXåtlåχ*, **wåñXåtlå-ts* ‘rhea’ > Mk *waatlaχ* || Ni *βånxåtlåx*, *βånxåtlå-s* || PCh **wåñhlåh*, **wåñhlå-s* || PW **wå’ntlåχ*, **wå’ntlå-s*
- (254) PM **xéjå?*(*-*l*) ‘bat’ > Mk *xaja?*(-*l*) || Ni *sejå*(-*k*) || PCh *-*<?a>héja?*(*-*l*)

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- (255) PM **?åfte*’l ‘**orphan**’ > Mk *afti*’l || Ni *?åfte*’k
- (256) PM **?åthajex* ~ **?åthäjex* ‘**molle fruit**’ > Mk *athejaχ* || Ni *?åtxajex*
- (257) PM **?å’jteχ*, **?å’jte-ts* ‘**to hurt**’ > Mk *a?taχ*, *a?ti-ts* || Ni *?å’jtex* ~ *?å’βtex* || PCh **?åj?tah-APPL*, *-*?åj?te-s-APPL* || PW **?åjtaχ*, **?åjte-s*
- (258) PM **?ånhajex* ‘**wild bean (*Capparis retusa*)**’ > Mk *anhejaχ* || Ni *?ånxajex* || PCh **?óhnajah* || PW **?ånhjaχ*
- (259) PM **?åtits* ~ *-i- ~ *-e- ~ *-é- ‘**wild pepper**’ > Mk *atits* || PCh **?åtés*
- (260) PM *-*?åx* (*-its) ‘**skin, bark**’ > Mk *-?ax* (-its) || Ni *-?åx* (-is) || PCh *-*?åh*, *-*?åh-és* || PW *-t-’*åχ*, *-t-’*åh-és*
- (261) PM **[j]éjxåts-han* ‘**to teach**’ > Mk *[j]ixats<hen>* || Ni *[j]ejxats-xan* / -*ejaxats-xan* || PCh **[j]éjåhås-an*

Only three examples instantiate what seems to be an irregular reflex of PM **å* in Maká: *i’n* in (262), *e* in (263), and *o* in (264).

- (262) PM *-såq’ålh, *-såq’ål-its ‘**soul, spirit**’ > Mk (?) -*si’nq’al(-its)* || Ni *-såk’åkl<it>* || PCh *-såq’ålh, *-såq’ål-is
- (263) PM *-tåtse?(-j^h) ‘**eyelash**’ > Mk *-tetsi?(-j)* || Ni *-tåtse(-j)* || PCh *-tåse?(*-j^h)
- (264) PM **tiłå’x* ‘**to carry on one’s shoulders**’ > Mk *tiło’x* / -*liło’x* || Ni *tiłå’x* || PCh **[i]tíhlåh* || PW **tiłåχ*

6.2.1.4 Pre-uvular lowering

Before the uvular fricative PM **χ*, certain Proto-Mataguayan vowels – at least PM **a* and **e*, but possibly also **ä* – have distinct reflexes in Maká.

When PM **χ* is adjacent to the target vowel, PM **a* and **e* merge as *a*. The development PM **aχ* > Mk *aχ* is shown below.

- (265) PM **ji?ixåtaχ*, **ji?ixåta-ts* ‘**ocelot**’ > Mk *i?ixataχ*, *i?ixate-ts* || Ni *jixåtax*, *jixåta-s*
- (266) PM **[wa]kuma’χ* ‘**to run**’ > Mk *[we]kuma’χ* || Ni *[βa]kuma’x*
- (267) PM *(-)k’útsa’χ, *(-)k’útsa-ts ‘**old**’ > Mk *k’utsa’χ*, *k’utshe-ts* || Ni *k’utsa’x*, *k’utsxa-s* || PCh *-k’úsah, *-k’úsa-s || PW *-k’útsaχ
- (268) PM *-taχ, *-ta-ts ‘**pseudo-**’ > Mk *-tax*, *-te-ts* || Ni *-tax*, *-ta-s* || PCh *-tah, *-ta-s || PW *-taχ, *-ta-s
- (269) PM *(*X₁₃on-*)xa’χ, *(*X₁₃on-*)xåh-aj^h ‘**night**’ > Mk *<na>xa’χ* || Ni *<xon>fa’x*, *<xon>fa’x-aj* || PCh *-*?a>h<n>åh* ~ *-*?å>h<n>åh* || PW *-*<hon>aχ*, *-*<hon>åh-aj^h*

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- (270) PM **tsófa-tax* ‘fruit of a shrub (*Lycium americanum*)’ > Mk *tsofe-tax* || Ni *tsof-tax*
- (271) PM *(‘)wánaχ, *(‘)wánha-ts ‘piranha’ > Mk *wanaχ*, *wanhe-ts* || Ni *βåanax*, *βånxas*
- (272) PM **xunxátax* ‘tusca fruit’ > Mk *xunxetaχ* || Ni *xunfataχ* || PCh **?ihnáta*h || PW **xnhátaχ*

The following examples show that PM **eχ* also changes to Mk *aχ*.

- (273) PM **wósitsex* ‘black algarrobo fruit (*Prosopis nigra*)’ > Mk *ositsaχ* || Ni *βaitsex* || PW **wósotsaχ*
- (274) PM **?ájteχ*, **?ájte-ts* ‘to hurt’ > Mk *a?taχ*, *a?ti-ts* || Ni *?ájtex* ~ *?ájtex* || PCh **?áj?tah-APPL*, **?áj?te-s-APPL* || PW **?ájtaχ*, **?ájte-s*
- (275) PM **?ánhajeχ* ‘wild bean (*Capparis retusa*)’ > Mk *anhejaχ* || Ni *?ånxajex* || PCh **?óhnajah* || PW **?ánhjaχ*
- (276) PM **?åthajex* ~ **?åthäjeχ* ‘molle fruit’ > Mk *athejaχ* || Ni *?åtxajex*

In the following example, it is impossible to rule out the reconstruction of PM **aχ* or PM **eχ*.

- (277) PM *[*ji*]k’ásaχ ~ *[*ji*]k’áseχ ‘to divide’ > Mk [*j*]<*a*>k’esaχ || PCh *[*ji*]k’ésah || PW *[*hi*]k’ésaχ

If a consonant intervenes between the target vowel and PM **χ*, **e* is reflected as Mk *e* rather than *i* or *a*.

- (278) PM **kétxa-ju’k*, **kétxa-jku-j^h* ‘red quebracho’ > Mk *keṭe-jku-* || Ni *tseṭxa-juk*, *tseṭxa-ku-j* || PCh **kéhla-juk* / **kéhla-jku-* || PW **k’éṭ-juk^w*, **k’éṭ-k’u-j^h*

The lowering induced by the uvular fricative left behind a number of synchronically active alternations in Maká. In forms that go back to PM etyma with **eχ* or **aχ*, the lowering applies, and one finds Mk *aχ*. By contrast, the reflexes of PM forms derived from the vocalic stems of the same etyma (see §5.2.2) show no lowering, because PM **χ* was absent in the respective protoforms. Consequently, one finds Mk *i* and *e*. Some examples are given in (279).

- (279) Maká (Gerzenstein 1999: 121, 130, 183, 361)
- anhejaχ* ‘wild bean’ → *anheji-’p* ‘wild bean season’
 - a?taχ* ‘it hurts’ → *a?ti-ts* ‘they hurt’

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- c. *i-f'ilxetsax* ‘poor.sg’ → *i-f'ilxetsi-ts* ‘poor.PL’
- d. *wana'χ* ‘piranha’ → *wanhe-ts* ‘piranhas’
- e. *xaja-tax* ‘western mastiff bat’ → *xaja-te-ts* ‘western mastiff bats’

Note that the lowering does not apply before the uvular stop **q*, as the following example shows.

- (280) PM **tsaqaq* ~ **-ä-* ‘**plant (sp.)**’ > Mk *tseqeq* || Ni *tsakak*

The sound change described in this subsection is thus unrelated to the process whereby *i* is lowered to *e* (or *a*, *o* as per vowel harmony) before the uvular stop *q* in Maká, as in the first-person singular possessive prefix *ji-* and in the homophonous third-person active realis prefix (cf. *je-qekxi?* ‘my calf’, *ja-q'astali?* ‘my saliva’, *jo-qofol* ‘my nail’, *je-qeku?* ‘s/he doubts’; [Gerzenstein 1994](#)).

6.2.1.5 Vowel harmony

Above (§6.2.1.2) we have seen that PM **a* and **ä* have Mk *e* as their default reflex. However, a special reflex is found when the following syllable contains one of *a* or *o*: in that case, PM **a* (and possibly **ä*) harmonize to Mk *a* or *o*, respectively, as the following examples show.

- (281) PM **k'alxó(*-ts)* ‘**armadillo (sp.)**’ > Mk *k'olo'x* || Ni *k'akxo(-s)* || PCh **k'ihló?(*-s)* || PW **k'anhóh*
- (282) PM **qá- / *q-* ‘**indirect possession**’ > Mk *qe- / qa- / qo- / q-* || Ni *ka- / k-* || PCh **qá- / *q-* || PW **qá- / *q-*
- (283) PM **(-)tak'o(h) ~ *(-)ták'o(h)* ‘**kind of utensil**’ > Mk *tok'o* || Ni *-tak'o-tax*
- (284) PM **(?)wawo(h) (*-l)* ‘**maned wolf**’ > Mk *wowo (-l)* || Ni *βaβo (-k)*
- (285) PM **xnáwá'p* ‘**spring**’ > Mk *xinawa'p* || Ni *ʃnaβáp ~ ʃnáβáp* || PCh **náwop* || PW **x'náwop*
- (286) PM **ʔa'nqo'k* ‘**paralytic**’ > Mk *onqok* || Ni *ʔa'nko'k*
- (287) PM **[t']at'o* ‘**to yawn**’ > Mk *[t]ot'o-kij* || Ni *[t']at'o*

This sound change gave rise to a synchronically active alternation in Maká whereby *e* alternates with *a* and *o* whenever a low vowel follows in the next syllable ([Gerzenstein & Gualdieri 2003](#): 106–108). This alternation affects prefixes that contain the vowel *e* < PM **a*/**ä*, as is the case with the indirect possession prefix *qa-* (288) and the second-person possessive prefix *a-* (289). In addition, it affects prefixes that are reconstructed as syllabic consonants in Proto-Mataguayan.

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This includes the third-person possessive and the second-person active realis prefixes (PM **ɬ*- before consonants), the third-person active irrealis prefix (PM **n*- before consonants), and the third-person T-class realis prefix (PM **t*- before consonants), whose Maká reflexes are *ɬe-* / *ɬa-* / *ɬo-* (290), *ne-* / *na-* / *no-* (291), *te-* / *ta-* / *to-* (292).

- (288) Maká (Gerzenstein & Gualdieri 2003, Gerzenstein 1999: 240)

- a. *ɬe-qe-nene'k*
3.POSS-ALZ-spoon
'his/her spoon'
- b. *in-qo-kojoj*
1+2.POSS-ALZ-car
'our car'
- c. *ja-qa-lasxixu*
1SG.POSS-ALZ-poncho
'my poncho'

- (289) Maká (Gerzenstein & Gualdieri 2003: 107)

- a. *e-kumkenet*
2.POSS-thigh
'your thigh'
- b. *a-qawex*
2.POSS-throat
'your throat'
- c. *o-noki?*
2.POSS-elbow
'your elbow'

- (290) Maká (Gerzenstein 1994: 85, 88, 148)

- a. *ɬe-k'inix*
3.POSS-younger _brother
'his/her younger brother'
- b. *ɬo-noki?*
3.POSS-elbow
'his/her elbow'
- c. *ɬe-fejejki?*
2.ACT-rotate
'you rotate'

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- d. ɬa-ma?
 2.ACT-sleep
 'you sleep'

(291) Maká (Gerzenstein 1994: 85, 88)

- a. ne-n-ek
 3.ACT.IRR-CISL-go
 's/he comes'
- b. no-t-otoj
 3.ACT.IRR-3_T-dance
 '(that) s/he dance'
- c. na-ma?
 3.ACT.IRR-sleep
 '(that) s/he sleep'

(292) Maká (Gerzenstein & Gualdieri 2003: 106)

- a. te-fejejki?
 3_T-rotate
 's/he rotates'
- b. to-foχij-kij
 3_T-play_flute-ANTP
 's/he plays flute'

6.2.2 Maká *j* following high vowels

The combination of Mk *i* and *j* surfaces as [i:], either at morpheme boundaries or within morphemes. One example is Mk *witi-kfi-j* 'one's ears', pronounced [witikfi:]. In this book, we represent the sequence in question as *ij*.

In a similar vein, PM **uj*(^h) is reflected as Mk *wi* after obstruents, with the sonority reaching its peak during the final phase of the rhyme: Mk *k'wi* 'cold' (but *k'uj-i-m* 's/he feels cold', with the benefactive applicative), *nimełkw-i* 'tombs' (from *nimełuk* 'tomb' and *-j* 'plural'), *k-'wi* 'I enter' (but *j-uj* 's/he enters'). In this case we follow our sources in representing the sequence in question as *wi*, because *uj* is also attested as a valid rhyme in the language: *hejftuj* 'I fart', *wit'afthuj* 'bile.PL', *esupuj* 'it is soft' (Gerzenstein 1999).

6.3 Word-level prosody

6.3 Word-level prosody

According to Gerzenstein's (1989) description, Maká retains no traces of the prosodic distinctions that we reconstruct for Proto-Mataguayan. Instead, Maká has innovated an edge-demarcation pattern whereby the final syllable of a word receives primary stress (293).

(293) Maká (Gerzenstein 1989: 67–68)²

- a. *sa'lal* 'cicada'
- b. *sala'lits* 'cicadas'
- c. *foχits* 'flutes'
- d. *si'wa'laχ* 'spider'
- e. *si'walaχits* 'spiders'
- f. *najale'ne'χ* 'alligator'
- g. *najalene'χits* 'alligators'
- h. *honokok'en'xu?* 'I kneel'

In addition, words of four or more syllables receive secondary stress on their peninitial syllable if it is heavy (i.e., contains a coda), and on their initial syllable otherwise (Gerzenstein 1989: 68).

(294) Maká (Gerzenstein 1994: 69)

- a. *qo{textin'he?* 'bee sp. (mid-sized, dark brown, stings lightly)'
- b. *qo{textinhe'tax* 'bee sp. (queen bee, large, dark brown, stings painfully)'
- c. *t'o,konkote'ket* 'acacia (*Acacia bonariensis*) grove'
- d. *,qets'ijo'hol* 'bee sp. (mid-sized, yellow, stings hard, produces small amounts of inedible honey)'
- e. *,qets'ijoho'lits* 'bees sp. (mid-sized, yellow, sting hard, produce small amounts of inedible honey)'
- f. *,neqfejen'het* 'wax'
- g. *,neqfejenhe'tits* 'wax.PL'

²The preglottalization in the terms for 'spider' and 'alligator' is not represented in Gerzenstein's (1989) work; it is attested in Paraguay (2022: 16) and Braunstein (1987: 71), respectively.

7 Nivaâle

This chapter deals with the historical phonology of Nivaâle [niva1238].

§7.1 discusses the development of PM consonants, vowels, and prosody from the PM stage to Nivaâle. §7.2 is concerned with the diversification of the Nivaâle dialects.

In what follows, we rely on Seelwische's (2016) dictionary, on Gutiérrez's (2015b) phonological description, and on Stell's (1987), Fabre's (2014), and Campbell et al.'s (2020) grammatical descriptions. The consonantal inventory we assume for Nivaâle is given in Table 7.1. We follow Gutiérrez's (2015b) analysis of the preglottalized codas as complex codas, and do not posit a set of preglottalized stops and fricatives; therefore, Nivaâle *k̪lo?*^p 'winter' is analyzed as /k̪lo?p/. The inclusion of preglottalized segments is our addition, broadly inspired by Gutiérrez's (forthcoming) work. The vocalic inventory we assume for Nivaâle includes only six vowels, /i e a å o u/.

Table 7.1: Nivaâle consonants

	labial	dental	alveolar	postalveolar	velar	glottal
plain stops	p	t	ts	tʃ	k [k ~ q]	?
ejective stops	p'	t'	ts'	tʃ'	k' [k' ~ q']	
laterally rel. stop					k̪l [k̪l ~ q̪l]	
pregl. laterally rel. stop					'k̪l [?k̪l ~ ?q̪l]	
plain fricatives	ɸ [ɸ ~ f]	θ	s	ʃ	x [x ~χ ~ h]	
plain approximants	β [β ~ w]			j		
preglottalized approximants	'β [?β ~ ?w]			'j [?j]		
plain nasals	m		n			
preglottalized nasals	'm [?m]		'n [?n]			

7.1 From Proto-Mataguayan to Nivaâle

This section describes the evolution of PM consonants (§7.1.1), vowels (§7.1.2), and prosody (§7.1.3) in Nivaâle.

7.1.1 Consonants

The consonant system of Nivaâle has undergone relatively little change since the Proto-Mataguayan stage. We start by discussing the phonetic (or even notational) change PM *w > Ni β (§7.1.1.1). Then we proceed to the major innovations that affected PM *l , which changed to \widehat{kl} (§7.1.1.2), as well as the consonants $^*k(')$, $^*q(')$, *x , $^*\chi$, *h , which are reflected as Ni $k(')$, $tf(')$, x , f , or \emptyset depending on the environment (§7.1.1.3). We also describe two sound changes restricted to the coda position – *kl > Ni k (§7.1.1.4) and *ts > Ni s (§7.1.1.5) – and a number of changes involving glottalized consonants and the glottal stop (§7.1.1.6–§7.1.1.9). §7.1.1.10 deals with the development of PM consonant clusters in Nivaâle.

7.1.1.1 PM *w

In this book, we employ the symbol β for the labial approximant of Nivaâle. It is the regular reflex of PM *w (see §2.1.13 for concrete examples). Note that even synchronically some authors still analyze the phoneme in question as Ni $\beta /w/$, though all agree that its possible realizations include a bilabial approximant in addition to a labiovelar one. In this regard, Gutiérrez (2016a: 4) states that in the Shichaam Lhavos variety “[β] and [v] appear to have replaced the use of /w/. However, the latter can still be found preceding back vowels”. Campbell et al. (2020: 44–45) analyze the phoneme as question as /w/ and claim that it “varies in pronunciation between [w] and [β]. In most cases, [β] is possible but one of these allophones is favored over the other in certain environments. It is typically pronounced as [β] before *i*, *e*, or *a*. This [β] is not a strong bilabial fricative, rather it is a bilabial approximant with very weak friction. It has the allophone [w] before *u*, *o*, and \hat{o} [our *å* – A.N., J.C.], sometimes alternating freely with [β] before these vowels”.

7.1.1.2 PM *l

PM *l changed to \widehat{kl} in Nivaâle. This cross-linguistically rare sound is described as a laterally released velar stop by Gutiérrez (2019a). The sound change from PM *l to Ni \widehat{kl} is argued by Gutiérrez (2019a: 64–70) to have been a perception-driven one, whereby stop bursts were reinterpreted as emergent laterally released stops. In the coda position, \widehat{kl} further delateralized to k , as discussed in §7.1.1.4. The following examples illustrate (for a more representative list, see §2.1.14).

- (1) PM $^*[ji]\phi\acute{a}l$ ‘to tell’ > Mk $n(i)\text{-}fel\text{-}im$ || Ni $n(i)\text{-}\phiak / n(i)\text{-}\phiak\widehat{l}$ || PCh $^*[?i]hw\acute{e}l$
 || PW $^*[?i]x^w\acute{e}l^h / ^*[?i]x^w\acute{e}l$

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- (2) PM **-(é)l* ‘**PL**’ > Mk *-l* || Ni *-(e)k* || PCh **-(é)l* || PW **-(é)l^h*
- (3) PM **[ji]lán* ‘**to kill**’ > Mk *[ji]lan* || Ni *[ji]klán* || PCh **[?i]lán* || PW **[?i]lán*
- (4) PM **-lå?*, **-lå-j^h* ‘**domestic animal**’ > Ni *-klå?(-j)* || PCh **-lå<hwah>* || PW **-lå?*, **-lå-j^h*
- (5) PM **-lét̚s* ‘**offspring**’ > Mk *-lits* || Ni *-kles* || PCh **-lés* || PW **-lés*
- (6) PM **[ji]lé?* ‘**to wash**’ > Mk *[ji]lix-u?* ‘**to clean**’ || Ni *[ji]klé?* || PCh **[?i]léh* || PW **[?i]léχ*
- (7) PM **lo?* ~ **ló?* *p*, **lop-íts* ~ **lóp-its* ‘**winter**’ > Mk *lo?* *p*, *lop-its* || Ni *klo?* *p*, *klop-is* || PCh **lóp* || PW **lop* ~ **lóp*
- (8) PM **(-)lútse?* *x*, **(-)lútsxe-ts* ‘**bow**’ > Ni *klutsef* / *-klutse?* *f*, *(-)klutsfe-s* || PCh **(-)lúseh* (*-es) || PW **(-)lútseχ*, **(-)lútse-s*
- (9) PM **sålå?* *l*, **sålål-its* ‘**middle-sized cicada**’ > Mk *sala?* *l*, *salal-its* || Ni *såkl* <*åkl*> *åk* (-is)
- (10) PM **s?* *wúla?* *χ*, **s?* *wúla-ts* ‘**anteater**’ > Ni *s?* *βuklax*, *sβuklā-s* || PCh **s?* *ʔúlah*, **s?* *ʔúla-s* || PW **súlaχ*
- (11) PM **ʔéle?* (?) ‘**parrot**’ > Ni *ʔeklē* || PCh **ʔéle?* || PW **ʔéle*

It must be noted that since the sound change in question Nivaâcle has innovated a new *l*, found in borrowings, such as *alus* ‘rice’, *palaβaj* ‘Paraguay’, *kaletax* ‘cart’, *ele* ‘German, missionary’ (Gutiérrez 2015b: 252),¹ and in onomatopoeic words, such as *sile sile* ‘a flute from old times’, *uku'luku* ‘barn owl’ (Stell 1987: 60).

7.1.1.3 Guttural stops and fricatives

The guttural stops (PM **k*, **k'*, **q*, **q'*) and fricatives (**x*, **χ*, **h*) yielded velar segments in Nivaâcle (Ni *k*, *k'*, and *x*), with two important exceptions: the velar consonants of Proto-Mataguayan – but not the uvular and glottal consonants – palatalized to Ni *tf*, *tf'*, and *f* in certain environments, and the glottal fricative **h* is deleted in the coda position.

We start by presenting the reflexes of PM **q*, **q'*, and **χ*, which never palatalize in Nivaâcle. PM **q* and **q'* yield Ni *k* and **k'*, respectively, in all positions:

¹The former three loans ultimately come from Spanish *arroz*, *Paraguay*, and *carreta*, with identical meanings; the stem-final *x* in *kaletax* could be attributed to popular etymology, given the existence of the suffix *-tax* ‘similar to’. The origin of the latter loan (identified by Campbell et al. (2020: 8) as a Shichaam Lhavos dialectism) is disputed: Stell (1987: 60) and Seelwische (2016: 124) claim it comes from Maká (we have been unable to identify a suitable etymon), whereas others believe it is a borrowing from Spanish *inglés* ‘Englishman’ (Fritz 1997).

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- (12) PM *-åq, *-qå-ts ‘food’ > Mk -aq, -qa-ts || Ni -åk, -kå-s || PCh *-åk, -qå-s || PW *-t-åq, *-qå-s>
- (13) PM *-φqató(*-l) ‘elbow’ > Ni -(?V)φkato(-k) || PCh *-qató?(*-l) || PW *-qáto(*-l^h)
- (14) PM *(-)håqke? ‘well’ > Mk haqqiʔ river’ || Ni -xåke‘dry well’ || PCh *-hååkeʔ artificial well’
- (15) PM *-nX₂₃aq(’)åt ‘to snore’ > Ni [ta]nxakåt || PCh *[?i]hnåq’åt
- (16) PM *qa ‘in order to’ > Mk qe || Ni ka || PCh *qa
- (17) PM *qá- / *q- ‘indirect possession’ > Mk qe- / qa- / qo- / q- || Ni ka- / k- || PCh *qá- / *q- || PW *qá- / *q-
- (18) PM *[ji]qáku? ‘to distrust’ > Mk [je]qeku? || Ni [ji]kaku || PCh *[ji]qáku? || PW *[ji]qák^ju-APPL
- (19) PM *-qalå? (*-j^h) ‘leg’ > Ni -kaklå? (-j) || PCh *-qa’lå? ~ *-qå’lå? (*-j^h) || PW *-qålå (*-j^h)
- (20) PM *qapa(’)p ~ *-ä- ‘dwarf’ > Mk qep<ep>e(’)p || Ni kapap ‘dwarf dog’
- (21) PM *qati’s, *qatits-él ‘star’ > Ni kati’s || PCh *qatés, *qates-él || PW *qates, *qatéts-el^h
- (22) PM *-quéj (*-its) ‘costume’ > Ni -kej (-is) || PCh *-quéj? (*-is) || PW *-quéj (*-is)
- (23) PM *-såq’ål^h, *-såq’ål-its ‘soul, spirit’ > Mk (?) -si[?]nq’al(-its) || Ni -såk’åkl-<it> || PCh *-såq’ål^h, *-såq’ål-is
- (24) PM *slåqha(’)j, *slåqhaj-its ‘wild cat’ > Ni /klåkxaj ~ sklåkxaj(-is) || PCh *s[?]låhqaj? ~ *s[?]låhqaj? (*-is) || PW *silåqhåj
- (25) PM *tsaqaq ~ *-ä- ‘plant (sp.)’ > Mk tseqeq || Ni tsakak
- (26) PM *?a[?]nqo[?]k ‘paralytic’ > Mk onqok || Ni ?a[?]nko[?]k
- (27) PM *?aqáje[?]k ‘wild honey’ > Ni ?akåjet[?] || PW *?aqájeq
- (28) PM *-aqhu[?]ts ~ *-?aqhú[?]ts ‘knee’ > Mk -aqhu[?]ts || Ni -(?a)kxu[?]s || PCh *-?aqús

Similarly, PM *χ yielded Ni *x in all environments:

- (29) PM *[j]åte(?)χ ‘to be fat’ > Ni [j]åtex || PCh *[j]åtah || PW *[j]åtaxχ
- (30) PM *n-åχ ‘to end up’ > Mk n-aχ || Ni n-åx || PCh *<n>óhw-APPL || PW *<n>ox^w
- (31) PM *φåtsu(?)χ, *φátshu-ts ‘centipede’ > Ni φatsux, φatsxu-s || PCh *(h)wásuh, *(h)wásu-s || PW *x^wåtsux^w
- (32) PM *φínä(?)χ ‘crab’ > Ni φinax || PCh *hwíneh

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- (33) PM **ɸkéna(?)χ* ‘north wind, north’ > Ni *ɸtſenax* || PCh **hw^wkénah*
- (34) PM **ɸtsána(?)χ* ‘suncho (*Baccharis sp.*)’ > Ni *ɸtsánax* || PCh **sánah* || PW **x^witsánaχ*
- (35) PM **[ji]ɸχän-* ~ **[ji]ɸχán-* ‘to kill a bird’ > Ni *[ji]ɸxan-APPL* || PCh **<?a>hwén-(n)ah* ‘bird’ || PW **<?a>x^wén-kⁱe* ‘bird’
- (36) PM *-*ɸχúx*, *-*ɸχú-ts* ‘finger’ > Mk *-fxux*, *-fxu-s* ‘toe’ || PCh *-*hwu-ké?* || PW *-*x^wúx^w*, *-*x^wú-s*
- (37) PM **ji?ixåtaχ*, **ji?ixåta-ts* ‘ocelot’ > Mk *i?ixataχ*, *i?ixate-ts* || Ni *jixåtax*, *jixåta-s*
- (38) PM **[ji]ka^wχ* ? ~ **[ji]kå^wχ* ‘to take away’ > Mk *[j]<e>ka^wχ* || Ni *[ji]tſa^wx* || PW **[ji]kⁱäχ*
- (39) PM **kéłχa-ju^wk*, **kéłχa-jku-j^h* ‘red quebracho’ > Mk *kełe-jku-* || Ni *tſełxa-juk*, *tſełxa-ku-j* || PCh **kéhla-juk* / **kéhla-jku-* || PW **kⁱéł-juk^w*, **kⁱéł-kⁱu-j^h*
- (40) PM **[wa]kuma^wχ* ‘to run’ > Mk *[we]kuma^wχ* || Ni *[βa]kuma^wx*
- (41) PM **k'ú(t)sta(?)χ*, **k'ú(t)sta-ts* ‘barn owl’ > Ni (?) *k'ustax*, *k'usta-s* ‘mockingbird’ || PCh **k'ústah*, **k'ústa-s* || PW **kⁱústax*
- (42) PM **(-)k'útsa^wχ*, **(-)k'útsha-ts* ‘old’ > Mk *k'utsa^wχ*, *k'utshe-ts* || Ni *k'utsa^wx*, *k'utsxa-s* || PCh *-*k'úsah*, *-*k'úsa-s* || PW *-*kⁱútsaχ*
- (43) PM **[?a]lóχ* ‘many.SG’ > Ni *<?a>k̪lox* || PCh **[?a]lóχ*
- (44) PM **pátse(?)χ* ‘fast, quick’ > Ni *pátsex* || PCh **(-)pásah*
- (45) PM **pátséχ* ‘jabiru’ > Ni *pátsex* || PCh **pátsáh* || PW **pátsáχ*
- (46) PM **pätóχ* ‘to be deep’ > Ni *[?a]patox* || PCh *-*pítōhw<ij?>* || PW **pitóx^w*
- (47) PM **pitéχ*, **pité-ts* ‘long’ > Ni *pitex*, *pite-s* || PW **pitáχ*, **pité-s*
- (48) PM **sijå(?)χ*, **sijåχ-is* ‘fish (*sp.*)’ > Mk *sija(?)χ*, *sijaχ-its* || Ni *sijåx* (-is)
- (49) PM **s^wwúla^wχ*, **s^wwúla-ts* ‘anteater’ > Ni *s^wβuklax*, *s^wβuklā-s* || PCh **s^w?úlah*, **s^w?úla-s* || PW **súlax*
- (50) PM **táxχan* ‘to thunder’ > Mk *texen* || Ni *taſxen* || PW **t'áχan*
- (51) PM *-*taχ*, *-*ta-ts* ‘pseudo-’ > Mk *-taχ*, *-te-ts* || Ni *-tax*, *-ta-s* || PCh *-*tah*, *-*ta-s* || PW *-*taχ*, *-*ta-s*
- (52) PM **tijå^wχ* ‘to shoot, to throw’ > Mk *tija^wχ* / *-dija^wχ* || Ni *tijå^wx* || PCh **[?i]tíjåh* || PW **tijåχ*
- (53) PM **tóχ-APPL*, **tó-ts-APPL* ‘far’ > Mk *-toχ-ij*, *to-ts-ij* || Ni *tox-APPL* || PCh **tóh(w)-APPL*, **tó-ts-APPL* || PW **tóx^w-ej^h*

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- (54) PM **tux*-APPL 'to burn (vi.)' > Mk *tux-xem*, *tux-e?* || Ni *tux-a'm*, *tux-ej*
- (55) PM **tséχ*-APPL 'full (river)' > Ni *tsex*-APPL || PCh *-sáh || PW **tsáχ*-APPL
- (56) PM **tsófa-taχ* 'fruit of a shrub (*Lycium americanum*)' > Mk *tsofe-taχ* || Ni *tsoφ-tax*
- (57) PM *[*j*úlå(?)χ 'to be tired' > Mk -*ułta(?)χ* 'breath' || Ni [*j*ułåx || PCh *[*j*úhlåh
- (58) PM **wVχ*, **wV-ts* 'large, fat' > Ni -*βå'x* || PCh **wúh*, **wú-s* || PW **wúx^w*, **wú-s*
- (59) PM **wátå(?)χ* 'palo flojo fruit' > Ni *βåtåx* || PW **wátox^w*
- (60) PM *(?)*wána'χ*, *(?)*wánha-ts* 'piranha' > Mk *wana'χ*, *wanhe-ts* || Ni *βåanax*, *βånxa-s*
- (61) PM **wósitseχ* 'black algarrobo fruit (*Prosopis nigra*)' > Mk *ositsaχ* || Ni *βaitsex* || PW **wósotsaχ*
- (62) PM **wánXåłåχ*, **wánXåłå-ts* 'rhea' > Mk *waatåχ* || Ni *βånxåłåx*, *βånxåłå-s* || PCh **wánhlåh*, **wánhlå-s* || PW **wå'ndåχ*, **wå'ndå-s*
- (63) PM *(*X₁₃on*)-*xa'χ*, *(*X₁₃on*)-*xáh-aj^h* 'night' > Mk <*xon>xa'χ* || Ni <*xon>fa'x*, <*xon>fa'x-aj* || PCh *<*?a>h<n>áh* ~ *<*?a>h<n>áh* || PW *<*hon>aχ*, *<*hon>áh-aj^h*
- (64) PM **xunxátaχ* 'tusca fruit' > Mk *xunxetaχ* || Ni *xunfatax* || PCh **?ihnátah* || PW **xhátaχ*
- (65) PM *(?)*aX₁₃útsa(?)χ*, *(?)*aX₁₃útsha-ts* 'crested caracara' > Ni *xutsax*, *xutsxa-s* || PCh *(?)*ahúsah*, *(?)*húsa-s* || PW **?ahútsaχ*, **?ahútsha-s*
- (66) PM **?áp'a(?)χ* ~ **?áφ'a(?)χ* 'jararaca' > Ni *?ap'ax* || PCh **?áp'ah*
- (67) PM **?atu'χ* ~ **?atú'χ* 'snake (sp.)' > Ni *?atu'x* || PCh **?atúh*
- (68) PM **?áwu(C)tseχ* 'peccary' > Ni *?aβuktsex* ~ *?aβoktsex* || PCh **?áwusah* || PW **?áwutsaχ*
- (69) PM **?aX₁₃áje(?)χ* 'mistol fruit' > Ni *?axájex* || PCh **?ahájah* || PW **?ahájaχ*
- (70) PM **?á'jteχ*, **?á'jte-ts* 'to hurt' > Mk *a?tax*, *a?ti-ts* || Ni *?á'jtex* ~ *?á'βtex* || PCh **?áj?tah*-APPL, *-*?áj?te-s*-APPL || PW **?ájtaχ*, **?ájte-s*
- (71) PM **?á'lá-taχ*, **?á'lá-ta-s* 'Argentine boa' > Ni *?á'klá-tax*, *?á'klá-ta-s* || PCh **?á'lá-tah* ~ **?á'lá-tah>*, **?á'lá<ta>-s* ~ **?á'lá<ta>-s* || PW (?) **lá<taχ>*
- (72) PM **?ál(V)tse(?)χ*, **?ál(V)tse-ts* 'cháguar (*Deinacanthus urbanianum*)' > Ni *?åktsex*, *?åktse-s* || PCh **?ál'sah*, **?ál'se-s* || PW **?åletsaχ*
- (73) PM **?ánhajeχ* 'wild bean (*Capparis retusa*)' > Mk *anhejaχ* || Ni *?ånxajex* || PCh **?óhnajah* || PW **?ánhjaχ*

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- (74) PM **?åsk'åla*([?])χ ‘widower’ > Ni *?åstf'aklax* || PCh **?åsk'elah*
- (75) PM **?åthajex* ~ **?åthäjex* ‘molle fruit’ > Mk *athejex* || Ni *?åtxajex*
- (76) PM *-*?äsxən*, *-*?äsxán-its* ‘meat’ > Mk *-?ese'n*, *-?esen-its* || Ni *-(?a)sxa'n*, *-(?a)sxan-is* || PCh *-*?isá'n*, *-*?isán-is* || PW *-*t-isa'n*, *-*t-isán-is*
- (77) PM **?ítå*([?])χ, **?ítå-ts* ‘fire’ > Ni *?itåx*, *?itå-s* || PCh **?ítåh*, **?ítå-s* || PW **?ítåχ*, **?ítå-s*
- (78) PM **?óna*([?])χ ‘my brother’ > Ni *?onax* || PCh **?ónah*
- (79) PM **?uwále*([?])χ ~ **C'uwałe*([?])χ ‘puma’ > Ni <xum>*p'uβałex* || PCh **k'uwałlah* || PW **?owáłax* ~ **C'owáłax*

PM **h* also yielded Ni **x*, but only in onsets.

- (80) PM **φánha?* ~ **φänha?*([?]*-jh*) ‘locust’ > Mk <e>*fenhe?*(-j) || Ni *fanxa* (-j)
- (81) PM **φátshu-ts* ‘centipedes’ > Ni *φatsxu-s* || PCh *(*h*)wásu-s
- (82) PM **h-* ‘that (outside the speaker’s sight)’ > Mk *h-* || Ni *xa?* || PCh **há?* ~ **há?*
- (83) PM **ha-* ‘1SG.ACT’ > Mk *he- / ha- / ho-* || Ni *xa-* || PCh **?a-* || PW **?a-*
- (84) PM **(-)håqke?* ‘well’ > Mk *haqqi?* ‘river’ || Ni *-xåke* ‘dry well’ || PCh *-*hååke?* ‘artificial well’
- (85) PM **him* ([?]*-its*) ‘coati’ > Mk *him* (*-its*) || Ni *xim* (*-is*)
- (86) PM **khåt* ‘cactus’ > Mk *khat-u'k* || Ni *kxat* || PCh **kåhåt* || PW **k'åhåt*
- (87) PM **k'unhate-nha?* ‘pacu fish’ > Mk <*i*>*k'unheti-nhe?*(-j) || Ni *k'unxate*<*nxa*> (-j)
- (88) PM **(-)k'útsha-ts* ‘old.PL’ > Mk *k'utshe-ts* || Ni *k'utsxa-s* || PCh **(-)k'úsa-s*
- (89) PM *-*mhå-j^h* ‘powders, flours’ > Ni *mxå-j* || PW *-*mhó-j^h*
- (90) PM **(-)níjhå-j^h* ‘ropes, cords’ > Mk *(-)nijha-j* || Ni *-nijxå-j* || PCh **níhjå-j^h* || PW **níjhå-j^h*
- (91) PM **slåqha*([?])*j*, **slåqhaj-its* ‘wild cat’ > Ni *sklåkxaj* ~ *sklåkkxaj*(-is) || PCh **s'låhqaj?* ~ **s'låhqåj?*([?]*-is*) || PW **silåqhåj*
- (92) PM **títhe-j^h* ‘plates’ > Ni *(-)titxe-j* || PCh **tíhte-j^h*
- (93) PM **wáth(å-j)u'k* ‘palo flojo tree’ > Ni *βåtxå-juk* || PCh **wáht<uk>*
- (94) PM *-*xåthe-j^h* ‘heads’ > Ni *-fatxe-s* || PCh *-*héhte-j^h* || PW *-*t-éthe-j^h*
- (95) PM *(*?**a*)*X₁₃útsha-ts* ‘crested caracaras’ > Ni *xutsxa-s* || PCh *(*?**a*)*húsa-s* || PW **?ahútsha-s*

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- (96) PM *-ʔaqhu⁷ts ~ *-ʔaqhú⁷ts ‘**knee**’ > Mk -aqhu⁷ts || Ni -(ʔa)kxu⁷s || PCh *-ʔaqús
- (97) PM *ʔánhajex ‘**wild bean (Capparis retusa)**’ > Mk anhejaχ || Ni ʔánxajex || PCh *ʔóhnajah || PW *ʔánhjaχ
- (98) PM *ʔáthajex ~ *ʔáthäjex ‘**molle fruit**’ > Mk athejaχ || Ni ʔátxajex
- (99) PM *-[j]éjxáts-han ‘**to teach**’ > Mk [j]ixats<hen> || Ni [j]ejxats-xan / -?ejxats-xan || PCh *-[j]éjähås<an>
- (100) PM *ʔomhaták ~ *ʔomhäták ‘**queen palm fruit**’ > Mk omhetek || Ni ʔomxatats

Word-finally, by contrast, PM *h was lost in Nivaâle (note that PM *h is not known to have occurred in codas word-medially). The deletion of PM *h also applied to PM *j^h and *l^h (underlying clusters */jh/, */lh/), as in (101), (102), (111), (113).

- (101) PM *-(á)j^h ‘**PL**’ > Mk -(e)j || Ni -(a)j || PCh *-(á)j^h || PW *-(á)j^h
- (102) PM *-ej^h ‘**APPL:DISTAL**’ > Mk -ij || Ni -ej || PCh *-ej^h || PW *-ej^h
- (103) PM *-ɸah, *-ɸa-ts ‘**companion**’ > Mk -fe (-ts) || Ni -ɸa (-s) || PCh *-hwah, *-hwa-s || PW *-xʷah, *-xʷa-s
- (104) PM *k'ék'eh ‘**monk parakeet**’ > Ni tʃ'etʃ'e || PCh *kék'eh || PW *k'ék'j'e
- (105) PM *-kíɸah, *-kíɸa-ts ‘**neighbor**’ > Mk -kife(-ts) || Ni -tʃíɸa(-s) || PCh *-kíhwah, *-kíhwa-s
- (106) PM *-k'álɸah ‘**spouse**’ > Ni -tʃ'akɸa || PCh *-k'élhwah || PW *-k'j'exʷah
- (107) PM *láp'ih ~ *láɸ'ih ‘**snail**’ > Ni klap'i || PCh *láp'ih
- (108) PM *máh ‘**go!**’ > Mk ma || Ni må || PCh *máh^h || PW *máh
- (109) PM *nú?uh, *nú?u-ts ‘**dog**’ > Ni nū?u (-s) || PCh *nú?uh, *nú?u-s
- (110) PM *pútäh ‘**tapeti rabbit**’ > Ni puta || PCh *púteh
- (111) PM *-sáq'álh^h, *-sáq'ál-its ‘**soul, spirit**’ > Mk (?) -si⁷nq'ál(-its) || Ni -sák'ákl<it> || PCh *-sáq'álh^h, *-sáq'ál-is
- (112) PM *ts'áts'ih, *ts'áts'i-l ‘**rufous hornero**’ > Mk ts'its'i (-l) || Ni ts'ats'i (-k) || PCh *sát'ih || PW *táts'i
- (113) PM *-xíj^h ‘**recipient**’ > Mk -xij || Ni -ʃij / -xij || PW *-híh
- (114) PM *X₂₃wé'lah, *X₂₃wé'la-ts ‘**moon**’ > Ni xiβe'la(-s) || PCh *wé'lah, *wé'la-s || PW *xwé'lah
- (115) PM *ʔánitih ‘**wasp (sp.)**’ > Ni ʔániti || PCh *ʔánitih
- (116) PM *ʔúlʔåh, *ʔúlʔå-ts ‘**dove**’ > Ni ʔuklʔå (-s) || PCh *ʔúlʔåh, *ʔúlʔå-s

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- (117) PM *?*Vlá?ah*, *?*Vlá?a-ts* 'lesser grison' > Mk *ile* || Ni *?aklā?a(-s)* || PCh *?*elá?ah*, *?*elá?a-s* ~ *?*alá?ah*, *?*alá?a-s* || PW *?*ilá?ah*

The velar consonants of Proto-Mataguayan followed a more complex evolution pathway: they clearly underwent a conditioned split, yielding velars (Ni *k*, *k'*, *x*) in some environments and post-alveolars (Ni *tʃ*, *tʃ'*, *ʃ*) in others. The environment for palatalization can be broadly defined as "next to a non-back vowel (PM **i*, **e*, **ä*, **a* > Ni *i*, *e*, *a*), possibly with an intervening coronal consonant". However, the palatalization did not occur if a back vowel (*u*, *o*, *å*) directly follows the target consonant or precedes it (either directly or with an intervening [+grave] = non-coronal consonant).

The following examples illustrate the palatalization of PM **k* and **k'* to Ni *tʃ* and *tʃ'*, respectively. Note that all cases there is a non-back vowel adjacent to the target consonant, and no back vowels adjacent to it.

- (118) PM *-*aje'k* ~ *-*ajé'k* 'honey comb' > Ni *-aje'tʃ* || PCh *-*q-ájek*
- (119) PM *(-)*ɸełek* ~ *-*éłe-* ~ *-*ełé-* 'mortar' > Mk *(-)fiłik* || Ni *-ɸełetʃ* || PCh *(-)*hwVhlek* || PW **xʷéłeq*
- (120) PM **[ji]phi'k* ~ **[ji]phi'k* 'to hide' > Ni *[ji]phi'tʃ* || PCh **[?i]hwík*
- (121) PM **ɸkéna(?)χ* 'north wind, north' > Ni *ɸtſenax* || PCh **hw²kénah*
- (122) PM *-*ka*, *-*ká-l* 'tool, skillful person' > Ni *-tſa?(-k)* || PCh *-*ká?(-l)* || PW *-*k'ia*, *-*k'á-l^b*
- (123) PM **[ji]ka'χ* ~ **[ji]ká'χ* 'to take away' > Mk *[j]<e>ka'χ* || Ni *[ji]tſa'x* || PW **[ji]k'áχ*
- (124) PM **k'ek'eh* 'monk parakeet' > Ni *tʃ'etʃ'e* || PCh **kék'eh* || PW **k'ék'j'e*
- (125) PM **kéłχa-ju'k*, **kéłχa-jku-j^h* 'red quebracho' > Mk *kełe-jku-* || Ni *tſełxa-juk*, *tſełxa-ku-j* || PCh **kéhla-juk* / **kéhla-jku-* || PW **k'él-juk^w*, **k'él-k'u-j^h*
- (126) PM **[ji]kén* 'to send' > Mk *[j]<u>kin* || Ni *[ji]tſen* || PCh **[?i]kén* || PW **[?i]k'én*
- (127) PM *-*kíphah*, *-*kípha-ts* 'neighbor' > Mk *-kife(-ts)* || Ni *-tſípha(-s)* || PCh *-*kíhwah*, *-*kíhwa-s*
- (128) PM *-*kilá?(-wot)* 'elder brother' > Ni *-tſeklā?/tſiklā-(-βot)* || PCh *-*kilá?(-wot)* || PW *-*k'ila*
- (129) PM *-*kitá?(-wot)* 'elder sister' > Ni *-tſita?(-βot)* || PCh *-*kitá?(-wot)* || PW *-*k'ita*
- (130) PM *-*ti'k* ~ *-*ti'k*, *-*tlí-j^h* 'thread' > Ni *-ti'tʃ, -ti-j<is>* || PCh *-*hlik*, *-*hlí-j^h*

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- (131) PM *(-)skä²t ‘mesh’ > Ni -stfa²t || PW *sik²et
- (132) PM *títe(‘)k, *títhe-j^h ‘plate’ > Ni (-)titetʃ, (-)titxe-j || PCh *títek, *tíhte-j^h
- (133) PM *wäk ‘all’ > Mk we:k || Ni -βatʃ || PCh *-wek || PW *-weq
- (134) PM *-xäte²k, *-xäthe-j^h ‘head’ > Ni -fate²tʃ, -fatxe-s || PCh *-hétek, *-héhte-j^h || PW *-t-éteq, *-t-éthe-j^h
- (135) PM *?aqáje²k ‘wild honey’ > Ni ?akåjetʃ || PW *?aqájeq
- (136) PM *?omhatäk ~ *?omhätäk ‘queen palm fruit’ > Mk omhetek || Ni ?omxatats

The following examples illustrate the palatalization of PM *x to Ni /ʃ/. Note that in all cases there is a non-back vowel adjacent to the target consonant, and no back vowels adjacent to it. Note that back vowels fail to block the palatalization of *x in (156), (162)–(164), and in the plural forms in (145) and (149), since a coronal consonant intervenes. In (161), the coronal consonant *n* is transparent for the palatalization triggered by the front vowel *a (the alternative reflex å is a late dialectal innovation, on which see §7.2.1.3).

- (137) PM *-ata(‘)x ~ *-ä- ‘food’ > Mk -ete(‘)x || Ni -ataʃ
- (138) PM *-á(-j^h)-xi? (*-l) ‘mouth’ > Mk -exi?(-l) || Ni -afí (-k) || PCh (?) *-á<aj?> || PW *-t-áj-hi (*-l^h)
- (139) PM *[ji]φá²x ‘to cut down’ > Mk fex-inet-ki?ax || Ni [ji]φa²ʃ || PCh *[?i]hwáh-APPL || PW *[i]x^wáχ
- (140) PM *-φájí²x ‘right’ > Mk -feji²x‘left’ || Ni -φaji²ʃ || PCh *-hwíjah
- (141) PM *φaxi(‘)j ~ *φäxi(‘)j ‘green ameiva’ > Mk fexij || Ni φafij
- (142) PM *φä²x ~ *φä²x ‘field’ > Ni φa²ʃ || PCh *hwéh
- (143) PM *-k’ínx², *-k’ínx²-ts ‘younger brother’ > Mk -k’inix || Ni -tʃinif || PCh *-k’ínih, *-k’ihni-s || PW *-k’íniχ, *-k’ínhis
- (144) PM *[ji]lé²x ‘to wash’ > Mk [ji]lix-u?‘to clean’ || Ni [ji]kłe²ʃ || PCh *[?i]léh || PW *[i]léχ
- (145) PM *(-)lútse²x, *(-)lútsxe-ts ‘bow’ > Ni kłutseʃ/-kłutseʃ, (-)kłutsfe-s || PCh *(-)lúseh (*-es) || PW *(-)lútseχ, *(-)lútse-s
- (146) PM *-li²x, *-lix-áj^h ‘language, word’ > Mk -'lix<e?> || Ni -'kli²ʃ, -'kłif-aj || PCh *-lith, *-lih-áj^h
- (147) PM *-na²x ~ *-ná²x / *-nxa- ~ *-nxá- ‘nose’ > Mk -ne²x / -nxe- || Ni -na²ʃ, -nxa-s || PCh *-hná<tVwoh> || PW *-nh<us>

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- (148) PM *-nji⁷x ‘smell’ > Mk -nji⁷x || Ni -ni⁷ʃ || PCh *-níh || PW *-niχ
- (149) PM *(⁻)náji⁷x, *(⁻)nájx-aj^h ‘path’ > Ni náji⁷ʃ, (⁻)nájʃ-aj / -⁻náji⁷ʃ || PCh *(⁻)nájih, *(⁻)náhj-aj^h || PW *(⁻)nájiχ, *(⁻)nájh-aj^h
- (150) PM *-sa⁷x ~ *-sä⁷x ‘leaf’ > Mk 3 te-se⁷x || Ni -sa⁷ʃ
- (151) PM *táxχan ‘to thunder’ > Mk texen || Ni taʃxen || PW *t'áχan
- (152) PM *ti⁷x ‘to dig’ > Mk ti(⁷)x-APPL / -ti(⁷)x-APPL || Ni ti⁷ʃ || PCh *[ʔi]tíh-ij? || PW *tiχ
- (153) PM *-wá⁷x, *-w(ä)x-áj^h ‘burrow; anus’ > Ni -βa⁷ʃ, -βaf-aj^h || PCh *-wéh || PW *-wéχ, -wh-áj^h
- (154) PM *[ji]t'ex ‘to say’ > Mk [ji]t'ix || Ni [ji]t'eʃ
- (155) PM *-xa, *-xá-l ‘price’ > Ni -fa?(-k) || PW *-ha, -há-l^h
- (156) PM *(X_{1,3}on-)xa⁷χ, *(X_{1,3}on-)xáh-aj^h ‘night’ > Mk <xon>xa⁷χ || Ni <xon>fa⁷x, <xon>fa⁷x-aj || PCh *<a>h<n>áh ~ *<?a>h<n>áh || PW *<hon>aχ, *<hon>áh-aj^h
- (157) PM *-xäjk'u(?)(*-l) ‘egg’ > Ni -sajk'u(-k) || PCh 3 *hl-éjk'u? (*-l) || PW *-t-ík^ju(*-l^h)
- (158) PM *-xäte⁷k, *-xäthe-j^h ‘head’ > Ni -fate⁷ts, -satxe-s || PCh *-hétek, *-héhte-j^h || PW *-t-éteq, *-t-éthe-j^h
- (159) PM *xélå-ju⁷k ‘tree (sp.)’ > Ni seklå-juk || PCh *hél-ek || PW *hél-ek^w
- (160) PM *-xéle? ‘dirt’ > Mk -xili? || Ni -sekłe
- (161) PM *xnáwå⁷p ‘spring’ > Mk xinawa⁷p || Ni snaβäp ~ snåβäp || PCh *náwop || PW *xnáwop
- (162) PM *xunxátaχ ‘tusca fruit’ > Mk xunxetaχ || Ni xunfatax || PCh *?ihnátah || PW *xnhátaχ
- (163) PM *xunxáta-(ju)⁷k ‘tusca tree’ > Mk xunxete-⁷k || Ni xunfata-juk || PCh *?ihnáta-k || PW *xnháte-q
- (164) PM *xunxáta-kat ‘tusca grove’ > Mk xunxete-ket || Ni xunfata-tsat || PCh *?ihnáta-kat

The following examples illustrate PM *k and *k' that fail to palatalize in Nivaâle. In almost all cases there is a back vowel either directly following or preceding the target consonant. In (169), irregular vowel metathesis (*å...a > *a...å) must have counterfed the palatalization. In (181), the non-back vowel in Nivaâle is likewise irregular, but in this case it is not clear whether the irregular vowel change counterfed the palatalization or whether the palatalization simply did not apply in the environment #_C[+grave]V[-back]. (183) and (184) are genuine exceptions; the latter may turn out to be a late loan from Maká.

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- (165) PM **phinåk*, **phinhå-j^h* ‘tobacco’ > Mk *finak*, *finha-j* || Ni *phinåk*, *phinxå-j*
- (166) PM **fts-u^k* ‘palm (*Copernicia alba*)’ > Mk *fits-uk* || Ni *fts-u^k* || PCh **hwis-úk* || PW **x^wits<uk^w*
- (167) PM *(-)φ’ok ~ *(-)φ’ók (*-its) ‘arrow’ > Mk (-)φ’ok (-its) || Ni (-)φ’ok (-is)
- (168) PM *(-)jipku? (*-l) ‘hunger’ > Mk (-)jipku? (-l) || Ni *jipku?* / -*jipku* (-k)
- (169) PM *[ji]kåla ^l ‘to fry’ > Mk [j]<a>*kale* ^l || Ni [ji]kaklå^l / -*kaklå* ^l
- (170) PM *-kåñ (*-its) ‘testicle’ > Ni -*kåñ-sij* || PCh *-kåñ<is> || PW *-k^jåñ<is>
- (171) PM *-kå’s, *-kås-él ‘tail’ > Ni -*kå’s*, -*kås-ek* || PCh *-kås || PW *-k^jås, *-k^jås-*el^h*
- (172) PM *[ji]kå[?]t-APPL ‘to fall’ > Ni [ji]kå[?]t-APPL || PW *[ni]kå[?]t-APPL
- (173) PM **kula^j* ~ **kulá^j* ‘sun’ > Ni <xum>*kuklå^j* || PCh **kuláj?*
- (174) PM *[ji]ku[?]t ‘to answer’ > Mk [j]<e>*ku[?]t* || Ni [ji]ku[?]t || PCh *[?i]ku[?]hl-APPL || PW *[ni]k^jút
- (175) PM *[wa]kuma[?]χ ‘to run’ > Mk [we]kuma[?]χ || Ni [βa]kuma[?]x
- (176) PM *[t]kú[?]m-APPL ‘to grab; to work’ > Mk [te]ku[?]m-APPL || Ni [t^a]ku[?]m-APPL || PCh *[?i]kúm-APPL || PW *[t]k^jú(?)m-APPL
- (177) PM *-kun ~ *-kún ‘to eat.INTR’ > Ni <tsak>*kun* || PCh *[t^a]<?já>*kun*
- (178) PM **kús* ~ **kúts* ‘heat’ > Mk (?) *kus* (*Pyrocephalus rubinus*) || Ni *kus* || PCh **kús-APPL*
- (179) PM *-kút-ex ‘to meet’ > Mk [w(e)]kut-ix-u[?]t || Ni [βa]kut-ef || PCh *[?i]kút-eh || PW *-k^jút-ex
- (180) PM **kú[?]X₁₂* ‘sweat’ > Ni -[?]β-*ku[?]x* || PW **k^jíx^w*
- (181) PM **khåt* ‘cactus’ > Mk *khat-u^k* || Ni *kxat* || PCh **kåhåt* || PW **k^jåhåt*
- (182) PM *-(j)ku-j^h ‘trees (suffix)’ > Mk -(j)kw-i || Ni -*ku-j* || PCh *-(j)ku-j^h || PW *-k^ju-j^h
- (183) PM **k’alxó* (*-ts) ‘armadillo (sp.)’ > Ni *k’akxo* (-s) || PCh **k’ihló?* (*-s) || PW **k^j’anhóh*
- (184) PM **låttsiki-ju^k* ‘willow’ > Mk *lattsiki-ju^k* || Ni *klåttsiki-juk*
- (185) PM *-tu^k, *-tu-j^h ‘yica bag, load’ > Mk -*tu^k*, -*tu-j* || Ni -*tu^k* || PCh *-hlúk, *-hlúj-... || PW *-duk^w, *-tú-j<is>
- (186) PM *-må[?]k, *-mhå[?]j^h ‘powder, flour’ > Ni -*må[?]k*, -*mxå-j* || PCh *-måk || PW *-mók^w, *-mhó-j^h

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- (187) PM *-muk, *-mhu-*j^h* ‘feces’ > Mk -<*i*>muk, -<*i*>mhu-*j* || Ni (-)<*sa*>muk, (-)<*sa*>mxu-*j* || PCh *-<’já>muk || PW *-<’já>muk^w, *-<’já>mhu-*j^h*
- (188) PM *²mók (*-its) ‘zorzar bird (*Turdus sp.*)’ > Mk mok (-its) || Ni mok (-is) || PCh *²mók (*-is)
- (189) PM *néwo(?)k ‘wild manioc’ > Ni noβok || PCh (?) *n²wák || PW *néwok^w
- (190) PM *(-)níják, *(-)níjhå-*j^h* ‘rope, cord’ > Mk (-)nijak, (-)níjha-*j* || Ni -níják, -níjxå-*j* || PCh *níják, *níjhå-*j^h* || PW *níják^w, *níjhå-*j^h*
- (191) PM *-p’o’k ~ *-φ’o’k ‘fence’ > Ni -p’o’k || PCh *-p’ók || PW *-p’ok^w
- (192) PM *[ji]qáku? ‘to distrust’ > Mk [je]qeku? || Ni [ji]kaku || PCh *[ji]qáku? || PW *[ji]qák^ju-APPL
- (193) PM *tänúk(*-its) ‘feline’ > Mk tenuk (-its) || Ni tanuk (-is) || PCh *tinúk(*-is)
- (194) PM *téwo(?)k ~ *téwå(?)k ‘river’ > Ni toβok ~ toβåk || PCh *téwok ~ *téwåk || PW *téwok^w
- (195) PM *-t(á)ko?(*-l) ‘face’ > Mk -tko<je^k> || Ni -tako?(-k) || PCh *-tåko?(*-l) || PW *-ták^jo (*-l^h)
- (196) PM *tlú’k ‘blind’ > Ni taklu’k || PCh *t²lúk || PW *tilúk^w
- (197) PM *túku(?)^(t)s ‘ant’ > Ni tukus || PCh *túkus
- (198) PM *-’txo’k ~ *-’txó’k, *-’txóko-wot ‘uncle’ > Mk -txo’k || Ni -’txo’k, -’txoko-βot || PCh *-<*i*>tók, *-<*i*>tóko-wot || PW *-<wi>thok^w
- (199) PM *tsänú’k ‘duraznillo trees’ > Ni tsanu’k || PCh *sinúk || PW *tsinúk^w
- (200) PM *-(j)uk ‘tree (suffix)’ > Mk -(j)uk || Ni -(j)uk || PCh *-(j)uk || PW *-(j)uk^w
- (201) PM *-wå’k ‘bad mood’ > Mk -wak || Ni -βå’k || PCh *-wåk || PW *-wåk^w
- (202) PM *X₁₃ó’k ‘palo santo (*Bulnesia sarmientoi*)’ > Ni xo’k || PCh *hók || PW *hók^w
- (203) PM *-X₁₃u’k, *-X₁₃ú-*j^h* ‘firewood’ > Ni -xu’k, -xu-*j* || PCh *(ʔítåh)-huk || PW *-huk^w, *-hú-*j*<is>
- (204) PM *?a’nqo’k ‘paralytic’ > Mk onqok || Ni ?a’nko’k

The following examples illustrate PM **x* that fails to palatalize in Nivaâle. In almost all cases there is a back vowel either directly following or preceding the target consonant. The irregular change PM *å > Ni *a* in (220) must have counterfed the palatalization of velars.

7 Nivaâle

- (205) PM *- $\phi\chi\acute{u}x$, *- $\phi\chi\acute{u}-ts$ ‘**finger**’ > Mk *-fux* || Ni *-fxux*, *-fxu-s* ‘**toe**’ || PCh *-*hwu-ké?* || PW *-*x^wúx^w*, *-*x^wú-s*
- (206) PM **jixå(?)* ~ **jixå(?)* ‘**to be true**’ > Mk *ixa* || Ni *jixå?* || PCh **ihå<wet>*
- (207) PM **ji?ixåtax*, **ji?ixåta-ts* ‘**ocelot**’ > Mk *i?ixatax*, *i?ixate-ts* || Ni *jixåtax*, *jixåta-s*
- (208) PM *-*k’åxe?(-l)* ‘**arrow**’ > Mk *-qaxi?(-l)* || Ni *-k’åxe* || PCh *-*k’åhe?(-l)* || PW *-*k^jåhe* (*-*l^b*)
- (209) PM **k’alxó(-ts)* ‘**armadillo (sp.)**’ > Ni *k’akxo (-s)* || PCh **k’ihló?(-s)* || PW **k^janhóh*
- (210) PM **n-xåte?(-l)* ~ **n-xåti?* ‘**dream, sleepiness**’ > Mk *-nixati?(-l)* || Ni *nxåte(-k)* || PCh **ihnåti?* || PW **nahåti*
- (211) PM **ti^lå’x* ‘**to carry on one’s shoulders**’ > Mk *ti^lo’x* / -*ti^lo’x* || Ni *ti^lå’x* || PCh *[*yi*]*tíhlåh* || PW **ti^låx*
- (212) PM **xoxaw-u’k* ~ **xoxi-ju’k*, *-*ku-j* ‘**palo cruz (*Tabebuia nodosa*)**’ > Mk *xoxew-u’k*, *xoxew-kw-i* || Ni *xoxi-juk*, *xoxi-ku-j*
- (213) PM **tux* ‘**to eat.TR**’ > Mk *tux* / -*lux* || Ni *tux* || PCh *[*yi*]*túM* || PW **tux^w*
- (214) PM *-*t’ox* ~ *-*t’óx* ‘**aunt**’ > Ni *-t’ox* || PCh *-<*i>t’óh* || PW *-<*wi>t’oχ*
- (215) PM *-*txo’k* ~ *-*txó’k*, *-*txóko-wot* ‘**uncle**’ > Mk *-txo’k* || Ni *-*txo’k*, *-*txoko-βot* || PCh *-<*i>tók*, *-<*i>tóko-wot* || PW *-<*wi>thok^w*
- (216) PM **xunxåtax* ‘**tusca fruit**’ > Mk *xunxetax* || Ni *xunfatax* || PCh **ihnåtah* || PW **xnhåtax*
- (217) PM **xunxåta-(ju)’k* ‘**tusca tree**’ > Mk *xunxete-’k* || Ni *xunfata-juk* || PCh **ihnåta-k* || PW **xnhåte-q*
- (218) PM **xunxåta-kat* ‘**tusca grove**’ > Mk *xunxete-ket* || Ni *xunfata-tsat* || PCh **ihnåta-kat*
- (219) PM *-*ʔåx* (*-*its*) ‘**skin, bark**’ > Mk *-ʔax* (-*its*) || Ni *-ʔåx* (-*is*) || PCh *-*ʔåh*, *-*ʔåh-és* || PW *-*t-’åχ*, *-*t-’åh-és*
- (220) PM *[*j*]*éjxåts-han* ‘**to teach**’ > Mk [*j*]*jixats<hen>* || Ni [*j*]*ejxats-xan* / -*ejxats-xan* || PCh *-[*j*]*éjåhås<an>*

In a number of morphemes, the alternation between velar and postalveolar consonants is still synchronically active in Nivaâle. This can happen when a Proto-Mataguayan consonant is found in different environments in the consonantal and vocalic allomorphs of the same stem (cf. §5.2). In the following example, PM **x* palatalizes in the singular, because there is no adjacent non-back

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vowel, but fails to palatalize in the plural, because the metathesis (§5.2.5) creates context for palatalization blocking: the back vowel *å* is now separated from *x* by a [+grave] (non-coronal) consonant.²

- (221) PM *-tåwä²x, *-tåwxä-ts ‘(abdominal) cavity’ > Mk -tawe²x, -tawxe-ts || Ni -tåβa²ʃ, -tåβxa-s || PCh *-tóweh || PW *-tóweχ

Another instance of an alternation between velars and postalveolars is seen in the verb ‘to go away’, where the root vowel varies throughout the paradigm (see §5.4). In addition to the forms reconstructible to Proto-Mataguayan, the relation between the choice of *k* and *tʃ* and the backness of the adjacent vowel is seen in forms such as *fn-åk* ‘we.INCL go away’, *n-åk* ‘(that) s/he go away’, and *ni?j-itʃ* ‘I don’t go away’ (Fabre 2014: 146).

- (222) PM 1 *h-åk, 2 *t-åk, 3 *[j]ik; CISL *n-åk ‘to go away’ > Mk 1 *h-ak*, 2 *t-ak*, 3 *ik*; CISL *n-ek* || Ni 1 *x-åk*, 2 *t-åk*, 3 *[j]itʃ*; CISL *n-atʃ* || PCh 1 *?åk*, 2 *hl-ék || PW 2 *t-eq, 3 *[j]iq; CISL *n-eq

Finally, and most importantly, velars and postalveolars alternate at the left edge of some suffixes, whose allomorphs are chosen depending on the final segment(s) of the stem. Quite expectedly, in all cases the initial segment of the suffix is followed by a non-back vowel. Proto-Mataguayan suffixes that start with a velar consonant followed by a back vowel have non-alternating reflexes in Nivaçle (as in *-xop* ‘next to, surrounding’), because velar consonants never palatalize in Nivaçle if there is an adjacent back vowel.

- (223) PM *-kat ‘collective of plants’ > Mk -ket || Ni -tfat / -kat || PCh *-kat || PW *-k²at (*-at after *k^w, *q)
- (224) PM *-ke?(*-j^h) ‘feminine’ > Mk -ki?(-j) || Ni -tse / -ke (-j) || PCh *-ke?(*-j^h) || PW *-k²e (*-j^h)
- (225) PM *-xä²n(e?) ‘verbal plural (suffix)’ > Ni -fa²ne? / -xa²ne? || PCh *-he²n(e?) || PW *-he²n
- (226) PM *-xij^h ‘recipient’ > Mk -xij || Ni -sij / -xij || PW *-híh

²In the speech of one of the co-authors of Campbell et al. (2020), representative of the Pilcomayoño subdialect of Chishamnee Lhavos, this pattern is also found in stems where the intervening consonant is coronal: *kłutseʃ*, *kłutsxe-* ‘bow’. This must be a local innovation, since the regular form *kłutse-s* is abundantly attested in the Central Paraguayan subdialect of Chishamnee Lhavos (Campbell et al. 2020: 10), as well as in all other sources on the language, including Stell (1987), Fabre (2014), Seelwische (2016).

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Gutiérrez (2015b: 64) and Campbell et al. (2020: 54–55) document the alternation in question for suffixes such as *-xam* / *-sam* ‘on top of, up, through’; *-xaʔne* / *-saʔne* ‘downwards’; *-kifam* / *-tʃifam* ‘upward’; *-xi* / *-fi* ‘indefinite location, indefinite direction; intensive’; *-xij* / *-sij* ‘concave container’; *-k'e* / *-tʃ'e* ‘along; distributive’; *-ke* / *-tʃe* ‘feminine’; *-kat* / *-tʃat* ‘group of plants’. In all these suffixes, the initial consonant (followed by a non-back vowel) surfaces as postalveolar if the preceding vowel is front, even if a consonant intervenes (227), but as velar if the preceding vowel is back, if a [+grave] (non-coronal) consonant intervenes (228).

- (227) Nivaâcle (Gutiérrez 2015b: 64)

- a. *ɬ-né'ɬ-sam*
2SG-get-LOC:up
'you get up'
- b. *ɿitáʔ-sam*
scrub-LOC:up
'very thick scrubland'

- (228) *xa-xú'x-xam* *ɬa=t'ún*
1SG-bite-LOC:up F.DET=cracker
'I bit the cracker'

If a coronal consonant separates the suffix from a back vowel, the initial consonant of the suffix does palatalize, as in (229).³

- (229) Nivaâcle (Gutiérrez 2015b: 66)

- a. *-tá'ɬ-sam*
come.from-LOC:up
'to come from'
- b. *ji-kxú's-sam*
1SG-knee-LOC:up
'on my knee'

³Although Campbell et al. (2020: 54) fail to note the key role of the [+grave] feature of the intervening consonants for the blocking of palatalization in Nivaâcle, they still give some interesting examples that shed light on the behavior of consonants such as *s*: compare *tox=k'e* ‘far’ and its plural *to-s=tʃ'e*, *ʔakáx=xi=ʔin* ‘rich’ and its plural *ʔaká-s=ʃi=ʔin*. The possible role of coronal consonants as an intervening factor had already been mentioned by Gutiérrez (2015b: 66).

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Note that the instances of *k* derived from erstwhile *kl < *l (§7.1.1.4) behave as coronal in what concerns palatalization blocking in Nivaclé. This can be seen in words such as *la-ntåkſitſ-’a* ‘grandson (male ego)’, where the postalveolar fricative *f* occurs despite being separated from a back vowel *å* by a prima facie [+grave] consonant *k*; the fact that this *k* goes back to *kl is clear from related forms such as Ni *la-ntåkſeftſe?e* ‘granddaughter (male ego)’ (data from Campbell et al. 2020: 89). The same explanation may account for *t’aklåk-tſat* ‘scrub’, derived from *t’aklåk* ‘weed’ and explicitly stated to be an exception by Stell (1987: 211).

Genuine exceptions from the palatalization rule are very rare in Nivaclé. Gutiérrez (2015b: 66–67) mentions the form *tsanku-kat* ‘stand of duraznillo trees’; according to Stell (1987: 211), this form is typical of the Chishamnee Lhavos variety and may thus represent a late dialectal development. Stell (1987: 210) also gives an unexplainable form *ſeklå-tſat* ‘group of trees (*Prosopis* sp.)’.

7.1.1.4 Delateralization of PM *l > *kl > *k* in codas

The consonant *kl cannot occur in Nivaclé codas (except dialectally when followed by a glottal stop, see §7.2.4). Instead, a productive rule delateralizes it to *k* in that position.

(230) Nivaclé (Gutiérrez 2015b: 225–226)

- a. *la-xpekl-is*
3-shadow-PL
'her/his shades'
- b. *la-xpek*
3-shadow
'her/his shade'
- c. *∅-bakte’tf*
3-walk
'her/his shades'
- d. *∅-baktſe-mat*
3-walk-defect
's/he limps'

Campbell & Grondona (2007: 8–9) ascribe this alternation to a positionally conditioned diachronic sound change *kl > *k* that must have occurred in the history of Nivaclé. Comparative data show that this is indeed the case: PM *l

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indeed evolved into *k* in the coda position in Nivaâcle, as also noted in Gutiérrez (2015b: 253).

- (231) PM *-ápił ‘to return thither’ > Mk [w]apil || Ni [β]apek || PCh *[j]ápił || PW *[j]ápił^h
- (232) PM *-(é)l ‘PL’ > Mk -l || Ni -(e)k || PCh *-(é)l || PW *-(é)l^h
- (233) PM *[j]i]fáł ‘to tell’ > Mk *n(i)-fel-im* || Ni *n(i)-fak/n(i)-fakl-* || PCh *[?i]hwél || PW *[?i]xʷél^h / *[?i]xʷél-
- (234) PM *[t]píł ‘to return hither’ > Mk [t(e)]pil || Ni [t(a)]pik ~ [t(a)]pek || PW *[t]píł^h
- (235) PM *(-)X₂₃pél ‘shadow’ > Ni xpek || PCh *-pél || PW *hpél^h / *-hpel^h
- (236) PM *?áfte'l ‘orphan’ > Mk afti'l || Ni ?áfte'k
- (237) PM *?ál(V)tse(?)χ, *?ál(V)tse-ts ‘cháguar (*Deinacanthus urbanianum*)’ > Ni ?áktsex, ?áktse-s || PCh *?ál'sah, *?ál'se-s || PW *?áletsaχ

7.1.1.5 Deaffrication of PM *ts > s in codas

As discussed in §2.1.3, the occurrence of *ts* is banned from codas in Nivaâcle, except when the onset of the next syllable is *x* or *ɸ* (see footnote 2). This restriction arose as a result of a diachronic deaffrication of PM *ts > s in codas (shared with Wichí and possibly Chorote).

- (238) PM *(-)fétä'ts ‘root’ > Mk *fitets* || Ni -feta's || PCh *-hwétus || PW *(-)xʷétes
- (239) PM *jijá'ts ‘dew’ > Mk *ije'ts* || Ni *jija's* || PCh *?ijés-tah || PW *?ijás
- (240) PM *-léts ‘offspring’ > Mk -lits || Ni -kles || PCh *-lés || PW *-lés
- (241) PM *-täts-u'k, *-täts-ku-j^h ‘trunk’ > Ni -tats-uk, -tas-ku-j || PCh *(-)tés-uk, *-tés-ku-j^h
- (242) PM *qati'ts, *qatits-él ‘star’ > Ni *kati's* || PCh *qatés, *qates-él || PW *qates, *qatéts-el^h
- (243) PM *-?aqhu'ts ~ *-?aqhú'ts ‘knee’ > Mk -aqhu'ts || Ni -(?a)kxu's || PCh *-?aqús

In some etyma, the erstwhile presence of an affricate in certain forms is suggested by the synchronically active alternations in Nivaâcle: compare Ni -fetats-ij ‘roots’, -(?a)kxatsu-j ‘knees’, -tats-uk ‘trunk’ vs. -fetas ‘root’, -(?a)kxu's ‘knee’, -tas-ku-j ‘trunks’ (Gutiérrez 2015b: 45). Campbell et al. (2020: 50) note that this alternation is restricted to nouns in Nivaâcle, whereas in verbs *ts* alternates with

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t instead: compare Ni *xa-nuts-xa-jan* ‘I cause him/her to be angry’, *kuts-xanax* ‘thief, robber’, *xa-taβkits-xat* ‘I make him/her/it dizzy’ vs. *xa-nut* ‘I get angry’, *ta-t-kut* ‘you steal’, *tsi-taβkit* ‘I am dizzy, I get dizzy’ (Campbell et al. 2020: 50). The diachronic origins of the latter alternation are unknown because the relevant roots do not reconstruct back to Proto-Mataguayan.

7.1.1.6 PM *ɸ', *t' > Ni *p'*, *t'*

Nivaclé also participated in yet another sound change shared with Chorote and Wichí, but not with Maká, which consists of the fortition of the Proto-Mataguayan glottalized fricatives (phonologically possibly analyzable as tautosyllabic sequences of a fricative and a glottal stop) to glottalized stops: PM *ɸ', *t' > Ni *p'*, *t'*. The sequence *kɸ', however, changed to Ni *k'*, as in (246).

- (244) PM *-ɸ'i(?) ‘foot’ > Mk -f'i? || Ni -p'i-k'o‘heel’
- (245) PM *(-)ɸ'ok ~ *(-)ɸ'ók (*-its) ‘arrow’ > Mk (-)f'ok (-its) || Ni (-)p'ok (-is)
- (246) PM *[ji]kɸ'ás ~ [ji]kɸ'ás ‘to be torn open’ > Ni [ji]k'as-APPL || PCh *[ʔi]k'(w)ós || PW *[hi]kʷ'és-APPL
- (247) PM *t-’áX₂₃te(?)(*-j^h) ‘her female breast’ > Ni t-’axte(-j) || PCh *t-’áhate?(*-j^h) || PW *t-’áte (*-j^h)
- (248) PM *t-’åx ‘skin, bark’ > Mk t-’ax || Ni t-’åx || PCh *t-’åh || PW *t-’åχ
- (249) PM *t-’äsx_a'n, *t-’äsx_{án}-its ‘meat’ > Mk t-’ese'n, t-’esen-its || Ni t-’asxa'n, t-’asxan-is || PCh *t-’isá'n, *t-’isán-is || PW *t-’isa'n, *t-’isán-is
- (250) PM *t-’í (*-l) ‘liquid, juice’ > Mk t-’i?(-l) || Ni t-’i?(-k) || PCh *t-’i?(*-l) || PW *t-’í (*-l^h)
- (251) PM *t-’út ‘you urinate’ > Mk t-’ut || Ni t-’ut || PCh *<h>t-’út || PW *t-’út
- (252) PM *t-’útu(?) ‘her/his urine’ > Ni t-’utu || PCh *t-’úhlu? || PW *t-’útu

As a result of the sound change PM *t' > (*t', Nivaclé now displays a morphophonological rule which converts the underlying sequence /t+ʔ/ into *t'* (rather than *t'*, as in Maká). The rule is no longer entirely productive in Nivaclé, since the sequence /tʔ/ may occur within a morpheme, as in *snitʔå* ‘lizard (*Teius teyou*)’.

7.1.1.7 Deglottalization of sonorants

Although the glottalized sonorants of Proto-Mataguayan (*ʷw, *ʷl, *ʷj, *ʷm, *ʷn) are normally preserved in Nivaclé as sequences of the type “ʔ + sonorant” (‘C

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in our notation), the glottalization fails to surface in some environments. Most notably, glottalized sonorants are deglottalized in the word-initial position in *Nivaâle*, merging with their plain counterparts. Note that in (257), (260)–(262), and (264) the glottalization does surface after prefixes, even if not all of our sources on the language document it consistently: *?a-[?]nâjif* ‘your way’ (Fabre 2014: 318), *ta-[?]βakl̥etʃ* ‘you walk’ (Seelwische 2016: 312), *ja-[?]βé[?]ta* ‘I am alone’ (Seelwische 2016: 312), *ji-[?]βoj-ej* ‘my blood.PL’ (Fabre 2014: 189), *sta-[?]βå[?]t* ‘we.INCL climb, rise’ (Campbell et al. 2020: 234). The root in (258), by contrast, is attested with a plain β even after prefixes in all available sources (Stell 1987, Fabre 2014, Seelwische 2016, Campbell et al. 2020).

- (253) PM $^{*?}låjX_{23}VnåX_{13}å$ ‘Azara’s night monkey’ > Ni *klajxenåxå* || PCh $^{*?}léhjanåhå-ke?$
- (254) PM $^{*?}mók$ ($^{*?}-its$) ‘zorzal bird (*Turdus sp.*)’ > Mk *mok* ($-its$) || Ni *mok* ($-is$) || PCh $^{*?}mók$ ($^{*?}-is$)
- (255) PM $^{*?}na?$ ‘this.M (within one’s hands’ reach)’ > Mk *ha-[?]ne?* || Ni *na?* || PCh $^{*?}ná?$
- (256) PM $^{*?}nálu(h)$, $^{*?}nálu-ts$ ‘day, world’ > Mk *nelu* ($-ts$) || Ni *nalu* ($-s$) || PCh $^{*?}náhl<ikis>$ ~ $^{*?}náhl<ikes>$ ‘midday’
- (257) PM $^{*?}(-)náji[?]x$, $^{*?}(-)nájx-a[?]j^h$ ‘path’ > Ni *nåji[?]f*, $(-?)nåj[?]f-a[?]j$ / $^{*?}náji[?]f$ || PCh $^{*?}(-)nájih$, $^{*?}(-)náhj-a[?]j^h$ || PW $^{*?}(-)nájiχ$, $^{*?}(-)nájh-a[?]j^h$
- (258) PM $^{*?}wátshan$ ~ $^{*?}wátsχan$ ‘to be healthy, alive’ > Ni *βatsxan* || PCh $^{*?}wásá[?]n$ || PW $^{*?}wátshan$
- (259) PM $^{*?}wánXåłåχ$, $^{*?}wánXåłå-ts$ ‘rhea’ > Mk *waałax* || Ni *βånxåłåx*, *βånxåłå-s* || PCh $^{*?}wánhlåh$, $^{*?}wánhlå-s$ || PW $^{*?}wá[?]nłåχ$, $^{*?}wá[?]nłå-s$
- (260) PM $^{*?}wäle[?]k$ ‘to walk’ > Mk $-<i>^{?}welki-[?]met[?]to limp$ || Ni *βakle[?]tʃ* || PCh $^{*[?i]}wélek$ || PW $^{*?}weleq$
- (261) PM $^{*?}wé[?]t=a?$ ‘one’ > Mk $<e>wi[?]t-e?$ || Ni *βé[?]t<a>* / $^{*?}βé[?]t<a>$
- (262) PM $^{*?}(-)wo[?]j$ ‘blood’ > Ni *βo[?]j* / $^{*?}βoj-ej$ || PCh $^{*?}(-)wój-is$ || PW $^{*?}woj-ís$ / $^{*?}wój-is$
- (263) PM $^{*?}wóså(?)q$ ~ $^{*?}wóså(?)k$ ‘butterfly’ > Ni *βosåk* || PCh $^{*?}wósåk$
- (264) PM $^{*?}wV[?]t$ ~ $^{*?}wV[?]t$ ‘to climb’ > Mk *we[?]t* || Ni *βå[?]t* || PCh $^{*[?i]}wút$ || PW $^{*[?i]}wut$ ~ $^{*[?i]}wút$

In the postconsonantal position, most of our sources (with the notable exception of Campbell et al. 2020) rarely if ever indicate the glottalization of sonorants. Gutiérrez (forthcoming) has recently described the phonetic realization of

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such clusters as involving creaky voice phonation either in the sonorant itself (*łas-*’*βán* [łas’βan] ‘you see me’, *βát-*’*βan* [βat’βan] ‘s/he sees herself/himself’) or in the preceding segment, if it is also a sonorant (*sin-*’*βán* [sin’βan] ‘they see us’).

- (265) PM **sláqha*([?])*j*, **sláqhaj-its* ‘wild cat’ > Ni *sklåkxaj* ~ *sklåkxaj*(-*is*) || PCh **s[?]låhqaj*? ~ **s[?]låhqåj?*([?]-*is*) || PW **silåqhåj*
- (266) PM *[*ji*]*s[?]wun* ~ *[*ji*]*s[?]wún* ‘to like, to love’ > Mk [*ji*]*su?un* || Ni [*ji*]*s[?]βun* || PCh *[*ji*]*s[?]βún*

7.1.1.8 Deglottalization in codas in “weak” syllables

As described by Gutiérrez (2016b: 183–184), Nivaclé systematically deletes postvocalic instances of /?/ whenever it does not get parsed to the head syllable of the foot; in other words, postvocalic /?/ can only surface in syllables that carry primary or secondary stress in Nivaclé. Importantly, in Gutiérrez’s (2016b) analysis /?/ accounts not only for the occurrences of [?] in codas, but also for what we represent as preglottalized codas (’C) in this book: in Gutiérrez’ account, these are analyzed as underlying sequences of the type /?C/, where /?/ is parsed to the nucleus. This is clearly seen in some lexemes that either have or lack /?/ in different inflected forms, where stress falls on different syllables (see §7.1.3 on the stress in Nivaclé).

- (267) Nivaclé (Gutiérrez 2016b: 183–184)
- (*takló’k*)
weed
‘weed’
 - ta(klōk-tfát)*
weed-plant_group
‘scrub’
 - (*jijé?*)
caraguatá
‘caraguatá’
 - ji(je-tfát)*
caraguatá-plant_group
‘a place where the caraguatá plant lives’

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- e. (finβó?)
honey
'honey'
- f. ji-(finβo)
1.POSS-honey
'my honey'

This rule is a direct consequence of a diachronic sound change that deleted the coda *? and deglottalized erstwhile preglottalized coda in unaccented syllables in the history of Nivaâle. Note that in some cases the position of the stress may have changed at least in some varieties of Nivaâle (see §7.1.3); it is the position of the Proto-Mataguayan accent that matters. The following examples instantiate the loss of *? in unaccented syllables, including the glottalization in preglottalized coda, as in (275) and (286).

- (268) PM *-t-á(-j^h)-xi?(*-l) 'her/his mouth' > Mk t-exi?(-l) || Ni t-asi?(-k) || PCh (?) *hl-á<aj?> || PW t-áj-hi (*-l^h)
- (269) PM *t-áni's 'its stinger' > Mk t-ani's || Ni t-ánis || PCh *hl-ánis || PW (?) *t-á'ni
- (270) PM *t-áse? 'her/his daughter' > Mk t-asi? || Ni t-áse || PCh *hl-áse? || PW *t-áse
- (271) PM *-φájXo?(*-l) 'coal' > Ni -φajxo?(-k) || PW *-x^wíjho (*-l^h)
- (272) PM *-φál?u?(*-ts) 'son-in-law, brother-in-law' > Mk -felu?(-ts) || Ni -φakl?u(-s) 'brother-' || PCh *-hwílu? ~ -hwélu?(*-s) 'son-in-law'
- (273) PM *(-)háqke? 'well' > Mk haqqi? 'river' || Ni -xáke 'dry well' || PCh *-hááke? 'artificial well'
- (274) PM *(-)jipku?(*-l) 'hunger' > Mk (-)jipku?(-l) || Ni jipku? / -jipku (-k)
- (275) PM *[ji]kála't 'she/he fries' > Mk [j]<a>kaleł || Ni [ji]kaklåł
- (276) PM *-k'áxe?(*-l) 'arrow' > Mk -qaxi?(-l) || Ni -k'áxe || PCh *-k'áhe?(*-l) || PW *-k^j'áhe (*-l^h)
- (277) PM *-k'ínxå? ~ *-k'ínxå?(*-wot) 'younger sister' > Mk -k'ínxå? ~ -k'ínxå? || Ni -tfínxå (-βot) || PCh *-k'íhnå?(*-wot) || PW *-k^j'ínhå
- (278) PM *-tí'wte? 'heart' > Mk -liti? || Ni -ti'βte
- (279) PM *n-xáte?(*-l) ~ *n-xáti? 'dream, sleepiness' > Mk -nixati?(-l) || Ni nxáte(-k) || PCh *nahnáti? || PW *naháti

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- (280) PM *[?]njánxte? ‘**tapeti rabbit, cavy**’ > Mk *nijaxti?* || Ni *nánxate* || PCh *[?]náhåte? || PW *[?]náte
- (281) PM *[*ji*]pé^j-a? ‘**to hear**’ > Mk [*ji*]pi^j-e? || Ni [*ji*]pe^j-a || PCh *[*?*i]pé^j-a?
- (282) PM *-pxúse?(*-j^h) ‘**beard**’ > Mk -<*a*>*pxusi?*(-j) || Ni -*påse*(-j) || PCh *-púse?(*-j^h) || PW *-*påse*(*-j^h)
- (283) PM *[*ji*]qáku? ‘**to distrust**’ > Mk [*je*]qeku? || Ni [*ji*]kaku || PCh *[*ji*]qáku? || PW *[*ji*]qák^ju-APPL
- (284) PM *-tátse?(*-j^h) ‘**eyelash**’ > Mk -*tetsi?*(-j) || Ni -*tåtse*(-j) || PCh *-tåse?(*-j^h)
- (285) PM *-whá^ja? ‘**spouse**’ > Mk -*whe?*je? || Ni -*xa*^ja || PCh *-hwá^ja?
- (286) PM *t-xäte^k ‘**head**’ > Ni *t-satetʃ* || PCh **hl*-étek || PW **t*-éteq
- (287) PM *xéjå?(*-l) ‘**bat**’ > Mk *xaja?*(-l) || Ni *sejå*(-k) || PCh *<*a*>*héja?*(*-l)
- (288) PM *-xéle? ‘**dirt**’ > Mk -*xili?* || Ni -*sekle*
- (289) PM *?óφo?(*-ts) ‘**pigeon**’ > Mk *ofo?*(-l) || Ni *?óφo*(-s) || PCh *?óhwo?(*-s)

One exception is given below (the PM accent is reconstructed here based on evidence from Chorote). Synchronously, the root in question has irregular final stress in Nivaclé (Analía Gutiérrez, 2023, personal communication).

- (290) PM *?éja?(*-l) ‘**mosquito**’ > Mk *ije?*(-l) || Ni *jija?* || PCh *?éja?(*-l)

As is clear from the discussion in Gutiérrez (2016b), the deglottalization applies at a relatively shallow level in Nivaclé and does not generally alter the underlying representation of the morphemes. The following examples show that in words with an established Mataguayan etymology the deglottalization applies word-finally only in forms where the accent is non-final.

- (291) Nivaclé (Seelwische 2016: 129, 357, 382)

- a. (*ɸ*-φáj)xo
3.POSS-charcoal
'its charcoal'
- b. (φajxó?)
charcoal
'charcoal'
- c. (?a-ji^j)ku
2.POSS-hunger
'your hunger'

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- d. (jipkú?)
hunger
'hunger'
- e. (ji-jà)tetʃ
1.POSS-head
'my head'
- f. (βàt)-(ʃaté'tf)
GNR-head
'one's head'

It is important to note that although PM enclinomena (§4.2.1) lacked an underlying accented syllable, they do not show the deletion of *? in Nivaâle. This entails that at the time when the deglottalization occurred in Nivaâle, erstwhile enclinomena had already developed a default final stress, preserved to this day in Nivaâle.

- (292) PM **ɸajXo?* 'coal' > Ni *ɸajxo?* || PCh **hwa(h)jo-* || PW **xʷijho?(?)*
- (293) PM **ji'jå'X₁₂* 'jaguar' > Ni *ji'jå'x* || PCh **?a'jåh* || PW **ha'jåχ*
- (294) PM **ji'lå?* 'tree' > Ni *ji'klå?* || PCh **?a'lå?* || PW **ha'lå*
- (295) PM **jit'å?* 'vulture' > Ni *jit'å?* || PCh **?at'å?* || PW **hat'å(?)*
- (296) PM *[*ji*]*kaχ?* ~ *[*ji*]*kåχ* 'to take away' > Mk [*j*]<*e*>*kaχ* || Ni [*ji*]*tʃaχ* || PW *[*ji*]*k'åχ*
- (297) PM *-*kå's* 'tail' > Ni -*kå's* || PCh *-*kås* || PW *-*k'ås*
- (298) PM *[*ji*]*låj* 'to withstand' > Ni [*ji*]*klåj* || PCh *[*ji*]*låj-eh* || PW *[*ji*]*låj*
- (299) PM *-*lå?* 'domestic animal' > Ni -*klå?* || PCh *-*lå<hwah>* || PW *-*lå?*
- (300) PM *-*li'x* 'language, word' > Mk -*li'x<e?>* || Ni -*kliʃ* || PCh *-*lih*
- (301) PM *-*tu'k* 'yica bag, load' > Mk -*tu'k* || Ni -*tu'k* || PCh *-*hlúk* || PW *-*tukʷ*
- (302) PM *-*nji'x* 'smell' > Mk -*nji'x* || Ni -*niʃ* || PCh *-*nih* || PW *-*niχ*
- (303) PM *-*p'o'k* ~ *-*ɸ'o'k* 'fence' > Ni -*p'o'k* || PCh *-*p'ók* || PW *-*p'okʷ*
- (304) PM *-*p'o't* 'lid' > Mk -*p'ot<o?>* || Ni -*p'o't* || PCh *-*p'ót* || PW *-*p'ot*
- (305) PM **qati'ts* 'star' > Ni *kati's* || PCh **qatés* || PW **qates*
- (306) PM *-*så't* 'vein' > Mk -*så't* || Ni -*så't* || PCh *-*såt-* || PW *-*såt*
- (307) PM **tijaχ* 'to shoot, to throw' > Mk *tijaχ* / -*tijaχ* || Ni *tijå'x* || PCh *[*?i*]*tijåh* || PW **tijåχ*

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- (308) PM **tiłåχ* ‘to carry on one’s shoulders’ > Mk *tiłoχ* / -*tiłoχ* || Ni *tiłåχ* ||
PCh *[?i]tíhlåh || PW **tiłåχ*
- (309) PM **wije?* ‘caraguatá (*Bromelia serra*)’ > Ni *βije?* ~ *jije?* || PCh **wijé?* ||
PW **wuje?*(?)
- (310) PM **wäle?*^k ‘to walk’ > Mk -*i* *welki-*^{met}‘to limp’ || Ni *βakle?*^tf || PCh *[?i]^{wélek} || PW **weleq*
- (311) PM *-*wät* ‘place’ > Mk -*wet* || Ni -*βat* || PCh *-*wét* || PW *-*wet*
- (312) PM *-*xa* ‘price’ > Ni -*fa?* || PW *-*ha*
- (313) PM *...*xa*^t ‘earth’ > Ni <*kots*>*xa*^t || PCh *<?a>*h*<*n*>*át* ~ *<?å>*h*<*n*>*át* ||
PW *<*hon*>*hat*
- (314) PM **X₁₃on-xa*^χ ‘night’ > Ni <*xon*>*fa*^χ || PW *<*hon*>*aχ*
- (315) PM *-*X₁₃u*^k ‘firewood’ > Ni -*xu*^k || PCh *(?ítåh)-*huk* || PW *-*huk*^w
- (316) PM **l-äsxan* ‘meat’ > Mk *l-ese*ⁿ || Ni *t-asxa*ⁿ || PCh **t-isá*ⁿ || PW **t-isa*ⁿ

7.1.1.9 Glottal insertion in monosyllables

Synchronously, the minimal word in Nivaâle is constituted by CVC (Gutiérrez 2015b: 118, 132ff.). This is likely a result of an innovation whereby all monosyllabic roots of the shape CV underwent insertion of a word-final *?*, a process shared with Maká. It is noteworthy that the epenthesis occurred even in monosyllabic roots that never constitute a morphological (or phonological) word by themselves, as seen in (318)–(319).

- (317) PM *-*e*, *-*é-l* ‘thorn’ > Mk 3 *l-i?* || Ni -*e?*(-*k*) || PCh 3 **hl-é?*(*-*l*) || PW *-*l-e*
- (318) PM *-*ka*, *-*ká-l* ‘tool, skillful person’ > Ni -*tsa?*(-*k*) || PCh *-*ká?*(*-*l*) ||
PW *-*k^ja*, *-*k^já-l^h*
- (319) PM *[*ji*]må ‘to sleep’ > Mk [*i*]ma? || Ni [*ji*]må? || PCh *[?i]må? || PW *[?i]må
- (320) PM *-*ó*(*-*l*) ‘penis’ > Ni -*o?*(-*k*) || PCh *-*ó?*(*-*l*) || PW *-*l-ó*(*-*l^h*)
- (321) PM *-*wó*(*-*ts*) ‘worm’ > Ni -*βo?*(-*s*) || PCh *-*wó?*(*-*s*) || PW *-*wó*(*-*s*)
- (322) PM *-*w(t)s'é*(*-*l*) ‘belly’ > Ni -*βts'e*(-*k*) || PCh *-*ts'é?*(*-*l*) || PW *-*ts'é*(*-*l^h*)
- (323) PM *-*xa*, *-*xá-l* ‘price’ > Ni -*fa?*(-*k*) || PW *-*ha*, -*há-l^h*
- (324) PM *-*ʔi*(*-*l*) ‘liquid, juice’ > Mk 3 *l-i?*(-*l*) || Ni -*ʔi?*(-*k*) || PCh *-*ʔi?*(*-*l*) ||
PW *-*t-í*(*-*l^h*)

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7.1.1.10 Consonant clusters

Nivaâle is fairly conservative with regard to the consonant clusters of Proto-Mataguayan. Very few PM clusters have apparently become illicit in Nivaâle.

The sound change $^*(-)nj > n$ is instantiated by two examples.

- (325) PM $^*-nji'x$ ‘smell’ > Mk $-nji'x$ || Ni $-ni'ʃ$ || PCh $^*-níh$ || PW $^*-niχ$
 (326) PM $^*njánxte?$ ‘tapeti rabbit, cavy’ > Mk $nijaxti?$ || Ni $nánxate$ || PCh $^*náhåte?$
 || PW *náte

The sound changes $^*tts > ts$ and $^*qk > k$ are found in one example each; the simplification /tts/ > /ts/ does operate in Nivaâle as a synchronically active process, as in $βa-tseβte$ ‘one’s tooth’, from $βat-$ and $-tseβte$ (Seelwische 2016: 294).

- (327) PM $^*(-)háqke?$ ‘well’ > Mk $haqqi'ř$ ‘river’ || Ni $-xáke$ ‘dry well’ || PCh $^*-háåke?$ ‘artificial well’
 (328) PM $^*låttsiki-ju'k$ ‘willow’ > Mk $lattsiki-ju'k$ || Ni $klåtsiki-juk$

The sound change $^*wh > x$ is known from only one root.

- (329) PM $^*-whá'ja?$ ‘spouse’ > Mk $-whe'je?$ || Ni $-xa'ja$ || PCh $^*-hwá'ja?$
 (330) PM $^*[t]wha'já-'$ ‘to marry’ > Mk $[te]whe'je-j$ || Ni $[t]xa'ja-'$ || PCh $^*[t]hwa'jé<j?$ || PW $^*[t]wháje<j>$

In one example, the cluster $^*χw \sim ^*hw$ yielded Ni $xiβ$.

- (331) PM $^*X_{23}wé'lah$, $^*X_{23}wé'la-ts$ ‘moon’ > Ni $xiβe'la(-s)$ || PCh $^*wé'lah$, $^*wé'la-s$ || PW $^*wé'lah$

The cluster $kφ$ is licit word-medially, as in $ji-kφij$ ‘my shoe’, but not word-initially, where PM *kφ yielded Ni kx .

- (332) PM $^*kφáts'i(?)$ ‘Molina’s hog-nosed skunk’ > Ni $kxats'i$ || PCh $^*k^ohwáts'i?$

Some clusters, including at least two triconsonantal clusters, underwent the insertion of a *a*. Known examples involve the clusters *nxt , *stw , and *tl , which yielded $nxat$, $staβ$, and $takl$.

- (333) PM $^*njánxte?$ ‘tapeti rabbit, cavy’ > Mk $nijaxti?$ || Ni $nánxate$ || PCh $^*náhåte?$
 || PW *náte
 (334) PM $^*stwú'n$, $^*stwún-its$ ‘king vulture’ > Ni $staβu'n$, $staβun-is$ || PCh $^*?stíu'n$,
 $^?stíun-is$ || PW $^?istíwin$

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- (335) PM **tlú’k* ‘blind’ > Ni *taklú’k* || PCh **t^olúk* || PW **tilúk^w*

Note that *a*-epenthesis is a synchronically active strategy for triconsonantal clusters in the language. The epenthesis of Ni *a* is seen in the third-person possessive and the second-person active prefixes. Both surface as a syllabic *ɬ*- before simplex onsets (336) or as a regular *ɬ*- before vowels (337), but as *ɬa-* before consonant clusters (338) (Gutiérrez 2015b: 59, 62, 230–231).

- (336) a. *ɬ-t’óx*
3SG-aunt
'his/her aunt'
- b. *ɬ-klí’ʃ*
3SG-word
'his/her word'
- c. *ɬ-pé’ja*
2SG-listen
'you listen'
- (337) a. *ɬ-åse*
3SG-daughter
'his/her daughter'
- b. *ɬ-ám*
2SG-come
'you come'
- (338) a. *ɬa-kté’tf*
3SG-grandfather
'his/her grandfather'
- b. *ɬa-ɸxúx*
3SG-toe
'his/her toe'
- c. *ɬa-ktʃá?*
2SG-paddle
'you paddle'

Finally, there are further changes involving *x* and *ʃ* in the environment #_C in some Nivaclé dialects. These will be discussed in greater detail in §7.2.5.

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7.1.2 Vowels

Nivaâle is quite conservative with regard to the vowels of Proto-Mataguayan, with the only major innovation being the unconditional merger of **a* and **ä* as Ni *a* (see §3.3 for examples of the sound change PM **ä* > Ni *a*). Before labials, PM **å* is sometimes reflected as Ni *a*, though the inverse development is also found; as discussed in §7.2.1.3 below, these apparently irregular correspondences may have in fact originated after the dialectal diversification of *Nivaâle* as a result of dialectal borrowing.

- (339) PM **n-åm* ‘to arrive’ > Mk *n-am* || Ni *n-am* || PCh **n-åm* || PW **<n>åm*
- (340) PM *-åp ‘to cry’ > Mk *-ap* || Ni *-ap* || PCh *[*j*]åp
- (341) PM *-åpil ‘to return thither’ > Mk [*w*]apil || Ni [β]apek || PCh *[*j*]åpil || PW *[*j*]åpil^h
- (342) PM *[*j*]åp’ä(?)t ~ *[*j*]åf’ä(?)t ‘to burn’ > Ni [*j*]ap’at || PCh *[*j*]åp’et || PW *[*j*]åp’et
- (343) PM *-fåpå-ke? ‘shoulder blade’ > Ni -fåpå-ke || PCh *-hwopó-ke?
- (344) PM **xnáwå’p* ‘spring’ > Mk *xinawa’p* || Ni *snåβåp* ~ *snåβåp* || PCh **náwop* || PW **náwop*

Another minor innovation involving vowels is that the sequence PM *éwV is reflected as oβV in *Nivaâle*.

- (345) PM **néwo(?)k* ‘wild manioc’ > Ni *noβok* || PCh (?) **n[?]wák* || PW **néwok^w*
- (346) PM **téwo(?)k* ~ **téwå(?)k* ‘river’ > Ni *toβok* ~ *toβåk* || PCh **téwok* ~ **téwåk* || PW **téwok^w*

7.1.3 Word-level prosody

The stress system of *Nivaâle* inherits some of the properties reconstructed for Proto-Mataguayan in Chapter 4. A synchronic analysis of the *Nivaâle* stress system is offered by Gutiérrez (2015b), who attributes the superficial patterns to systematic regularities of three types. Specifically, she argues that tautosyllabic sequences of the type V? behave as heavy and attract stress; that the language has a number of edge-alignment constraints whereby prosodic foot domains align with the left edge or with the right edge, depending on the morphological category; and that syllables of the structure /CVC/ constitute degenerate feet. Let us examine the former two regularities in their relation with Proto-Mataguayan.

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7.1.3.1 Trochaic stress pattern as a remnant from Proto-Mataguayan

The first generalization – that tautosyllabic sequences of the type *V?* are heavy in Nivaâcle – is meant to account for the fact that although most disyllabic underived words receive final stress in the language (and are thus iambic), some receive initial stress (and are thus trochaic), and there is a strong correlation between the presence of a */?* in the initial syllable and the trochaic stress pattern. The following examples are from Gutiérrez (2015b: 162–163, 168).

- (347) a. *sât'â* 'cactus fruit'
 b. *?itâx* 'fire'
 c. *k'akxó* 'armadillo'
 d. *nuksítʃ* 'manioc'
 e. *finβó?* 'honey'
 f. *k'utxá'n* 'thorn'
 g. *kú'kten* 'thunder'
 h. *tâ?łâs* 'pot'
 i. *jó?nis* 'fox'
 j. *βé?la* 'one'

There are, however, several exceptions to this generalization, which are not explicitly discussed by Gutiérrez (2015b). In a handful of disyllabic roots, stress falls on the initial syllable despite the absence of */?*, at least for some speakers.⁴ The following examples are from Gutiérrez (2015b: 38, 267) and Campbell et al. (2020: 36).

- (348) a. *?óφo* 'dove'
 b. *t-áse* 'her/his daughter'
 c. *nú?u* 'dog'
 d. *=k'ója* 'for, before'

The cognates of the former three stems in Chorote all have initial stress, reflecting the trochaic accent pattern of Proto-Mataguayan: PCh **?óhwo?* 'dove',

⁴Stell (1987: 150, 189, 205) documents forms such as *?oφó* 'dove', *nu?ú* 'dog', *=k'ojá* (no gloss), suggesting that the position of the stress may be different for some speakers. Analía Gutiérrez (personal communication, 2021) confirms that there is interspeaker variation in this regard. It is straightforward to assume that the less common trochaic pattern is conservative, and that the iambic pattern attested in Stell (1987) is an innovation.

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**hl-áse?* ‘her/his daughter’, **nú?uh* ‘dog’. The fourth one also occurs with initial stress when prefixed: PCh *-kójá? ‘for’. It is, therefore, tempting to assume the trochaic accent of PM is preserved in disyllables that end in a vowel in Nivaçle. By contrast, PM disyllables reconstructed as trochaic appear to have innovated final stress in Nivaçle: to the best of our knowledge, no variants with initial stress have been attested in any published source for nouns such as *snaβáp* ‘spring’, *φináx* ‘crab’, *nájíf* ‘path’, *noβók* ‘wild manioc’, *βosók* ‘butterfly’, *?ítáx* ‘fire’ (Gutiérrez 2015b: 40, 163, 271, 273, 304, 319), even though their Proto-Mataguayan etyma are reconstructed as trochaic: PM **xnáwáp* ‘spring’, **φinäχ* ‘crab’, **nájix* ‘path’, **néwok* ‘wild manioc’, **wósåq* ~ **wósák* ‘butterfly’, **?ítáχ* ‘fire’. Moreover, even some vowel-final roots are systematically documented with a final stress; examples include *t-aβá* ‘its flower’, *tf'etsé* ‘parrot’, *?ukl?á* ‘turtle dove’ (Gutiérrez 2015b: 38, 68, 110). We surmise that these nouns instantiate the type of variation discussed in footnote 4 and predict that they have trochaic variants at least in some dialect, something that can be tested in the future with native speakers of Nivaçle.

As for the correlation between the presence of a postvocalic /?/ and stress in Nivaçle, one is left wondering whether that could not be an epiphenomenal consequence of deglottalization in unstressed syllables, discussed in §7.1.1.8 above. Indeed, if the language allows for disyllabic stems that are lexically specified as trochaic, one could expect some of them to contain a /?/ after the vowel of the initial syllable (as in /kú?kten/, or perhaps /kú?klten/). This glottal stop makes it to the surface, because it occurs in an accented syllable. On the other hand, disyllabic stem with final accent can also contain an underlying /?/ after the vowel of the initial syllable, but the fact that it is located in the unaccented position is expected to prevent it from surfacing: compare Ni *φú?x* ‘it smells’ and *φux-k'é* ‘it stinks’ (Seelwische 2016: 138). This possibility will need to be kept in mind in future descriptions of the stress system of Nivaçle.

7.1.3.2 Edge-aligned foot construction

We have seen in §7.1.3.1 that the disyllabic roots with initial stress (trochees) of Proto-Mataguayan show a tendency of shifting the stress rightwards in Nivaçle, and in some dialects the erstwhile distinction may have been entirely erased in favor of the iambic pattern. This subsection presents additional evidence for an innovative pattern in Nivaçle, where iambic feet are constructed from right to left.

Gutiérrez (2015b) argues that different morphological categories are associated with different edge-alignment constraints in Nivaçle. More specifically, prosodic

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foot domains align with the right edge in words composed of bare roots (Root domain), or in words where roots are augmented by derivational suffixes (Morphological Stem 1), in which case iambic feet are built from the right edge of word. The following examples are from Gutiérrez (2015b: 165, 173); note that non-final syllables of the structure CVC constitute a degenerate foot, and the grave accent indicates secondary stress.

- (349) a. *tſa(xaní)* ‘wild boar’
 b. *?å(jintſé)* ‘pepper’
 c. *(pù?)(xaná)* ‘three’
 d. *(?åk)(xeklå)* ‘woman’
 e. *(sisé)* ‘cane’
 f. *si(se-tſát)* ‘cane field’ (‘cane’ + ‘plant group’)
 g. *(samük)* ‘feces’
 h. *(sàm)(ku-xíj)* ‘latrine’ (‘feces’ + ‘concave container’)

In words that contain prefixes and lack inflectional suffixes (Morphological Stem 2), the iambic foot is instead aligned with the left edge of the word. The following data are from Gutiérrez (2015b: 184, 186, 188–191, 195, 199–200). Note the coda deglottalization in the unparsed syllables in (350b), (350f), (350g), (350i), (350k), (350m), (350o), (350q), (350s), (350u), (350w). In (350n), by contrast, deglottalization affects the coda of the weak syllable in an iambic foot.

- (350) a. *(finβó?)* ‘honey’
 b. *(ji-ſín)βo* ‘my honey’
 c. *(?itáx)* ‘fire’
 d. *(?a-β-i)tåx* ‘your fire’
 e. *(ji-βí?)* ‘my rib’
 f. *(katsí)-βli* ‘our rib’
 g. *(βatá)-βli* ‘one’s rib’
 h. *(k’utxá^n)* ‘thorn’
 i. *(ji-k’út)xan* ‘my needle’
 j. *(xúk)* ‘firewood’
 k. *(ji-ká)-xuk* ‘my firewood’
 l. *(ji-tsó’s)* ‘my milk (inalienable)’
 m. *(ji-ká)-tsos* ‘my milk (alienable)’

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- n. (*ji-txó'k*) ‘my uncle’
- o. (*ji-ká*)-*txok* ‘my brother-in-law’
- p. (*ji-kt'é*[?]*tʃ*) ‘my grandfather’
- q. (*ji-ká*)-*kt'etʃ* ‘my father-in-law’
- r. (*ji-kt'é?*) ‘my grandmother’
- s. (*ji-ká*)-*kt'e* ‘my mother-in-law’
- t. (*βàt*)-(*saté*[?]*tʃ*) ‘one’s head’
- u. (*?a-sá*)*tetʃ* ‘your head’
- v. (*kàs*)-(*tini*[?]*ʃ*) ‘our necklace’
- w. (*?a-tí*)*nif* ‘your necklace’

Finally, the largest domain for stress assignment described in Gutiérrez (2015b) – the Morphological Word – is the one that encompasses inflectional suffixes, such as the nominal plural suffixes. The presence of such suffixes overrides the Morphological Stem 2 domain, defined by prefixes, and iambic feet are constructed, one again, from the right left edge of the word. The following examples are from Gutiérrez (2015b: 202–206).

- (351) a. (*t-åk-ås*) ‘her/his foods’
 b. *ji-(tat-ís)* ‘my thorns’
 c. *ji-(klif-áj)* ‘my words’
 d. *ji-t'i(kl-éj)* ‘my tears’
 e. (*ji-kò'ts*)(*xat-ís*) ‘my lands’
 f. (*ji-φè*)(*tats-ij*) ‘my roots/medicines’
 g. (*ji-på?*)(*kåt-åj*) ‘my hands’

The right-aligned footing pattern, described by Gutiérrez (2015b: 7) for the Root, Morphological Stem 1, and Morphological Word domains in Nivaâle, constitutes an innovation with regard to the left-aligned accent pattern of Proto-Mataguayan, as reconstructed in Chapter 4. For these morphological categories, the position of the Nivaâle stress and of the PM accent coincide in a handful of cases (see §4.2.1, §4.2.2, §4.3.1) but differ in others. The innovative pattern erases the distinctions that may have been present in PM, and is thus of no use for comparative reconstruction, even if its similarity with the right-aligned stress of Maká (§6.3) and Wichí (§9.1.3.2) is of note.

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Conversely, the left-aligned stress in the Morphological Stem 2 domain must reflect directly the left-aligned accent of Proto-Mataguayan. Recall that this pattern obtains in prefixed words, and almost all known Nivaclé prefixes go back to PM prefixes that lack an underlying accent.⁵ When such prefixes are followed by an unaccented monosyllabic root in Proto-Mataguayan, the word remains unaccented, as discussed in Chapter 4.2.1, and its Nivaclé reflex regularly receives default (final) stress: *ji-klíʃ* ‘my word’, *n-átf* ‘(that) s/he go away’, *?a-fá?* ‘your salary’.

- (352) a. **ji- + *-li'x* → **ji- li'x*
 b. **n- + *-äk* → **n-äk*
 c. **?a- + *-xa* → **?a-xa*

When unaccented prefixes are followed by an accented monosyllabic consonant-initial root or by a trochaic or unaccented disyllabic consonant-initial root, the accent regularly falls on the peninitial syllable in Proto-Mataguayan, as discussed in Chapter 4. In this case, Nivaclé retains the peninitial stress of Proto-Mataguayan: *ji-klés* ‘my children’, *ɻ-φájxo* ‘its charcoal’, *ji-φétas* ‘my root/medicine’.

- (353) a. **ji- + *-léts* → **ji-léts*
 b. **ɻ- + *φajxo?* → **ɻ-φájxo?*
 c. **ji- + *φétä'ts* → **ji-φétä'ts*

There are two combinations, however, where in our reconstruction prefixed words bear accent in a position other than non-peninitial in Proto-Mataguayan. One such combination arises when an unaccented prefix takes a non-moraic alloform before a vowel-initial trochaic root (354a), where the accent is initial. The

⁵We are aware of few exceptions. First of all, the PM etymon of the 1+2.POSS prefix *kats(i)=* probably was not a canonical prefix at all. Its Chorote cognate has a different function (1+2.P/S_P) and is invisible for the stress assignment rule, suggesting that PM **qats* was an enclitic or even an independent word, possibly a pronoun rather than a person index (otherwise it would be difficult to account for the difference between the functions of its reflexes in Nivaclé and Chorote). The second exception is the alienizing prefix *ka-*. It goes back to PM **qá-*, an accented morpheme that must have been phonologically independent in Proto-Mataguayan, just like its Chorote reflex. Be it as it may, in Nivaclé *ka-* is always preceded by a possessive person prefix; consequently, it is always stressed (just like its PM etymon), thus posing no difficulties for our analysis. Finally, the reflexive/reciprocal *(-βa('))t(-)* (as well as the indefinite possessor prefix *βat(-)*, which could be related to the reflexive/reciprocal prefix) is another possible candidate. Its Iyo'awujwa' and Manjui cognates are not prefixes but rather roots of independent prosodic words; in absence of a Wichí cognate it is impossible to determine whether its PM etymon was accented (**-wá't*) or not (**-wä't*).

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second combination is when an unaccented prefix is followed by an underlyingly iambic consonant-initial root, as in (354b) or (354c), in which case the accent is postpeninitial.

- (354) a. $^*t- + ^*-\acute{a}se?$ → $^*t-\acute{a}se?$ ‘her/his daughter’
 b. $^*ji- + ^*-\acute{k}itá?$ → $^*ji-\acute{k}itá?$ ‘my elder sister’
 c. $^*?a- + ^*-\acute{q}alá?$ → $^*?a-\acute{q}alá?$ ‘your leg’

In each case, there is evidence that Nivaâcle might in fact retain the Proto-Mataguayan accent pattern, thus violating the left-aligned pattern posited by Gutiérrez (2015b) for the Prosodic Word 2 domain. The Nivaâcle reflex of PM $^*t-\acute{a}se?$ ‘her/his daughter’ is attested as $t-\acute{a}se$ in Gutiérrez (2015b: 38), with initial stress. As for the postpeninitial accent pattern, although we have been unable to find the reflexes of forms such as $^*ji-\acute{k}itá?$ ‘my elder sister’ or $^*?a-\acute{q}alá?$ ‘your leg’ in sources that indicate stress explicitly,⁶ note that the final ? fails to deglottalize in Nivaâcle: $ji-tfita?$ ‘my elder sister’, $?a-kaklâ?$ ‘your leg’ (Seelwische 2016: 56, 103). This indicates that the Nivaâcle forms in question might retain the postpeninitial accent reconstructed for PM, a pattern unaccounted for by Gutiérrez (2015b): $ji-(tfitá?), ?a-(kaklâ?)$. This point needs to be clarified in future fieldwork with native speakers of Nivaâcle.

7.2 Innovations in Nivaâcle dialects

Gutiérrez (2015b: 7) reports at least three regional varieties of Nivaâcle as defined by linguistic criteria:

1. Chishamnee Lhavos (also known as the Arribeño, or Upriver dialect), spoken along the Pilcomayo River, from Fortín Magariños (to the west from Misión Esteros) in the southeast up to the Pedro P. Peña area (Paraguay) and Salta (Argentina) in the northwest (Stell 1987: 21–22);
2. Shichaam Lhavos (also known as the Abajeño, or Downriver dialect), spoken from Fortín Magariños up to the Missions of San José de Esteros and San Leonardo de Escalante/Fischat (Paraguay) (Stell 1987: 21–22);

⁶By saying this, we exclude Stell (1987), who attests final stress not only in the reflexes of these nouns, but also in multiple words where Gutiérrez (2015b) has documented non-final stress. That way, the variety of Nivaâcle described by Stell (1987) is not informative for the purposes of reconstructing PM prosody.

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3. and Yita' Lhavos (or the Bush dialect), whose zone lays to the north from the Chishamnee Lhavos area, entirely in Paraguay, reaching Mayor Infante Rivarola and approaching Mariscal Estigarribia, with speakers in the Mission of Santa Teresita.

Little is known about the defining characteristics of the dialects spoken by the Jotoi Lhavos (who live in the communities around Campo Loa, Paraguay) and the Tavashai Lhavos (who live north of San José de Esteros, and southeast of Filadelfia, close to the Mennonites colonies, also in Paraguay).

7.2.1 Reflexes of *å in Nivaclé dialects

The opposition between the back and non-back low vowels (*å and *a) is generally preserved in Nivaclé, except for certain (sub)dialects, where å may merge with a or o in specific environments.

7.2.1.1 Merger of a and å

The merger of å and a is found in the speech of many speakers of Nivaclé.

Most notably, Ni å and a are reported to have entirely merged as a in the variety spoken by the Yita' Lhavos (Gutiérrez 2015b: 37). According to one of Gutiérrez's (2015b) consultants, who works as a primary school teacher in Misión Santa Teresita (where the Yita' Lhavos variety is spoken), “the vowel [a] is only produced when reading texts at school or during mass, otherwise the [a] has replaced the [å] in everyday life”. The examples in (355), taken from Gutiérrez (2015b: 37–38), illustrate.

- (355) a. ShL *x-åk* ~ YL *x-ák* 'I go'
 b. ShL *tåjé'x* ~ YL *tajé'x* 'shaman'
 c. ShL *?a-łán* ~ YL *?a-łán* 'light!'
 d. ShL *xa-klá'p* ~ YL *xa-klá'p* 'I have (sb.) on my lap'
 e. ShL *?iná't* ~ YL *?iná't* 'water'
 f. ShL *toβåk* ~ YL *toβák* 'river'
 g. ShL *t-åse* ~ YL *t-ási* 'his/her daughter'

In addition to the Yita' Lhavos variety, Stell (1987: 534–535) reports that Shichaam Lhavos å corresponds to a in the speech of her Chishamnee Lhavos consultant from Las Vertientes (however, the same speaker is reported to produce å in some

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words where the Shichaam Lhavos tend to have *o*, on which see §7.2.1.2). Campbell et al. (2020: 8) also state that the merger is complete or “very advanced” for many (though not all) Chishamnee Lhavos. Stell (1987: 504, 507) gives the following examples.

- (356) a. ShL *t'aklå'k* ~ ChL *t'aklå'k* ‘weed’
 b. ShL *-klån* ~ ChL *-klan* ‘to kill’
 c. ShL *xokånåxå* ~ ChL *xokanaxa* ‘collared peccary’

That way, Proto-Nivaâle **å*, inherited from Proto-Mataguayan, is best preserved in Shichaam Lhavos and for some speakers of Chishamnee Lhavos in the default environment.

7.2.1.2 Merger of *å* and *o*

Above we have seen that Shichaam Lhavos is generally conservative with regard to Proto-Nivaâle **å*. In some words, however, it appears to be reflected as *o* in Shichaam Lhavos. In the same words, it fails to front to *a* in the Chishamnee Lhavos variety described by Stell (1987), as it usually does, on which see (356) above. Consider the following examples from (Stell 1987: 498, 504, 514, 517, 521), where *å* in the Chishamnee Lhavos dialect corresponds to *o* in Shichaam Lhavos.

- (357) a. ShL *βat-kåxoj-xajaf* ~ ChL *βat-kåxåj-xajaf* ‘one’s game, prey’
 b. ShL *xa-tsetxoj* ~ ChL *xa-tsetxåj* ‘I staked’
 c. ShL *k-’oxe’tf* ~ ChL *k-’åxe’tf* ‘I skinned’
 d. ShL *xa-tijox* ~ ChL *xa-tijåx* ‘I shoot’
 e. ShL *tfi-jo?xi* ~ ChL *tfi-jå?xi* ‘it is drunk’
 f. ShL *?inot* ~ ChL *?inåt* ‘water’
 g. ShL *noke* ~ ChL *nåke* ‘this’
 h. ShL *?ope’f* ~ ChL *?åpe’f* ‘therefore’

Sources other than Stell (1987) – including Gutiérrez (2015b), who has worked with speakers of Shichaam Lhavos – usually attest *å* in the cognates of these words (or *a*, for dialects that have lost **å* altogether), suggesting that the reflex *o* is restricted to specific subdialects of Shichaam Lhavos. We have been unable to identify the exact conditioning environment, but note that the target vowel is adjacent to *x* in most examples, including (357a)–(357e). The same environment appears to have prevented *å* from fronting to *a* in the subdialect of Chishamnee Lhavos described by Stell (1987).

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7.2.1.3 Variation between *a* and *å* before labials

The Proto-Mataguayan distinction between **å* and **a* appears to have blurred before labial consonants in Nivaclé, with most varieties showing *a* as the reflex of both Proto-Mataguayan vowels. Consider the following examples of Proto-Mataguayan roots that are unequivocally reconstructed with PM **å*, yet most Nivaclé varieties, including the conservative Shichaam Lhavos dialect, show *a* in its place according to our sources.⁷

- (358) PM **n-åm* ‘to arrive’ > Mk *n-am* || Ni *n-am* || PCh **n-åm* || PW **<n>åm*
- (359) PM *-*åp* ‘to cry’ > Mk *-ap* || Ni *-ap* || PCh **[j]åp*
- (360) PM *-*åpil* ‘to return thither’ > Mk *[w]apil* || Ni *[β]apek* || PCh **[j]åpil* || PW **[j]åpil^h*

One exception is the Central Paraguayan subdialect of Chishamnee Lhavos, spoken by one of the co-authors of [Campbell et al. \(2020\)](#). In that variety, **å* is the only low vowel found before labial consonants: *n-åm* ‘s/he arrives’, *x-åp*=‘in I cry’, *β-åpek* ‘s/he returns thither’.

Yet in other cases, PM **å* before labials is reflected as Ni *å*, sometimes in variation with *a*. The nature of variation in such cases is in all likelihood dialectal, though this is not explicitly stated in our sources. In the following examples, the Nivaclé reflexes are cited as they most commonly appear in our sources, but note that the verb in (361) is attested not only as *-ap'at*, but also as *-åp'at*, as in the first-person reflexive *xa-βank-åp'at* ([Seelwische 2016](#): 47), or even as *-å?p'åt*, as in *t-å?p'åt-xan* ‘s/he burns cháguar’ ([Campbell et al. 2020](#): 111). Conversely, the noun in (368) is usually attested with a back vowel ([Gutiérrez 2015b](#): 254, 277), but some sources give a form with a non-back vowel (*?aɸte'k*), which is probably characteristic of the Pilcomayeño subdialect of Chishamnee Lhavos ([Campbell et al. 2020](#), [Stell 1987](#): 125).

- (361) PM **[j]åp'ä(')t* ~ **[j]åφ'ä(')t* ‘to burn’ > Ni *[j]ap'at* || PCh **[j]åp'e^t* || PW **[j]åp'e^t*
- (362) PM **låp'ih* ~ **låφ'ih* ‘snail’ > Ni *klåp'i* || PCh **låp'ih*
- (363) PM **[ji]tå'm* ‘to defecate’ > Mk *<i>tå'm* || Ni *[ji]tå'm* || PCh **[?i]hlå'm* || PW **[t]<a>tå'm*

⁷An anonymous reviewer notes that the vowel in question can be pronounced as [a] in these examples, suggesting that extra documentation with special attention to the dialectal variation is needed in order to fully describe the reflexes of low vowels before labials in Nivaclé.

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- (364) PM *-támte?(*-ts) ‘daughter-in-law’ > Ni -támte<?e>(-s) || PCh *-támte?(*-s)
- (365) PM *-táwā’x, *-táwxä-ts ‘(abdominal) cavity’ > Mk -tawe’x, -tawxe-ts || Ni -tāβa’s, -tāβxa-s || PCh *-tóweh || PW *-tóweχ
- (366) PM *xnáwā’p ‘spring’ > Mk xinawa’p || Ni snaβáp ~ snáβáp || PCh *náwop || PW *xánwop
- (367) PM *[[j]áfti(?)t ‘to spin’ > Mk [j]afti(?)t || Ni [j]áfti^t
- (368) PM *?áfte’l ‘orphan’ > Mk afti’l || Ni ?áfte’k

As for Proto-Mataguayan *a and *ä before labials, they are mostly reflected as Ni a, sometimes in variation with å. In (372), å is the only option attested. In (374), the reflex *snaβáp* is attested by Stell (1987: 111, 395) and Gutiérrez (2015b: 40, 64), whereas the reflex *snáβáp* is attested by Stell (1987: 180), Fabre (2014: 118, 304), Gutiérrez (2015b: 53), Seelwische (2016: 244), and Campbell et al. (2020: 127). One can conclude that the former likely represents the Shichaam Lhavos variety, whereas the latter is typical of the Chishamnee Lhavos variety. In Yita’ Lhavos, the reflex is expectedly *snaβap* (Gutiérrez 2015b: 50), because that variety lacks the phoneme /å/ altogether. By contrast, the Central Paraguayan subdialect of Chishamnee Lhavos is reported to display an å in such cases, as in *t-åβå* ‘its flower’ (Campbell et al. 2020: 73).

- (369) PM *-äɸ, *-ɸä-ts ‘wing’ > Mk 3 t-ef, t-e-f-e-ts || Ni -aɸ, -<a>ɸa-s || PCh *-hw-é̄s> || PW *-t-ex^w
- (370) PM *-áwå(?) ‘flower’ > Ni -aβå || PCh 3 *hl-áwo? || PW *-t-áwo
- (371) PM *n-ap’u ~ *n-aɸ’u (~ *-á- ~ *-ú) ‘to lick’ > Ni n-ap’u || PCh *[?i]<n>áp’u? || PW *<n>ap’u ~ *<n>áp’u ~ *<n>ap’úh
- (372) PM *-ɸapá-ke? ‘shoulder blade’ > Ni -ɸápå-ke || PCh *-hwopó-ke?
- (373) PM *lama(h) ~ *läma(h)(*-m) ‘to be smooth’ > Mk le:me, leme-m || Ni klama<m>
- (374) PM *xnáwå’p ‘spring’ > Mk xinawa’p || Ni snaβáp ~ snáβáp || PCh *náwop || PW *xánwop
- (375) PM *(?)wawo(h)(*-l) ‘maned wolf’ > Mk wowo (-l) || Ni βaβo (-k)
- (376) PM *?ám?åh, *?ám?å-ts ‘rat’ > Ni ?am?å (-s) || PCh *?ám?ah ~ *?ám?åh, *?ám?a-s ~ *?ám?å-s || PW *?áma
- (377) PM *?áp’a(?)χ ~ *?áɸ’a(?)χ ‘jararaca’ > Ni ?ap’ax || PCh *?áp’ah
- (378) PM *?áwu(C)tseχ ‘peccary’ > Ni ?aβuktsex ~ ?aɸoktsex || PCh *?áwusah || PW *?áwutsaχ

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In conclusion, Nivaçle preserves the distinction between *a and *ä in a very unsystematic way before labial consonants, with the exceptions being too numerous to be ignored. We tentatively attribute them to interdialectal borrowing, but the issue clearly needs further research.

7.2.2 Variation between *ji* and *i*

Stell (1987: 534–535) states that the sequence *ji* may optionally lose the approximant *j* in the speech of most of her Shichaam Lhavos consultants (except for one consultant from San Leonardo/Fischat, who consistently has *ji*), whereas her consultant from the Chishamnee Lhavos group has only the *j*-less variant in his speech. More recently, Campbell et al. (2020: 49) reported that the sequence *ji* – not only word-initially, but in any position – may optionally lose the approximant *j* in the Chishamnee Lhavos variety, especially in its riverine subdialect (spoken along the Pilcomayo River) and in non-careful speech.

Stell (1987: 173, 498, 514, 521, 531) gives the following examples.

- (379) a. ShL *ji-* ~ ChL *i-* ‘1.POSS’
b. ShL *jita?* ~ ChL *ita?* ‘forest’
c. ShL *jitſatxuł* ~ ChL *itſatxuł* ‘four’
d. ShL *jite'x* ~ ChL *ite'x* ‘grass’
e. ShL *?ojintſe-j* ~ ChL *?ointſe-j* ‘peppers’

No such variation concerns instances of *?i* that lack an underlying /j/, as in *?itåx* ‘fire’, which never appears as **jitåx*.

7.2.3 Variation between *C'βu* and *C?u*

Campbell et al. (2020: 50) report that the sequence *C'βu* loses the approximant *β* (represented as *w* in the cited work) in the subdialect of Chishamnee Lhavos spoken in Central Paraguay:

- (380) a. ChL-Pi *s'βuklax* ~ ChL-Py *s?uklax* ‘anteater’
b. ChL-Pi *k-'a-s'βun* ~ ChL-Py *k-'a-s?un* ‘I love you, I want you’

7.2.4 Delateralization before Ni *?*

In all Nivaçle dialects, an entirely productive rule delateralizes *kl̩* to *k* in codas as a result of a sound change (see §7.1.1.4). Diachronically, the sound change

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in question also applied within morphemes, and consequently sequences of the type **kl̩C* are not found anywhere in the lexicon of Nivaâle with one exception: namely, the cluster *Ni kl̩?* is licit in most dialects morpheme-internally, as in *?ukl̩?a* ‘dove’ (from PM **?úllâh*). At morpheme boundaries, *kl̩* is delateralized to *k* in all dialects even before a ?, with the resulting cluster *k+?* expectedly yielding *k*.

In the variety spoken by the Yit'a Lhavos, however, the sequence *Ni kl̩?* is entirely illicit. Erstwhile **kl̩* changes to *k* both within morphemes and at morpheme boundaries in that dialect (Gutiérrez 2015b: 7, 227–228), resulting in the sound correspondence between Yit'a Lhavos *k* and Shichaam/Chishamnee Lhavos *kl̩?*, as shown in (381) (Gutiérrez 2015b: 227–228).

- (381) a. YL *?uk'á* ~ ShL *?ukl̩?á* ‘dove’
 b. YL *ji-φák'u* ~ ShL *ji-φákl̩?u* ‘my brother-in-law’
 c. YL *ji-φák'a* ~ ShL *ji-φákl̩?a* ‘my nephew’

7.2.5 Variation before Ni *sC-* and *fC-*

Stell (1987: 534–535) reports that the word-initial cluster *sC-* is found in the speech of her consultant from Las Vertientes (speaker of Chishamnee Lhavos) and – in variation with *fC-* – of one consultant from the Mission of San Leonardo/Fischat (speaker of Shichaam Lhavos), whereas her other Shichaam Lhavos-speaking consultants from San Leonardo/Fischat and San José de Esteros use exclusively *fC-*. This correspondence is found in items such as *sklåkxaj* ~ *fklåkxaj* ‘wild cat’ and *st(a)-* ~ *ft(a)-* ‘1+2.A/S_A’. The form *sklåkxaj* is attested as a variant alongside *fklåkxaj* in Gutiérrez (2015b: 231), who worked with speakers of Shichaam Lhavos and Yita' Lhavos. Only the forms *sklåkxaj* and *ft(a)-* are attested in Campbell et al. (2020), who deal with the Chishamnee Lhavos dialect.

From a diachronic point of view, the pattern discussed in this subsection is rather surprising: comparative data show that the variant with *s* is more conservative in words such as *sklåkxaj* ~ *fklåkxaj* ‘wild cat’, but the variant with *f* is apparently more conservative in *st(a)-* ~ *ft(a)-* ‘1+2.A/S_A’. It is therefore unclear whether the sound correspondence in question results from only one post-Proto-Nivaâle sound change or whether various sound changes with different directionalities have occurred in different Nivaâle dialects.

7.2.6 Shichaam Lhavos *i* and Chishamnee Lhavos *e*

Stell (1987: 124–125, 162, 498, 504, 514, 521, 526) documents the correspondence between *i* in the Shichaam Lhavos dialect and *e* in the Chishamnee Lhavos di-

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alect.

- (382) a. ShL *t-’åxi-tse* ~ ChL *t-’åxe-tse* ‘its scale’
 b. ShL *-xpik* ~ ChL *-xpek* ‘shadow’
 c. ShL *t-pik* ~ ChL *t-pe*k ‘s/he returns hither’
 d. ShL *nikxo’k* ~ ChL *nekxo’k* ‘boy’
 e. ShL *kifam* ~ ChL *ketfam* ‘upwards’
 f. ShL *nijåtsits* ~ ChL *niåtsetf* ‘maize chicha’

The same correspondence is found in the plural suffix *-is* in some nouns; Gutiérrez (2015b: 276–277) considers the vowel in question epenthetic.

- (383) a. ShL *jinkåp-ís* ~ ChL *inkåp-és* ‘years’
 b. ShL *kotsxat-ís* ~ ChL *kotsxat-és* ‘lands’

In this case, too, it is difficult to establish whether the sound correspondence in question results from only one post-Proto-Nivaçle sound change or whether various sound changes with different directionalities operated in different Nivaçle dialects. Note that in (382b) it is the variant with *e* that seems to be archaic, judging by the cognates in other Mataguayan languages, whereas in (382c) and in the plural suffix *-is* it is the variant with *i* that must represent a retention. The issue requires further investigation.

7.2.7 Sporadic vowel raising in Yita’ Lhavos

Gutiérrez (2015b: 38) reports that in some specific words Yita’ Lhavos shows a high vowel where other varieties have a mid one:

- (384) a. YL *tʃitʃí* ~ ShL *tʃetʃé* ‘parrot’
 b. YL *keklejtsí* ~ ShL *keklejtsé* ‘bean’
 c. YL *nìkxaké* ~ ShL *nèkxåké* ‘girl’
 d. YL *fijå* ~ ShL *fejå* ‘bat’ (example from Seelwische 2016)
 e. YL *kutsxá’t* ~ ShL *kotsxá’t* ‘earth’

7.2.8 Realization of /ij/

In their description of the Shichamnee Lhavos variety of Nivaçle, Campbell et al. (2020: 73) state that the rhyme *ij* is pronounced as [i:], as in *nijxåj* ‘ropes, strings’, *?antʃanij* ‘listen to me!’ (phonetically [ni:xqj], [?antʃanji:]). This may account

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for the fact that some of our sources, such as [Seelwische \(2016\)](#), often represent the sequence in question simply as *i*. In this book we use only the representation *ij*.

7.2.9 Intervocalic ejectives

[Gutiérrez \(2015b: 54\)](#) explicitly states that, at least in her data, “the glottal stop can occur before all consonants except before another glottal stop or an ejective”. However, in [Campbell et al.’s \(2020\)](#) description one often finds sequences of the type *?C* corresponding to ejective consonants in other sources:

- (385) a. ChL *n-a?p’u* ~ other *n-ap’u* ‘s/he licks’
b. ChL *?a?p’ax* ~ other *?ap’ax* ‘jararaca’
c. ChL *na?p’uk* ~ other *nap’uk* ‘salty’
d. ChL *-p’i?k’o* ~ other *-p’ik’o* ‘heel’

We believe that [?] is hardly phonological in such cases: its presence more likely reflects a difference in the relative timing of the articulatory gestures involved in the production of intervocalic ejective, whereby the obstruction of the airflow in the glottis initiates before the supraglottal constriction reaches its maximum. We know of no clear minimal pairs involving the purported *?C* sequences and ejective stops.

7.2.10 Progressive vowel assimilation

[Campbell et al. \(2020: 10, 317\)](#) note that the Pilcomayeño subdialect of Chishamnee Lhavos lacks the progressive translaryngeal vowel assimilation process, which is pervasive in the Central Paraguayan subdialect of Chishamnee Lhavos and has also been attested by [Gutiérrez \(2016c\)](#), who worked with speakers of Chishaam Lhavos and Yita’ Lhavos. For example, the imperfective suffix *-?in* is reported to surface as *-?en*, *-?an*, *-?ån* when preceded, respectively, by an *e*, *a*, or *å* in some varieties of the language ([Gutiérrez 2016c: 339–340](#)), whereas the Pilcomayeño subdialect of Chishamnee Lhavos knows no such process.⁸

- (386) ChL-Pi *xa ?j-at’o-?in* ~ other *xa ?j-at’o-?on* ‘I yawned’

⁸Note that in addition to the progressive translaryngeal vowel assimilation, which operates across an underlying glottal stop, Nivaâle also has a process of regressive vowel assimilation, which operates across an epenthetic glottal stop ([Gutiérrez 2016c: 340–341](#)). The latter process apparently occurs in all dialects, including Chishamnee Lhavos ([Campbell et al. 2020, Stell 1987: 167–168](#)).

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- (387) ChL-Pi *ji-jałp'o-ʔin* ~ other *ji-jałp'o-ʔon* 's/he/it drowned'

The Pilcomayeño subdialect of Chishamnee Lhavos also lacks the allomorphy pattern whereby the antipassive suffix *-xan* surfaces as *-xun* after the vowel *u* (Campbell et al. 2020: 10).

- (388) a. ChL-Pi *xaj-u'klu-xan* ~ other *xaj-u'klu-xun* 'I roast'
 b. ChL-Pi *xaj-aklapxu-xan* ~ other *xaj-aklapxu-xun* 'I pile, I stack'

Stell (1987) documents only the allomorphs with *u* in such cases, whereas Fabre (2014: 48) claims the assimilation is optional.

8 Chorote

This chapter deals with the historical phonology of Chorote [chor1274].

§8.1 discusses the development of PM consonants, vowels, and prosody from the PM stage to Proto-Chorote. §8.2 is concerned with the diversification of the Chorote varieties.

For the Iyojwa’aja’ variety, spoken in Argentina, there is a detailed vocabulary by [Gerzenstein \(1979\)](#), a dictionary by [Drayson \(2009\)](#), grammatical descriptions by [Gerzenstein \(1978\)](#) and [Carol \(2014b\)](#), and a detailed description of its phonology by [Carol \(2014a\)](#). For the Iyo’awujwa’ variety, also spoken in Argentina, there is a grammatical description and a vocabulary by [Gerzenstein \(1983\)](#). [Scarpa \(2010\)](#) documents multiple terms for plant species in Iyojwa’aja’ and Iyo’awujwa’. For Manjui, spoken in Paraguay, there is a dictionary by [Carol \(2018\)](#), which includes a morphological sketch, and [Carol’s \(forthcoming\)](#) paper on phonological and phonetic issues (recall that our use of the term “Manjui” excludes variety of San Eugenio/San Agustín, see §1.1.3). In addition to these sources, we rely on Carol’s field notes on all three varieties of Chorote, particularly on Iyojwa’aja’ and Manjui.

The consonantal inventory we assume for Proto-Chorote is given in Table 8.1. Note that **hw* and **hl* are analyzed as complex segments due to their distributional properties,¹ whereas other similar combinations (**ht*, **hj*, **hm*, etc.) are treated as clusters. In coda position, however, */hw/* and */hl/* are realized as **ɺ* and **ɭ*, respectively, with significant gestural overlap. The vocalic inventory we assume for Proto-Chorote includes six vowel phonemes, */i e a ə o u/*; the seventh vowel, reconstructed as **ø*, was an intrusive (nonphonemic) vowel.

Individual Chorote lects, however, show drastically different inventories. Their consonant systems lack a velar–uvular distinction; palatalized velars are opposed to plain velars instead. Many other palatalized consonants have arisen by means

¹Treating them as complex segments rather than clusters allows to explain the existence of forms such as *Ijw ɻinhlés* ‘one’s children’ or *ɻinhwés* ‘one’s wing’ without postulating complex onsets or codas. The two-phase realization is especially noticeable after a stressed vowel, where an intrusive “echo vowel” often appears, as already noticed by [Gerzenstein \(1983: 24–26\)](#); see also [Carol \(2014a: 80\)](#) for acoustic data. For example, *Ijw tähle* ‘comes from (a distant place)’ usually surfaces as [tahăle?].

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Table 8.1: Proto-Chorote consonants

	labial	dental	alveolar	velar	uvular	glottal
plain stops	*p	*t		*k	*q	*?
ejective stops	*p'	*t'	*ts'	*k'	*q'	
fricatives			*s			*h
plain approximants	*w	*l		*j		
glottalized approximants	*w'	*l'		*j'		
preaspirated approximants	*hw	*hl				
plain nasals	*m	*n				
glottalized nasals	*m'	*n'				

of palatalization processes, but their synchronic phonological status is disputed. The contemporary Chorote lects no longer retain *å as a speech sound (IPA *[a]), though [Carol \(2014a\)](#) does posit an underlying distinction between /a/ and /å/ for Iyojwa’aja’ based on their behavior. In all contemporary lects, /i u e o/ have lowered allophones in certain contexts, and in some cases the lowered allophones of /i u/ are phonetically very close to the default (non-lowered) allophones of /e o/.

8.1 From Proto-Mataguayan to Proto-Chorote

This section deals with the development of PM consonants (§8.1.1), vowels (§8.1.2), and prosody (§8.1.3) from the Proto-Mataguayan stage to Proto-Chorote.

8.1.1 Consonants

The historical development of the PM consonants in Chorote includes the following sound changes: the sound change PM *ts > PCh *s (§8.1.1.1), the merger of PM *k and PM *q in the coda position (§8.1.1.2), the unpacking of PM *ɸ and *ɬ to PCh *hw and *hl, respectively (§8.1.1.3), the merger of the fricatives PM *χ, *χ̥, and *h > PCh *h or *hw in certain environments (§8.1.1.4), the change of word-initial PM *ji- to PCh *yi- (§8.1.1.5), the insertion of *?[?] word-finally after vowels and *j (§8.1.1.6), the sporadic glottalization of sonorants in some words (§8.1.1.7), the glottal dissimilation (§8.1.1.8), the deglottalization of glottalized non-sonorant codas (§8.1.1.9), the fortition of glottalized fricatives (§8.1.1.10), and the evolution of syllabic consonants (§8.1.1.11). The evolution of Proto-Mataguayan consonant clusters is described in §8.1.1.12 (for clusters whose second element is a guttural fricative) and §8.1.1.13 (for all other clusters).

8.1 From Proto-Mataguayan to Proto-Chorote

8.1.1.1 PM *ts

Proto-Mataguayan *ts yielded PCh *s in both onsets and codas, thus merging with PM *s. In the contemporary varieties of Chorote, the pronunciation of its default reflex varies between [s], [xs], and [hs] whenever preceded by a vowel, as detailed in §8.2.2.11.

- (1) PM *ɸátsu(?)χ, *ɸátshu-ts ‘centipede’ > Ni φatsux, φatsxu-s || PCh *(h)wásuh, *(h)wásu-s || PW *x^wátsux^w
- (2) PM *-ɸálits ‘daughter-in-law, sister-in-law’ > Mk -felits || Ni -ɸaklís<?a>‘sister-in-law’ || PCh *-hwélis‘daughter-in-law’
- (3) PM *(-)ɸétä’ts ‘root’ > Mk fitets || Ni -ɸeta’s || PCh *-hwétus || PW *(?)x^wétes
- (4) PM *ɸtsána(?)χ ‘suncho (*Baccharis sp.*)’ > Ni φtsánax || PCh *sánah || PW *x^witsánax
- (5) PM *ɸts-u’k ‘palm (*Copernicia alba*)’ > Mk fits-uk || Ni φts-u’k || PCh *hwis<úk> || PW *x^wits<uk^w>
- (6) PM *jijá’ts ‘dew’ > Mk ije’ts || Ni jija’s || PCh *iijés-tah || PW *iijás
- (7) PM *-kéjåts (m.), *-ké(j)tså-ts (pl.) ‘grandchild’ > PCh *-kéjås, *-kétsås || PW *-k^jéjås, *-k^jétsås
- (8) PM *k(?)utsá(?)X₁₂ ~ *k(?)utsé(?)χ ‘cháguar (*Bromelia hieronymi*)’ > PCh *k’usáh || PW *k’utsáχ
- (9) PM *(-)k’útsa^jχ, *(-)k’útsha-ts ‘old’ > Mk k’utsa^jχ, k’utshe-ts || Ni k’utsa^jχ, k’utsxa-s || PCh *-k’úsah, *-k’úsa-s || PW *-k^jútsax
- (10) PM *lätsen-u’k ‘chañar plant’ > Mk <xu>letsin-u’k || PCh *léseni-k || PW *létsen-uk^w
- (11) PM *-léts ‘offspring’ > Mk -lits || Ni -k^jles || PCh *-lés || PW *-lés
- (12) PM *(-)lútse^jχ, *(-)lútsxe-ts ‘bow’ > Ni klutsef/-klutse^jf, (-)klutsfe-s || PCh *(-)lúseh (*-es) || PW *(-)lútseχ, *(-)lútse-s
- (13) PM *níltsa(?)X₁₂, *níltsX₁₃a-ts ‘white-lipped peccary’ > PCh *<?ih>nílsah, *<?ih>nílsa-s || PW *nítsaχ, *nítsha-s
- (14) PM *pátse(?)χ ‘fast, quick’ > Ni pátsex || PCh *(-)pásah
- (15) PM *páttseχ ‘jabiru’ > Ni pátsex || PCh *pátsáh || PW *pátsáχ
- (16) PM *qati’ts, *qatits-él ‘star’ > Ni kati’s || PCh *qatés, *qates-él || PW *qates, *qatéts-él^h
- (17) PM *-qátsile(?) (*-j^h) ‘guts’ > PCh *-qásile-j^h || PW *-qásle-j^h
- (18) PM *qatsíwo(?) ‘limpkin’ > PCh *qasíwo<?oh> || PW *qatsíwo

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- (19) PM *-tátse?(*-j^h) 'eyelash' > Mk -tetsi?(-j) || Ni -tátse (-j) || PCh *-táse?(*-j^h)
- (20) PM *-tä(')ts, *-täts-él 'trunk, base' > PCh *-tés (*-el) || PW *-tes, *-téts-el^h
- (21) PM *-täts-u^hk, *-täts-ku-j^h 'trunk' > Ni -tats-uk, -tas-ku-j || PCh *(-)tés-uk, *-tés-ku-j^h
- (22) PM *(-)tútse(')χ 'smoke' > PCh *(-)túsah || PW *(-)tútsaχ
- (23) PM *-(i)ts 'PL' > Mk -(i)ts || Ni -(i)s || PCh *-(í)s || PW *-(í)s
- (24) PM *ts- 'that (within the speaker's sight)' > Mk ts- || PCh *sé? || PW *=tsoh 'that (moving away)'
- (25) PM *tsaqaq ~ *-ä- 'plant (sp.)' > Mk tseqeq || Ni tsakak
- (26) PM *tsåhåq (*-its) 'chajá bird' > Mk tsahaq (-its) || PCh *såhåk, *såhåq-es ~ *såhåq-is || PW *tsåhåq
- (27) PM *[ji]tså(')j 'to spill' > PCh *[?i]såj? || PW *[?i]tsåj
- (28) PM *tsänú'k 'duraznillo trees' > Ni tsanu'k || PCh *sinúk || PW *tsinúk^w
- (29) PM *tsémłå(')k ~ *tsämłå(')k 'silk floss tree' > PCh *sémlåk || PW *tsémłåk^w
- (30) PM *tséχ-APPL 'full (river)' > Ni tsex-APPL || PCh *-sáh || PW *tsáχ-APPL
- (31) PM *tsópha(?) 'fruit of a shrub (*Lycium americanum*)' > PCh *sóhwa? || PW *tsóx^wa(?)
- (32) PM *tsóna(?) 'red brocket' > PCh *tsóna? || PW *tsó'nah
- (33) PM *wátshan ~ *wátsχan 'to be healthy, alive' > Ni βatsxan || PCh *wásá'n || PW *wátshan
- (34) PM *-ʔaqhu'ts ~ *-ʔaqhú'ts 'knee' > Mk -aqhu'ts || Ni -(?a)kxu's || PCh *-ʔaqús
- (35) PM *ʔáwu(C)tseχ 'peccary' > Ni ʔaβuktsex ~ ʔaβoktsex || PCh *ʔáwusah || PW *ʔáwutsaχ
- (36) PM *(?a)X₁₃útsa(')χ, *(?a)X₁₃útsha-ts 'crested caracara' > Ni xutsax, xutsxa-s || PCh *(?a)húsah, *(?a)húsa-s || PW *yahútsaχ, *yahútsha-s
- (37) PM *ʔál(V)tse(')χ, *ʔál(V)tse-ts 'cháguar (*Deinacanthus urbanianum*)' > Ni ʔåktsex, ʔåktse-s || PCh *ʔál^hsah, *ʔál^hse-s || PW *yahútsaχ
- (38) PM *ʔåtits ~ *-í- ~ *-e- ~ *-é- 'wild pepper' > Mk atits || PCh *ʔåtés

The Iyojwa'aja' reflexes suggest that the deaffrication may have failed to apply between a *j and a vowel. We propose that Proto-Chorote */s/ was articulated as *[ts] in that environment, and reconstruct PCh *'[n]ájtsi? 'to feel disgust' and *-kéjtsås 'grandchildren' (underlying representations: */n-ʔájsi/, */-kéjsås/).

8.1 From Proto-Mataguayan to Proto-Chorote

8.1.1.2 PM *k, *q, and their glottalized counterparts

This subsection deals with the development of Proto-Mataguayan *k(’) and *q(’) in Proto-Chorote.

The Proto-Chorote reflexes of these sounds in the onset position are represented in this book as *k(’) and *q(’), respectively. It is in fact likely that PCh *k(’) was articulated as a prevelar stop (IPA [k^h]) in onsets, since contemporary Chorote lects show palatalized reflexes in a development shared with Wichí: [k^j] (§8.2.2.2) for the plain stop and [k^{j’}] or [ʔ^j] (§8.2.2.5) for the ejective stop. In addition, [k^h(’)] is still a usual realization of the reflex of PCh *k(’) in Manjui before [e], and before in all Chorote lects before [i]. We do not reconstruct PCh *k and *k’ as *k and *k’, respectively, because these phonemes were subject to the so-called first palatalization, which applied independently across the differentiated Chorote lects (§8.2.1.1). Similarly, we propose that PCh *q(’) was articulated as uvular, even though its reflexes in the daughter lects are sometimes articulated as velar in the contemporary varieties of Chorote (therefore, the velar/uvular contrast is no longer existent in contemporary Chorote). Reconstructing a uvular value for PCh *q(’) helps to account for its failure to undergo the first palatalization in the contemporary Chorote varieties (§8.2.1.1) and for the lowering effect it causes in the preceding vowels (§8.2.3.6). Also note that in early loanwords from Spanish /k/ is rendered as modern *k^j* (from PCh *k) rather than *k* (from PCh *q), as in Ijw *wák'a* from Spanish *vaca* [βaka] ‘cow’ (Carol 2014a: 101, fn. 37).

In a number of cases, however, Proto-Mataguayan *k is reflected as PCh *q.² This is likely regular when PM *k occurs as part of the cluster *kh word-medially, as in (39), possibly due to the fact that *k may still have been syllabified as a coda when the merger of *k and *q took place (see below in this subsection; later on, clusters of the shape *Ch typically underwent metathesis; see §8.1.1.12).³ In other examples, Proto-Mataguayan *k is backed to *q before the vowel PCh *u.

- (39) PM *-kha ‘demonstrative base’ > Mk -khe || PCh *-hqa?
- (40) PM *[t]kú'j-APPL ‘to vomit’ > Mk [t]<’e>kuj(i)-kij || Ni [t('a)]ku'j-APPL || PCh *[t^o]qúj-^on || PW *[t]k^j'új-APPL

²We do not include the pair PCh *taqám ~ PW *ták'am ‘pacu fish’, where in addition to the anomalous correspondence PCh *q ~ PW *k^j one finds a mismatch between the placement of the accent. These words are likely related via borrowing and are not true cognates.

³We do not rule out the possibility that the cluster *kh should also be reconstructed in the Proto-Mataguayan terms for ‘wild cat’ (PM *sláqhaj in our current proposal) and ‘fog’ (PM *xnáqhaj in our current proposal), which could allow including the Maká homonyms *xunkhaj* ‘wild cat’ and *xunkhaj* ‘fog’ into the respective etymologies (in our current proposal, both are tentatively considered loans from Nivaclé). In both cases, one finds PCh *hq and PW *qh, which could hypothetically be considered regular reflexes of PM *kh and not only PM *qh.

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- (41) PM ${}^*kúj-hat$ ~ ${}^*kúj-et$ ‘vomit’ > Ni $-kuj$ -*et* || PCh *qu -*h**j*-*at* || PW ${}^*k'új$ -*hat*
- (42) PM $[ji]kún-han$ ‘to feed’ > Mk $[j]$ -*e*-*kun-hen* || Ni $[ji]kun-xan$ || PCh $[?i]quhn-an$ || PW $[?i]k'ún-han$

This exceptional development is not shared with Wichí, and the backing of PM *k before *u cannot be viewed as regular, because numerous counterexamples are known. Compare especially (43) with its causative (42).

- (43) PM *kun ~ *kún ‘to eat.INTR’ > Ni $<tsak>kun$ || PCh ${}^*[t^o]<?já>kun$

There is also a very rare correspondence between Ijw k' and I'w/Mj k , which is attributed to PCh *kw in this book. This cluster goes back to PM ${}^*k\phi$ and will be discussed in §8.1.1.13.

In the coda position, PM *k and *q merged in Proto-Chorote. It is unclear whether the resulting sound was articulated as velar or uvular; we symbolize it as PCh *k .

- (44) PM *aq , ${}^*qá-ts$ ‘food’ > Mk $-aq$, $-qa-ts$ || Ni $-åk$, $-kå-s$ || PCh *åk , $-qå-s$ || PW ${}^*t-åq$, *qå -*s*
- (45) PM ${}^*aje'k$ ~ ${}^*ajé'k$ ‘honey comb’ > Ni $-aje'tf$ || PCh ${}^*q-ájek$
- (46) PM 1 ${}^*h-åk$, 2 ${}^*t-äk$, 3 $[j]ik$; CISL ${}^*n-äk$ ‘to go away’ > Mk 1 $h-ak$, 2 $t-ak$, 3 ik ; CISL $n-ek$ || Ni 1 $x-åk$, 2 $t-åk$, 3 $[j]itf$; CISL $n-atf$ || PCh 1 $?åk$, 2 $hl-ék$ || PW 2 ${}^*t-eq$, 3 $[j]iq$; CISL ${}^*n-eq$
- (47) PM $(-)fetek$ ~ ${}^*éte-$ ~ ${}^*eté-$ ‘mortar’ > Mk $(-)fitik$ || Ni $-fetetf$ || PCh $(-)hwVhlek$ || PW ${}^*x^wéteq$
- (48) PM $[ji]phi'k$ ~ $[ji]phi'k$ ‘to hide’ > Ni $[ji]phi'tf$ || PCh $[?i]hwík$
- (49) PM ${}^*fts-u'k$ ‘palm (*Copernicia alba*)’ > Mk $fits-uk$ || Ni $fts-u'k$ || PCh ${}^*hwis<úk>$ || PW ${}^*x^wits<uk^w>$
- (50) PM ${}^*ti'k$ ~ ${}^*tí'k$, ${}^*tí-j^h$ ‘thread’ > Ni $-ti'tf$, $-ti-j$ -*is* || PCh *hlík , ${}^*hlí-j^h$
- (51) PM ${}^*tu'k$, ${}^*tú-j^h$ ‘yica bag, load’ > Mk $-tu'k$, $-tu-j$ || Ni $-tu'k$ || PCh *hlúk , ${}^*hlúj...$ || PW ${}^*tuk^w$, ${}^*tú-j$ -*is*
- (52) PM ${}^*má'k$, ${}^*mhá-j^h$ ‘powder, flour’ > Ni $-må'k$, $-mxå-j$ || PCh *måk || PW ${}^*mók^w$, ${}^*mhó-j^h$
- (53) PM *muk , ${}^*mhu-j^h$ ‘feces’ > Mk $-i>muk$, $-i>mhu-j$ || Ni $(-)sa>muk$, $(-)sa>mxu-j$ || PCh ${}^*-<?já>muk$ || PW ${}^*-<?já>muk^w$, ${}^*-<?já>mhu-j^h$
- (54) PM ${}^?mók$ (*its) ‘zorzar bird (*Turdus sp.*)’ > Mk mok ($-its$) || Ni mok ($-is$) || PCh ${}^?mók$ (*is)

8.1 From Proto-Mataguayan to Proto-Chorote

- (55) PM **néwo*(?)*k* ‘wild manioc’ > Ni *noβok* || PCh (?) **n^awák* || PW **néwok^w*
- (56) PM *(*-nijåk*, *(*-nijhå-j^h*) ‘rope, cord’ > Mk (*-nijak*, (*-nijha-j*) || Ni *-nijåk*, *-nijxå-j* || PCh **nijåk*, **nijhå-j^h* || PW **nijåk^w*, **nijhå-j^h*
- (57) PM *-*p'o'k* ~ *-*ɸ'o'k* ‘fence’ > Ni *-p'o'k* || PCh *-*p'ók* || PW *-*p'ok^w*
- (58) PM *-*qáwa*(?)*q* ‘belt, band’ > PCh *-*qáwak* || PW *-*qáwaq*
- (59) PM **tänúk* (*-its) ‘feline’ > Mk *tenuk* (-its) || Ni *tanuk* (-is) || PCh **tinúk* (*-is)
- (60) PM **téwo*(?)*k* ? ~ **téwå*(?)*k* ‘river’ > Ni *toβok* ~ *toβåk* || PCh **téwok* ~ **téwåk* || PW **téwok^w*
- (61) PM **títe*(?)*k*, **títhe-j^h* ‘plate’ > Ni (-*titetʃ*, (-*titxe-j*) || PCh **títek*, **tíhte-j^h*
- (62) PM **tlú'k* ‘blind’ > Ni *taklu'k* || PCh **t^olúk* || PW **tilúk^w*
- (63) PM *-*txo'k* ~ *-*txó'k* ‘uncle’ > Mk *-txo'k* || Ni *-txo'k* || PCh *-<i>tók || PW *-<wi>thok^w
- (64) PM **tsåhåq* (*-its) ‘chajá bird’ > Mk *tsahaq* (-its) || PCh **såhåk*, **såhåq-es* ? ~ **såhåq-is* || PW **tsåhåq*
- (65) PM **tsänú'k* ‘duraznillo trees’ > Ni *tsanu'k* || PCh **sinúk* || PW **tsinúk^w*
- (66) PM *-*(j)uk* ‘tree (suffix)’ > Mk *-(j)uk* || Ni *-(j)uk* || PCh *-*(j)uk* || PW *-*(j)uk^w*
- (67) PM *-*wå'k* ‘bad mood’ > Mk *-wak* || Ni *-βå'k* || PCh *-*wåk* || PW *-*wåk^w*
- (68) PM **wäk* ‘all’ > Mk *we:k* || Ni *-βatʃ* || PCh *-*wæk* || PW *-*weq*
- (69) PM *-*xäte'k*, *-*xäthe-j^h* ‘head’ > Ni *-fate'tʃ*, *-satxe-s* || PCh *-*hétek*, *-*héhte-j^h* || PW *-*t-éteq*, *-*t-éthe-j^h*
- (70) PM **xpå'k* ~ **xpå'k* ‘straw’ > Mk *xupa*(?)*k* ? ~ *xupek* || Ni *xpå'k* || PCh **?ipåk*
- (71) PM **X₁₃ó'k* ‘palo santo (*Bulnesia sarmientoi*)’ > Ni *xo'k* || PCh **hók* || PW **hók^w*
- (72) PM *-*X₁₃u'k*, *-*X₁₃ú-j^h* ‘firewood’ > Ni *-xu'k*, *-xu-j* || PCh **(ʔitåh)-huk* || PW *-*huk^w*, *-*hú-j<is>*
- (73) PM *-*?a*(?)*q* ‘rope, cord’ > PCh *-*?ák* || PW *-*t-’aq*

It is often possible to determine whether PCh **k* in the stem-final position goes back to PM **k* or **q* by adding a vowel-initial suffix: instances of PCh **k* that go back to PM **k* expectedly resyllabify as PCh **k* (which yields *k^j* in the contemporary Chorote varieties), whereas those instances of PCh **k* that go back to PM **q* resyllabify as PCh **q* (which yields *k* in the contemporary Chorote varieties). In (74), this is shown for the Iyojwa’aja’ reflexes of PM **h-åk* ‘I went away’ and **t-åq* ‘her/his food’.

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- (74) Iyojwa'aja'
- ʔá-k 'I went away' / ʔá-k^j-e? 'then I went away'
 - hl-ák 'her/his food' / hl-ák-e 'with her/his food'

8.1.1.3 PM *ϕ and *t

Proto-Mataguayan *ϕ and *t unpack to PCh *hw and *hl, respectively, in onsets, and yield *m and *l, respectively, in codas, the latter being allophones of the former. The two-phase realization of PCh *hw and *hl is especially noticeable in the daughter languages after a stressed vowel, where an intrusive “echo vowel” often appears, as already noticed by Gerzenstein (1983: 24–26); see also Carol (2014a: 80) for acoustic data. That way, Ijw táhle? ‘comes from (a distant place)’ usually surfaces as [tahále?], and Ijw tóhwe ‘is far away from’ as [tóhówe].

Some examples illustrating the evolution of PM *ϕ follow. The major allophones represented in our notation include *hw (in onsets) and *m (in codas). (Gerzenstein 1983: 20–21) describes its pronunciation in onsets as varying between [f^w], [x^w], and [h^w] in Iyojwa'aja', whereas [x^w] is reported as the predominating allophone in Iyo'awujwa' and Manjui (in the latter variety, [f] and [x^w] are reported as rare variants). In our data, [hw] (or – less frequently – [xw]) is the default realization of /hw/ in onsets in all Chorote varieties, whereas before a pause /hw/ may surface as [w^m] or [wh] at least in Iyojwa'aja' (Carol 2014a: 87).

- (75) PM *-äϕ, *-ϕä-ts ‘wing’ > Mk 3 t-ef, t-e-fə-ts || Ni -aϕ, -<a>ϕa-s || PCh *-hw<és> || PW *-t-ex^w
- (76) PM *-ϕah, *-ϕa-ts ‘companion’ > Mk -fe (-ts) || Ni -ϕa (-s) || PCh *-hwah, *-hwa-s || PW *-x^wah, *-x^wa-s
- (77) PM *ϕajXo?, *ϕajXó-l / *-ϕájXo?(*-l) ‘coal’ > Ni (-)ϕajxo?(-k) || PCh *hwa(h)jo- || PW *x^wijho?(?), *x^wijhó-l^h / *-x^wíjho (*-l^h)
- (78) PM *-ϕá-[~]mat ‘disease’ > Mk <eq>fe-[~]met || Ni -ϕa-[~]mat || PCh *-hwá-[~]mat
- (79) PM *-ϕapá?(?) ‘shoulder’ > PCh *-hwopó? || PW *-x^wápo
- (80) PM *-ϕapá-ke? ‘shoulder blade’ > Ni -ϕápá-ke || PCh *-hwopó-ke?
- (81) PM *ϕa[~]t ~ *ϕá[~]t ‘fire’ > Mk fe[~]t || PCh *hwát
- (82) PM *ϕátsu(?)χ, *ϕátshu-ts ‘centipede’ > Ni ϕatsux, ϕatsxu-s || PCh *(h)wásuh, *(h)wásu-s || PW *x^wátsux^w
- (83) PM *[ji]ϕá[~]x ‘to cut down’ > Mk fex-inet-ki?*ax || Ni [ji]ϕa[~]f || PCh *[?i]hwáh-APPL || PW *[?i]x^wáχ

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- (84) PM **ɸaʔáj* ‘algarrobo fruit (*Prosopis alba*)’ > Ni *ɸaʔaj* || PCh **hwaʔáj?* || PW **xʷaʔáj*^h
- (85) PM **ɸaʔáj-u*^h*k*, **ɸaʔáj-ku-j*^h‘algarrobo tree (*Prosopis alba*)’ > Ni *ɸaʔaj-*<j>*uk* || PCh **hwaʔáj-uk*, **hwaʔáj-ku-j*^h || PW **xʷaʔáj-uk*, **xʷaʔá-k^ju-j*^h
- (86) PM *-*ɸájíx* ‘right’ > Mk *-fejíx*‘left’ || Ni *-ɸajíʃ* || PCh *-*hwíjah*
- (87) PM **[ji]ɸáł* ‘to tell’ > Mk *n(i)-fel-im* || Ni *n(i)-ɸak* / *n(i)-ɸakl-* || PCh **[?i]hwél* || PW **[?i]xʷél*^h / **[?i]xʷél-*
- (88) PM *-*ɸáłits* ‘daughter-in-law, sister-in-law’ > Mk *-felits* || Ni *-ɸaklís-?a*‘sister-in-law’ || PCh *-*hwélis*‘daughter-in-law’
- (89) PM *-*ɸáłu?*(*-ts*) ‘son-in-law, brother-in-law’ > Mk *-felu?*(*-ts*) || Ni *-ɸakl?**u*(*-s*)‘brother-in-law’ || PCh *-*hwílu?* ~ *-*hwélu?*(*-s*)‘son-in-law’
- (90) PM **ɸä́x* ~ **ɸä́x* ‘field’ > Ni *ɸáʃ* || PCh **hwéh*
- (91) PM **[ji]ɸä́jå?* ~ **ɸä́jå* ‘to fly’ > Ni *[ji]ɸä́jå* || PCh **[?i]hwé́jå?* || PW **xʷéjå?* ~ **w-* ~ **-i-*
- (92) PM *-*ɸełek* ~ *-*éle-* ~ *-*eté-* ‘mortar’ > Mk *(-)fitik* || Ni *-ɸełetʃ* || PCh *-*hwVhlek* || PW **xʷełeq*
- (93) PM *-*ɸétä*^h*ts* ‘root’ > Mk *fitets* || Ni *-ɸeta*^h*s* || PCh *-*hwétus* || PW *-*xʷétes*
- (94) PM **[ji]ɸíj* ~ **[ji]ɸíj* ‘not to be afraid’ > Ni *[ji]ɸíj* || PCh **[?i]hwíj?* || PW **[?i]xʷíj-eh*
- (95) PM **ɸíjá́t* ‘cold weather, south wind’ > Ni *ɸíjat* || PCh **hwíjét* || PW **xʷíjét*
- (96) PM **[ji]ɸík* ~ **[ji]ɸík* ‘to hide’ > Ni *[ji]ɸítʃ* || PCh **[?i]hwík*
- (97) PM **ɸílå*(*?*)*X₁₂* ‘pocote (*Solanum sp.*)’ > PCh **hwílåh* || PW **xʷílåχ*
- (98) PM *-*ɸíłan* ‘to dream’ > PCh **[?i]hwíłan* || PW **[t]xʷíłan*
- (99) PM *-*ɸíłä*(*?*)*k* ‘dream’ > PCh *-*hwíhlek* || PW *-*xʷíłeq*
- (100) PM **ɸínä*(*?*)*χ* ‘crab’ > Ni *ɸinax* || PCh **hwíneh*
- (101) PM *-*ɸółXán* ‘ankle’ > PCh *-*hwóhlán* || PW *-*xʷónhán*
- (102) PM *-*ɸom* ‘to throw, to push’ > PCh **[?i]hwóm-ah* || PW **[t]xʷom*
- (103) PM *-*ɸút* ~ *-*ɸú́t*, *-*ɸtú-ts* ‘flatulence’ > Mk *-ftu-ts* || Ni *-ɸút*, *-ɸtu-ts* || PCh *-*hwút*
- (104) PM *-*kífah*, *-*kífa-ts* ‘neighbor’ > Mk *-kife*(*-ts*) || Ni *-tſiqa*(*-s*) || PCh *-*kíhwah*, *-*kíhwa-s*

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- (105) PM *-k'älfaħ ‘spouse’ > Ni -tʃ'akfa || PCh *-k'élhwah || PW *-k^jéx^wah
- (106) PM *silóʔtāɸV [?] ~ *siwóʔtāɸe ‘Caatinga puffbird’ > PCh *silóʔtāhwV? || PW *siwótāx^we
- (107) PM *stáɸe(?) ‘Chaco chachalaca’ > PCh *ʔstáhwe? || PW *ʔistáx^we
- (108) PM *[ni]-tāɸä(?)l-APPL ‘to know, to be acquainted’ > Ni [ni]tāɸakl-APPL || PCh *[ʔi]tāhwel-APPL || PW *-tāx^wel-APPL/ *-tāx^wnh-APPL
- (109) PM *tiɸ ~ *tíɸ ‘to spend’ > Ni tiɸ || PCh *[ʔi]tíM
- (110) PM *ti^jɸ ‘to suck breast’ > Mk tu^jf/ -tu^jf || Ni ti^jɸ || PCh *[ʔi]tíM || PW *tip
- (111) PM *tsóɸa(?) ‘fruit of a shrub (*Lycium americanum*)’ > PCh *sóhwa? || PW *tsóx^wa(?)
- (112) PM *ʔaɸu ~ *ʔaɸú ‘woman’ > Mk eɸu || PCh *ʔahwú?
- (113) PM *[n]åɸé(?)t ~ *'[n]åɸä(?)t ‘to be ashamed’ > PCh *[n]åhwéł || PW *[?]<n>åx^wéł
~ *[?]<n>åx^wéł^h
- (114) PM *ʔóɸo? (*-ts) ‘pigeon’ > Mk ofo? (-l) || Ni ʔóɸo (-s) || PCh *ʔóhwo? (*-s)

The evolution of PM *t is exemplified below. Note that the Chorote sequence /hl/ is represented as t even in onsets by [Campbell & Grondona \(2007\)](#). [Campbell & Grondona \(2010: 628\)](#) further state that [hl], [xl], and [l] are innovative realizations found in the speech of younger Iyo'awujwa' speakers. We surmise that [Campbell & Grondona's \(2010\)](#) attestation of [t] in older speakers' speech reflects the pronunciation of individuals bilingual in Chorote and Wichí or Ni-vaclé, since in our data [t] occurs only as an allophone of /hl/ in coda position, and [hl] – or even [hVl] after stressed vowels, as stated above – is the default realization of /hl/, attested by Carol in old speakers' speech (more than 60 years old) in all varieties of Chorote. [Gerzenstein \(1978, 1979, 1983: 26\)](#) also documents it as [?]l or xVl (and not as [t]). Before a pause, /hl/ may surface as [ll] or [l] in Iyojwa'aja' ([Carol 2014a: 87](#)).

- (115) PM *[j]áɸ'ä(?)t ~ *[j]áɸ'ä(?)t ‘to burn’ > Ni [j]ap'ał || PCh *[j]áp'et || PW *[j]áp'et
- (116) PM *(-)ɸetłek ~ *-éte- ~ *-eté- ‘mortar’ > Mk (-)fiłik || Ni -ɸetłetʃ || PCh *(-)hwVhlek || PW *x^wéteq
- (117) PM *-ɸíłan ‘to dream’ > PCh *[ʔi]hwíłan || PW *[t]x^wíłan
- (118) PM *-ɸíłä(?)k ‘dream’ > PCh *-hwihlek || PW *-x^wíłeq
- (119) PM *-jáł ‘breath’ > Ni -jał || PCh *-jáł || PW *-jáł

8.1 From Proto-Mataguayan to Proto-Chorote

- (120) PM **kéłxa-ju'k*, **kéłxa-jku-j^h* ‘red quebracho’ > Mk *kełe-jku-* || Ni *tsełxa-juk*, *tsełxa-ku-j* || PCh **kéhla-juk* / **kéhla-jku-* || PW **k^jéł-juk^w*, **k^jéł-k^ju-j^h*
- (121) PM **[ji]kú'ł* ‘to answer’ > Mk *[j]<e>ku'ł* || Ni *[ji]ku'ł* || PCh **[?i]kúhl-APPL* || PW **[ni]k^júł*
- (122) PM **(-)lkä(?)ł* ‘nasal mucus, cold’ > Mk *-leke(?)ł* || PCh **kéł* || PW **k^jéł-tax_χ*, **k^jéł-ta-s*
- (123) PM **ła?* ‘this.F (within one’s hands’ reach)’ > Ni *ła?* || PCh **hla?*
- (124) PM **(-)ła?*, **(-)łá-ts* ‘louse’ > Mk *-ij>łe?(-ts)* || Ni *-ła?(-s)* || PCh **-hlá?(*-s)* || PW **ła?*
- (125) PM **[ji]łá'm* ‘to defecate’ > Mk *<i>łá'm* || Ni *[ji]łá'm* || PCh **[?i]hlá'm* || PW **[t]<a>łá'm*
- (126) PM **[ji]łán* ‘to light fire’ > Mk *[ni]łan-APPL* || Ni *[ji]łán* || PCh **[?i]hlán-APPL* || PW **[?i]łán-APPL*
- (127) PM **(-)łé(?)ł* ‘firewood’ > Mk *łit<u?>* || PCh **-<?a>hlét* ~ **-<?å>hlét* || PW **-łét*
- (128) PM **-li'k* ~ **-łí'k*, **-łí-j^h* ‘thread’ > Ni *-li'łf*, *-li-j<is>* || PCh **-hlík*, **-hlí-j^h*
- (129) PM **-tu'k*, **-łú-j^h* ‘yica bag, load’ > Mk *-tu'k*, *-tu-j* || Ni *-tu'k* || PCh **-hlúk*, **-hlúj-...* || PW **-łuk^w*, **-łú-j<is>*
- (130) PM **łum?a* ‘day’ > Ni *łum?a-* || PCh **hlúma?*
- (131) PM **łútsX₂₃a(?)* (*-jek) ‘girl’ > Ni *łutsxa* (-jetf) || PCh **hlúsa?(*-jek)* || PW **łútsha*
- (132) PM **náłu(h)*, **náłu-ts* ‘day, world’ > Mk *nełu(-ts)* || Ni *nału(-s)* || PCh **náhl<ikis>* ~ **náhl-ikis>* ‘midday’
- (133) PM **péła(?)j*, **péłaj-its* ‘rain’ > Mk *piłej(-its)* || PCh **péhlaj?* || PW **péłaj^h*, **péłaj-is*
- (134) PM **ta'ł* ‘to sprout’ > Mk *ta'ł* || Ni *ta'ł* || PCh **ta'ł* || PW **ta'ł*
- (135) PM **tiłå'x* ‘to carry on one’s shoulders’ > Mk *tiło'x* / *-liło'x* || Ni *tiłå'x* || PCh **[?i]tíhlåh* || PW **tiłåχ*
- (136) PM **-ti'ł* ‘to spin, to sew’ > Mk *[ji]tił* || Ni *ti'ł* || PCh **[j]<á>tił*
- (137) PM **tsémłå(?)k* ~ **tsámłå(?)k* ‘silk floss tree’ > PCh **sémhłåk* || PW **tsémłåk^w*
- (138) PM **[j]úłå(?)χ* ‘to be tired’ > Mk *-uła(?)χ* ‘breath’ || Ni *[j]ułåx* || PCh **[j]úhlåh*
- (139) PM **wánXåłåχ*, **wánXåłå-ts* ‘rhea’ > Mk *wałaχ* || Ni *βánxåłåx*, *βánxåłå-s* || PCh **wáñhlåh*, **wáñhlå-s* || PW **wá'ñtlåχ*, **wá'ñtlå-s*

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- (140) PM *-²wti? ~ *-²wtl?; *-²wtl-ts ‘rib’ > Mk -²we²ti? (-ts) || Ni -²βti / -²βti? (-s) || PCh *-hlí<s>
- (141) PM *-²wV²t ~ *-²wV²t ‘to climb’ > Mk we²t || Ni βå²t || PCh *[?i]²wút || PW *[t]²wut ~ *[t]²wút
- (142) PM *[t]’á²t ‘to ask’ > Ni [t]’a²t || PCh *[t]’á²t || PW *[t]’á²t
- (143) PM *-?a²lå(?) ‘fat’ > PCh *-?ahlå? || PW *-t-’a²lå(?)
- (144) PM *?á²tu(?) ‘iguana’ > Ni ?a²tu (-s) || PCh *?áhlu? (*-s) || PW *?á²tu
- (145) PM *²[n]åphé(?)t ~ *²[n]åphä(?)t ‘to be ashamed’ > PCh *²[n]åhwé²t || PW *²<n>åx^wé²t
? ~ *²<n>åx^wé²l^h
- (146) PM *-?út ‘to urinate’ > Mk u²t / -?u²t || Ni [j]u²t / -?u²t || PCh *[t]’út || PW *[t]’út
- (147) PM *-?útu(?) ‘urine’ > Ni -?u²tu || PCh *-?uhlu? || PW *-t-’útu
- (148) PM *?uwá²le(?)χ ~ *C’uwá²le(?)χ ‘puma’ > Ni <xum>p’uβa²lex || PCh *k’uwáhlah
|| PW *?owá²lax ~ *C’owá²lax

An exception arises when PM *t was syllabified as a nucleus in the protolanguage: in this case, one finds *h^o (see §8.1.1.11).

8.1.1.4 PM *h, *x and *χ

In most cases, Proto-Mataguayan *x and *χ yielded PCh *h both in onsets and codas, thus merging with PM *h. In the contemporary Chorote varieties, the reflexes of PCh *h are typically articulated as [h] or [x],⁴ except in certain environments where PCh *h is altogether lost (§8.2.2.7–8.2.2.10).

Some examples showing the default reflex of PM *x in Chorote follow.

- (149) PM *[j]ékpha²x ‘to bite’ > Mk [j]ikfe²x || PCh *[j]ókwah || PW *[j]ók^waχ
- (150) PM *[ji]φá²x ‘to cut down’ > Mk fex-inet-ki²ax || Ni [ji]φa²f || PCh *[?i]hwáh-APPL || PW *[?i]x^wáχ
- (151) PM *-φájí²x ‘right’ > Mk -fejí²x‘left’ || Ni -φaji²f || PCh *-hwíjah
- (152) PM *φä²x ~ *φä²x ‘field’ > Ni φa²f || PCh *hwéh

⁴Gerzenstein (1983) represents the phoneme in question as /x/ in all three contemporary varieties. (Carol 2014a: 79) notes that it patterns with /?/ in being transparent to a specific kind of vowel assimilation, but at the same time it also patterns with supraglottal consonants in being subject to palatalization. In this book, we follow (Carol 2014a) in conventionally representing the segment in question as /h/ in all Chorote varieties as well as in Proto-Chorote.

8.1 From Proto-Mataguayan to Proto-Chorote

- (153) PM **jixå*(?) ~ **jixå*(?) ‘to be true’ > Mk *ixa* || Ni *jixå?* || PCh **ʔihå*<wet>
- (154) PM **kowä*’x / *-*kówä*’x ‘hole’ > PCh **kowéh* / *-*kóweh* || PW **kjowex* / *-*kjóweχ*
- (155) PM *-*k’åxe*? (*-l) ‘arrow’ > Mk *-qaxi?* (-l) || Ni *-k’åxe* || PCh *-*k’åhe*? (*-l) || PW *-*k’åhe* (*-l^h)
- (156) PM *-*k’ínix*, *-*k’ínxi-ts* ‘younger brother’ > Mk *-k’ínix* || Ni *-tfinis* || PCh *-*k’ínih*, *-*k’ihni-s* || PW *-*k’íniχ*, *-*k’ínhis*
- (157) PM *[*ji*]lé’x ‘to wash’ > Mk [*ji*]lix-*uʔ*‘to clean’ || Ni [*ji*]kłe’ʃ || PCh *[*ʔi*]léh || PW *[*ʔi*]lléχ
- (158) PM *(*-lútse*)’x, *(*-lútsxe-ts*) ‘bow’ > Ni kłutseʃ / -kłutseʃ, (*-lútsxe*)s || PCh *(*-lúseh*) (*-es) || PW *(*-lútseχ*), *(*-lútse-s*)
- (159) PM *-*li*’x, *-*li*x-áj^h ‘language, word’ > Mk *-li*x-*e?* || Ni -*kli*’ʃ, -*kli*’ʃ-*aj* || PCh *-*li*h, *-*li*h-áj^h
- (160) PM *-*nji*’x ‘smell’ > Mk *-nji*’x || Ni *-ni*’ʃ || PCh *-*níh* || PW *-*niχ*
- (161) PM *(*-náji*)’x, *(*-nájx-aj*)^h ‘path’ > Ni *náji*’ʃ, (*-nájx-aj*) / -*náji*’ʃ || PCh *(*-nájih*), *(*-nájh-aj*)^h || PW *(*-nájiχ*), *(*-nájh-aj*)^h
- (162) PM *-*táwä*’x, *-*táwxä-ts* ‘(abdominal) cavity’ > Mk *-tawe*’x, *-tawxe-ts* || Ni *-tåβa*’ʃ, *-tåβxa-s* || PCh *-*tóweh* || PW *-*tóweχ*
- (163) PM **tiłå*’x ‘to carry on one’s shoulders’ > Mk *tiło*’x / -*tiło*’x || Ni *tiłå*’x || PCh *[*ʔi*]tíhlåh || PW **tiłåχ*
- (164) PM **ti*’x ‘to dig’ > Mk *ti*(*-*)*x-APPL* / -*ti*(*-*)*x-APPL* || Ni *ti*’ʃ || PCh *[*ʔi*]tíh-*ij?* || PW **tiχ*
- (165) PM *-*wä*’x, *-*w(ä)x-áj*^h ‘burrow; anus’ > Ni *-βa*’ʃ, -*βaf-aj*^h || PCh *-*wéh* || PW *-*wéχ*, -*wh-áj*^h
- (166) PM *²*wá*(*-*)*x*, *²*wáx-aj*^h ‘stagnant water’ > PCh **hl*-*a* ²*wáh* (*-*aj*^h) || PW *²*wáχ*, *²*wáh-aj*^h
- (167) PM *(*X₁₃on-*)*xa*’χ, *(*X₁₃on-*)*xáh-aj*^h ‘night’ > Mk *<na>xa*’χ || Ni *<xon>fa*’x, *<xon>fa*’x-*aj* || PCh **<?a>h<n>áh* ~ **<?å>h<n>áh* || PW **<hon>aχ*, **<hon>áh-aj*^h
- (168) PM *-*xäte*’k, *-*xäthe-j*^h ‘head’ > Ni *-fate*’ʃ, -*satxe-s* || PCh *-*hétek*, *-*héhte-j*^h || PW *-*t-éteq*, *-*t-éthe-j*^h
- (169) PM **xélå-ju*’k ‘tree (*sp.*)’ > Ni *sekłå-juk* || PCh **hél-ek* || PW **hél-ek*^w
- (170) PM *-*xä*’n(*e?*) ‘verbal plural (suffix)’ > Ni *-fa’ne?* / -*xa’ne?* || PCh *-*he’n*(*e?*) || PW *-*he’n*

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- (171) PM **xu(?)p* ‘grass’ > Mk *xup<’el>* || PCh **húp* || PW **hup*
- (172) PM **’áxa?* ‘stork’ > Mk *exe?* **maguari stock**’ || PCh **’áha?* **jabiru**’
- (173) PM *-*’åx* (*-*its*) ‘skin, bark’ > Mk -*’ax* (-*its*) || Ni -*’åx* (-*is*) || PCh *-*’åh*, *-*’åh-és* || PW *-*t-’åχ*, *-*t-’åh-és*

The following examples show the default reflex of PM *χ in Chorote.

- (174) PM **[j]åte(?)χ* ‘to be fat’ > Ni *[j]åtex* || PCh **[j]åtah* || PW **[j]åtax*
- (175) PM **phiñä(?)χ* ‘crab’ > Ni *phiñax* || PCh **hwíneh*
- (176) PM **fkéna(?)χ* ‘north wind, north’ > Ni *ftsenax* || PCh **hw³kénah*
- (177) PM **ftsåna(?)χ* ‘suncho (*Baccharis sp.*)’ > Ni *ftsåanax* || PCh **sånah* || PW **xʷitsåanax*
- (178) PM **{j/?}is{a/å/e}χ* ~ **{j/?}is{á/å/é}χ* ‘sand’ > Mk *isaχ* || PCh **?isáh* ~ **?isáh*
- (179) PM **[ji]k’åsaχ* ~ **[ji]k’åseχ* ‘to divide’ > Mk *[j]<a>k’esaχ* || PCh **[?i]k’ésah* || PW **[hi]k’ésax*
- (180) PM **k’ú(t)sta(?)χ*, **k’ú(t)sta-ts* ‘barn owl’ > Ni (?) *k’ustax*, *k’usta-s* ‘mockingbird’ || PCh **k’ústah*, **k’ústa-s* || PW **k’ústax*
- (181) PM **(-)k’útsaχ*, **(-)k’útsha-ts* ‘old’ > Mk *k’utsaχ*, *k’utshe-ts* || Ni *k’utsaχ*, *k’utsxa-s* || PCh *-*k’úsah*, *-*k’úsa-s* || PW *-*k’útsaχ*
- (182) PM **pátse(?)χ* ‘fast, quick’ > Ni *pátsex* || PCh **(-)pásah*
- (183) PM **påttséχ* ‘jabiru’ > Ni *pátsex* || PCh **påtsáh* || PW **påtsáχ*
- (184) PM **s’wúlaχ*, **s’wúla-ts* ‘anteater’ > Ni *s’buklax*, *sþukla-s* || PCh **s’úlah*, **s’úla-s* || PW **súlaχ*
- (185) PM *-*taχ*, *-*ta-ts* ‘pseudo-’ > Mk -*taχ*, -*te-ts* || Ni -*tax*, -*ta-s* || PCh *-*tah*, *-*ta-s* || PW *-*taχ*, *-*ta-s*
- (186) PM **tijåχ* ‘to shoot, to throw’ > Mk *tijaχ* / -*tijaχ* || Ni *tijåx* || PCh **[?i]tíjåh* || PW **tijåχ*
- (187) PM **(-)tútse(?)χ* ‘smoke’ > PCh **(-)túsah* || PW **(-)tútsaχ*
- (188) PM **tséχ-APPL* ‘full (river)’ > Ni *tsex-APPL* || PCh *-*sáh* || PW **tsáχ-APPL*
- (189) PM **[j]úłå(?)χ* ‘to be tired’ > Mk -*ułå(?)χ* ‘breath’ || Ni *[j]ułax* || PCh **[j]úhlåh*
- (190) PM **wánXåłåχ*, **wánXåłå-ts* ‘rhea’ > Mk *wałax* || Ni *βånxåłåx*, *βånxåłå-s* || PCh **wáñhlåh*, **wáñhlå-s* || PW **wá’nlåχ*, **wá’nlå-s*

8.1 From Proto-Mataguayan to Proto-Chorote

- (191) PM *($X_{13}on$ -) $xaχ$, *($X_{13}on$ -) $xáh-aj^h$ ‘night’ > Mk $<na>xaχ$ || Ni $<xon>faχ$, $<xon>faχ-aj$ || PCh * $<?a>h<n>áh$ ~ * $<?a>h<n>áh$ || PW * $<hon>aχ$, * $<hon>áh-aj^h$
- (192) PM * $xunxátax$ ‘tusca fruit’ > Mk $xunxetaχ$ || Ni $xunxataχ$ || PCh * $?ihnátaχ$ || PW * $xnhátaχ$
- (193) PM *($?a$) $X_{13}útsa(?)χ$, *($?a$) $X_{13}útsha-ts$ ‘crested caracara’ > Ni $xutsax$, $xutsxa-s$ || PCh *($?a$) $húsah$, *($?a$) $húsa-s$ || PW * $?ahútsaχ$, * $?ahútsha-s$
- (194) PM * $?áp'a(?)χ$ ~ * $?áφ'a(?)χ$ ‘jararaca’ > Ni $?ap'ax$ || PCh * $?áp'ah$
- (195) PM * $?áwu(C)tseχ$ ‘peccary’ > Ni $?aβuktsex$ ~ $?aβoktsex$ || PCh * $?áwusah$ || PW * $?áwutsaχ$
- (196) PM * $?aX_{13}áje(?)χ$ ‘mistol fruit’ > Ni $?axájex$ || PCh * $?ahájah$ || PW * $?ahájaχ$
- (197) PM * $?á'jteχ$, * $?á'jte-ts$ ‘to hurt’ > Mk $a?taχ$, $a?ti-ts$ || Ni $?á'jtex$ ~ $?á'βtex$ || PCh * $?áj?tah-APPL$, * $?áj?te-s-APPL$ || PW * $?ájtaχ$, * $?ájte-s$
- (198) PM * $?á'lá-taχ$, * $?á'lá-ta-s$ ‘Argentine boa’ > Ni $?á'klá-tax$, $?á'klá-ta-s$ || PCh * $?á'lá<ta>$ ~ * $?á'lá<ta>$, * $?á'lá<ta>-s$ ~ * $?á'lá<ta>-s$ || PW (?) * $lá<ta>$
- (199) PM * $?ál(V)tse(?)χ$, * $?ál(V)tse-ts$ ‘cháguar (*Deinacanthus urbanianum*)’ > Ni $?áktsex$, $?áktse-s$ || PCh * $?ál'sah$, * $?ál'se-s$ || PW * $?áletsaχ$
- (200) PM * $?ánhajeχ$ ‘wild bean (*Capparis retusa*)’ > Mk $anhejaχ$ || Ni $?ánxajex$ || PCh * $?ohnajah$ || PW * $?ánhjaχ$
- (201) PM * $?ásk'äla(?)χ$ ‘widower’ > Ni $?ást'aklax$ || PCh * $?ásk'élah$
- (202) PM * $?ítå(?)χ$, * $?ítå-ts$ ‘fire’ > Ni $?itåx$, $?itå-s$ || PCh * $?ítåh$, * $?ítå-s$ || PW * $?ítåχ$, * $?ítå-s$
- (203) PM * $?óna(?)χ$ ‘my brother’ > Ni $?onax$ || PCh * $?ónah$
- (204) PM * $?uwáte(?)χ$ ~ * $C'uwałe(?)χ$ ‘puma’ > Ni $<xum>p'uβałex$ || PCh * $k'uwałlah$ || PW * $?owátaχ$ ~ * $C'owátaχ$

After rounded vowels, special reflexes are found. In that position, PM * $χ$ changes to PCh * hw if a vowel follows, but to * h in the coda position.

- (205) PM * $n-åχ$ ‘to end up’ > Mk $n-aχ$ || Ni $n-åx$ || PCh * $<n>óhw-APPL$ || PW * $<n>ox^w$
- (206) PM * $φátsu(?)χ$, * $φátshu-ts$ ‘centipede’ > Ni $φatsux$, $φatsxu-s$ || PCh *(h) $wásuh$, *(h) $wásu-s$ || PW * $x^wátsux^w$
- (207) PM *[$?a]lóχ$, *[$?a]ló-ts$ ‘many’ > Mk $<o>lo<ts>$ || Ni $<?a>kłox$ || PCh *[$?a]łóh$ || PW * $<?a>ló<s>$
- (208) PM * $pätóχ$ ‘to be deep’ > Ni [$?a]patox$ || PCh *- $pítóhw<ij?>$ || PW * $pítóx^w$

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- (209) PM **tóχ-APPL*, **tó-ts-APPL* ‘far’ > Mk *-toχ-ij*, *to-ts-ij* || Ni *tox-APPL* || PCh **tóh(w)-APPL*, **tó-ts-APPL* || PW **tóχ^w-ej^h*
- (210) PM **wVχ*, **wV-ts* ‘large, fat’ > Ni *-βāχx* || PCh **wúh*, **wú-s* || PW **wúx^w*, **wú-s*
- (211) PM **?atuχ* ~ **?atúχ* ‘snake (sp.)’ > Ni *?atuχx* || PCh **?atúh*

In fact, **h* and **hw* alternate synchronically in such cases in Chorote, as the following examples show.

- (212) Iyojwa’aja’ (Drayson 2009: 152, 157)
- wúh* ‘it is big’ / *wúhw-a^m* ‘it is thick’
 - tʒh-* ‘it is high, tall’ / *tʒhw-e* ‘it is far’, *tʒhw-i?* ‘it is deep’
- (213) Manjui (Carol 2018)
- ?a-tʒh-?i^m* ‘I am far from’ / *?a-tʒhw-ej* ‘it is far from’, *?a-tʒhw-a^m* ‘s/he is far from’
 - wúh* ‘it is big’ / *wúhw-a^m* ‘it is thick’

By contrast, PM **x* changes to PCh */hw/ only after **u*, but not after **o*, and in this case it is irrelevant whether the segment in question is syllabified as an onset or a coda (in the latter case, the allophone **m* occurs). That way, PM **x* merges with PM **ɸ* when preceded by an **u*.

- (214) PM **tux* ‘to eat.TR’ > Mk *tux* / -*tux* || Ni *tux* || PCh *[*i*] *túm* || PW **tux^w*
- (215) PM *-*t’ox* ~ *-*t’óx* ‘aunt’ > Ni *-t’ox* || PCh *-<*i*>*t’óh* || PW *-<*wi*>*t’ox*

There is some evidence that suggests that word-initial guttural fricatives are deleted if the syllable is unstressed, as in the first-person active suffix PM **ha-*, whose Chorote reflex is PM **?a-*. If what follows is a rounded vowel followed by **n*, some modifications may take place: the unstressed sequence PM **X₁₃on-* is reflected as PCh **?än-* ~ **?an-*, as in (217)–(218), and the sequence PM **X₁₃un-* as PCh **?in-*, as in (219)–(221). Guttural fricatives are also deleted in word-initial consonant clusters, as discussed in §8.1.1.12.

- (216) PM **X₁₃ajá’wu*(?) [?] ~ **X₁₃ajáwu*(?) (*-*l*) ‘shaman’ > PCh **?ajá’wu?* (*-*l*) || PW **hajáwu*(?) (*-*l^h*)
- (217) PM **X₁₃on-xaχ* ‘night’ > Ni <*xon>faχx* || PCh *<*?a>h<n>áh* ~ *<*?a>h<n>áh* || PW *<*hon>aχ*

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- (218) PM **X₁₃on-X₂₃a*’*t* (*-its) ‘earth’ > PCh *<?a>h<n>át ~ *<?å>h<n>át (*-es) ||
|| PW *<hon>hat, *<hon>hát-es
- (219) PM **xunxátaχ* ‘tusca fruit’ > Mk *xunxetaχ* || Ni *xunfataχ* || PCh *?ihnátaḥ
|| PW *xnhátaχ
- (220) PM **xunxáta-(ju)*’*k* ‘tusca tree’ > Mk *xunxete-*’*k* || Ni *xunfata-juk* || PCh *?ihnáta-k
|| PW *xnháte-q
- (221) PM **xunxáta-kat* ‘tusca grove’ > Mk *xunxete-ket* || Ni *xunfata-tfat* || PCh *?ihnáta-kat

Guttural fricatives are also sometimes deleted in intervocalic position in unstressed syllables after vowels such as **a* and **o*. The following vowel is assimilated to the preceding low vowel, and the resulting vowel sequence is exceptionally not resolved by an automatic glottal stop (Chorote does not otherwise allow onsetless syllables).

- (222) PM *-á(-j^h)-xi?(*-l) ‘mouth’ > Mk -exi?(-l) || Ni -asi(-k) || PCh (?) *-á<aj?>
|| PW *-l-áj-hi (*-l^h)
- (223) PM *[?i]’jáXin ‘to watch’ > PCh *[?i]’jáan || PW *[?i]jáhin
- (224) PM *-k’óX₂₃te(?) (*-j^h) ‘ear’ > PCh *-k’óote?(*-j^h) || PW *-k^j’óte (*-j^h)

As a consequence of the intervocalic loss of guttural fricatives, Chorote shows synchronically active alternations between PCh **h* and zero at morpheme boundaries.

- (225) Iyojwa’aja’ (Carol 2014b)
- ?i-m^já-ji’n-e? /i-må-hajin-?e/
3.I.RLS-sleep-CAUS-APPL:punctual
‘s/he makes sleep’
 - ?i-’já-jihñ-i? /i-’jå-hajin-hi(j)/
3.I.RLS-drink-CAUS-APPL:inside
‘s/he gives to drink’
- (226) Iyo’awujwa’ (Gerzenstein 1983: 105)
- má-ju? /-ma-haju/
-sleep-DESID
‘to feel sleepy’

However, not all suffixes are subject to the *h*-loss: the *h* at the left margin of applicatives and some other suffixes is never deleted in Iyojwa’aja’. This is the case

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in the verbal plural or ‘downwards’ applicative suffix */-hen/*, the ‘inside’ applicative suffix */-hi(j)/*, and the locative/dative applicative suffix */-håm/*.⁵ Note that the PM etyma of these suffixes contain a velar fricative, which could be a coincidence or not (by contrast, the suffixes where *h* is lost after a low vowel go back to **h*-initial morphemes of Proto-Mataguayan, such as **=haju?* ‘desiderative’).

- (227) Iyojwa’aja’ (Carol 2014b)

- a. *?i-’já-ha?* ~ *?i-’já-he?* /i-’jå-hi(j)/
3.I.RLS-drink-APPL:inside
's/he drinks'

Another instance where **h* is preserved intervocally after a low vowel is at the left margin of roots (perhaps due to the fact that the syllable in question is typically stressed: PCh **?a-håáke?* ‘your ditch’, **?a-hétek* ‘your head’, **?a-hó?* ‘I go’) and at the right margin of suffixes when these are followed by a vowel, such as the Iyojwa’aja’ first-person plural active suffix *-ah-*, incompletive *-tah-*, and in the applicatives of the shape *-ah-* (either underlying or derived by translaryngeal assimilation).

8.1.1.5 PM **ji-*

The sequence PM **ji* is reflected as PCh **?i* in the word-initial position.

- (228) PM **jijá’ts* ‘**dew**’ > Mk *ije’ts* || Ni *jija’s* || PCh **?ijés-tah* || PW **?ijás*
- (229) PM **jiju’s* ~ **jijú’s* ‘**wax**’ > Ni *jiju’s* || PCh **?ijús*
- (230) PM **jinǻ’t*, **jinǻt-its* ‘**water**’ > Ni *jinǻ’t*, *jinǻt-is* || PCh **?i’nǻt* (**-es*) || PW **?inǻt* (**-es*)
- (231) PM **ji’no*, **ji’nó-l* ‘**man**’ > PCh **?i’nó?* (**-l*) || PW **hi’no*, **hi’nó-l^h*
- (232) PM **jixå(?)* ~ **jixå(?)* ‘**to be true**’ > Mk *ixa* || Ni *jixå?* || PCh **?ihå< wet >*

When followed by a glottalized consonant and a low vowel (PM **a* or **å*, but not **ä*), PM **ji* > **?i* changed to PCh **?a* word-initially (§8.1.2.4).

- (233) PM **ji’jå’X₁₂* ‘**jaguar**’ > Ni *ji’jå’x* || PCh **?a’jåh* || PW **ha’jåχ*
- (234) PM **ji’lå?*, **ji’lå-j^h* ‘**tree**’ > Ni *ji’kłå?* (-j) || PCh **?a’lå?* (**-j^h*) || PW **ha’lå*, **ha’lå-j^h*

⁵In Manjui, unlike Iyojwa’aja’, *h* is lost in such cases, as in *?i-’jé-ej?* ‘s/he drinks’, but this must be a post-Proto-Chorote development. Like in Iyojwa’aja’, the vowel that follows **h* regularly assimilates to the one that precedes it.

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- (235) PM **jit'å?*, **jit'å-l* ‘vulture’ > Ni *jit'å?(-k)* || PCh **?at'å?(*-l)* || PW **hat'å?(?)*

Word-medially, no change occurs.

- (236) PM *-*qéj-its* ‘costumes’ > Ni *-kej-is* || PCh *-*qéj-is* || PW *-*qéj-is*

- (237) PM *-*~wój-its* ‘blood.PL’ > PCh **(-)~wój-is* || PW *-*~wój-is*

8.1.1.6 *[?] -insertion

A glottal stop is inserted after word-final vowels and after the approximant **j* in Chorote, in stressed and unstressed syllables alike. The opposition *? vs zero is thus neutralized in Proto-Chorote word-finally. Carol (2014a: 85–89) argues that even synchronically the word-final instances of [?] in Iyojwa’aja’ are best analyzed as inserted, whereas words that phonetically end in a vowel or a non-glottalized sonorant actually end in an underlying /h/, which is deleted before a pause in unstressed syllables.

- (238) PM **n-ap'u~n-ap'uh* (~ *-á- ~ *-ú) ‘to lick’ > Ni *n-ap'u* || PCh *[?i]<*n>áp'u?* || PW *<*n>ap'u* ~ *<*n>áp'u* ~ *<*n>ap'uh*

- (239) PM *-*e*, *-*é-l* ‘thorn’ > Mk 3 *t-i?* || Ni *-e?(-k)* || PCh 3 **hl-é?(*-l)* || PW *-*t-e*

- (240) PM *-*éj(*-its)* ‘name’ > Mk *-ij(-its)* || Ni *-ej(-is)* || PCh *-*éj?(*-is)* || PW *-*t-éj(*-is)*

- (241) PM **pha?áj* ‘algarrobo fruit (*Prosopis alba*)’ > Ni *pha?aj* || PCh **hwa?áj?* || PW **xʷa?áj^h*

- (242) PM *[*ji*]*phä?jå?* **phä?jå* ‘to fly’ > Ni [*ji*]*phä?jå* || PCh *[?i]*hwé?jå?* || PW **xʷe?jå?* ~ **w-* ~ **i-*

- (243) PM *-*phqató(*-l)* ‘elbow’ > Ni -(?V)*phkato(-k)* || PCh *-*qató?(*-l)* || PW *-*qáto(*-l^h)*

- (244) PM **ji?no*, **ji?nó-l* ‘man’ > PCh **?i?nó?(*-l)* || PW **hi?no*, **hi?nó-l^h*

- (245) PM *-*ka*, *-*ká-l* ‘tool, skillful person’ > Ni *-tfa?(-k)* || PCh *-*ká?(*-l)* || PW *-*k'ia*, *-*k'á-l^h*

- (246) PM *-*ko(')j(*-áj^h)* ‘hand, arm’ > Mk *-koj(-ej)* || PCh *-*kój?*, *-*koj-áj^h*

- (247) PM **k'axó(*-ts)* ‘armadillo (sp.)’ > Mk *k'olo'x* || Ni *k'akxo(-s)* || PCh **k'ihló?(*-s)* || PW **k'j'anhóh*

- (248) PM *-*k'o*, *-*k'ó-l* ‘bottom’ > Ni *-k'o?(-k)* || PCh *-*k'ó?* || PW *-*k'j'o*, *-*k'j'ó-l^h*

- (249) PM *-*k'u*, *-*k'ú-l* ‘horn, club’ > Mk *-k'u?(-l)* || Ni *-k'u?(-k)* || PCh *-*k'ú?(*-l)* || PW *-*k'j'u*, *-*k'j'ú-l^h*

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- (250) PM **k'uj* ~ **k'új* ‘cold’ > Mk *k'wi* / *k'uj-* || Ni *k'uj* || PCh **k'új?*
- (251) PM **lkéte* ‘squash’ > Mk *lekiti* || PCh **kéte?*
- (252) PM **túm?a* ‘day’ > Ni *tum?a-* || PCh **hlúma?*
- (253) PM **[ji]må* ‘to sleep’ > Mk *[i]ma?* || Ni *[ji]må?* || PCh **[?i]må?* || PW **[?i]må*
- (254) PM **mijó* (*-*l*) ‘savannah hawk’ > Mk *mijo* (-*l*) || Ni *mijo* (-*k*) || PCh **mijó?* (*-*l*) || PW **mijóh*
- (255) PM **nk'a* ‘new’ > Mk *i'nk'a* || Ni *nitʃ'a* || PCh **nk'á?* || PW **nek^ja* ~ **nék^ja* ~ **nek^je* ~ **nék^je*
- (256) PM *-ó (*-*l*) ‘penis’ > Ni *-o?* (-*k*) || PCh *-ó? (*-*l*) || PW *-*l-ó* (*-*l^h*)
- (257) PM *-*pák'o* ‘heel’ > PCh *-*pók'o?* || PW *-*pák^jo*
- (258) PM **péła*([?])*j*, **péłaj-its* ‘rain’ > Mk *pilej* (-*its*) || PCh **péhlaj?* || PW **péłaj^h*, **péłaj-is*
- (259) PM *-*qáka* (*-*l*) ‘medicine’ > PCh *-*qáka?* (*-*l*) || PW *-*qák^ja* (*-*l^h*)
- (260) PM *-*qéj* (*-*its*) ‘costume’ > Ni *-kej* (-*is*) || PCh *-*qéj?* (*-*is*) || PW *-*qéj* (*-*is*)
- (261) PM **sláqha*([?])*j*, **sláqhaj-its* ‘wild cat’ > Ni *sklákxaj* ~ *sklákxaj* (-*is*) || PCh **s[?]láhqaj?* ~ **s[?]láhqaj?* (*-*is*) || PW **siláqháj*
- (262) PM *-*t'ij* ~ *-*t'ij* ‘to move’ > Ni *[βa]t'ij* || PCh **[?i]t'ij?*
- (263) PM *-*wó* (*-*ts*) ‘worm’ > Ni *-βo?* (-*s*) || PCh *-*wó?* (*-*s*) || PW *-*wó* (*-*s*)
- (264) PM *-*w(t)s'é* (*-*l*) ‘belly’ > Ni *-βts'e* (-*k*) || PCh *-*ts'é?* (*-*l*) || PW *-*ts'é* (*-*l^h*)
- (265) PM *-[?]*wo*, *-[?]*wó-l* ‘neck’ > Mk *-wo<nxé?* || Ni *-βo?* (-*k*) || PCh *-[?]*wó?* (*-*l*) || PW *-[?]*wo*, *-[?]*wó-l^h*
- (266) PM *-*xa*, *-*xá-l* ‘price’ > Ni *-fa?* (-*k*) || PW *-*ha*, -*há-l^h*
- (267) PM **?aɸu* ~ **?aɸú* ‘woman’ > Mk *efu* || PCh **?ahwú?*
- (268) PM *-*ʔi* (*-*l*) ‘liquid, juice’ > Mk 3 *t'-i?* (-*l*) || Ni *-i?* (-*k*) || PCh *-*ʔi?* (*-*l*) || PW *-*t'-i* (*-*l^h*)
- (269) PM **[j]o* ‘to be ripe’ > PCh **[j]ó-?e?* || PW **[j]o*

The glottalized approximant PM *[?]*j* is likewise reflected as PCh **j?* word-finally, thus merging with PM *j*.

- (270) PM *-*áʔj*, *-*áj-is* ‘yica bag’ > Ni *-a'j*, *-aj-is* || PCh *-*éj?* (*-*is*) || PW *-*l-éj* (*-*is*)
- (271) PM **[ji]phi'j* ~ **[ji]phi'j* ‘not to be afraid’ > Ni *[ji]phi'j* || PCh **[?i]hwíj?* || PW **[?i]x^wíj-eh*
- (272) PM **kula'j* ~ **kulá'j* ‘sun’ > Ni *<xum>kuklá'j* || PCh **kuláj?*

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8.1.1.7 Sporadic glottalization

In a very restricted number of roots, Chorote has a glottalized sonorant where other Mataguayan languages have a plain one. We attribute this sound correspondence to a sporadic sound change whereby some sonorants irregularly became glottalized in Chorote.

- (273) PM **[ji]já?* ‘to drink’ > Mk <*i>ja?* || Ni *[ji]já?* || PCh **[?i]já?* || PW **[?i]já?*
- (274) PM **jiná?*^t, **jinát-its* ‘water’ > Ni *jiná?*^t, *jinát-is* || PCh **?i*^{ná?}*t* (*-es) || PW **?iná?* (*-es)
- (275) PM **[?a]lóχ*, **[?a]ló-ts* ‘many’ > Mk <*o>lo<ts>* || Ni <*2a>kłox* || PCh **[?a]lóh* || PW **<?a>ló<s>*
- (276) PM *-*qalá?* (*-*j^h*) ‘leg’ > Ni *-kakłá?* (-*j*) || PCh *-*qa'lá?* ~ *-*qå'lá?* (*-*j^h*) || PW *-*qå'lá?* (*-*j^h*)

An anonymous reviewer brought our attention to the fact that sporadic glottalization seems to affect forms that otherwise contain PCh *?^t, but we have been unable to formulate a precise predictor of the process in question in terms of a regular, contextually conditioned sound change.

8.1.1.8 Glottal dissimilation

When two consecutive syllables have glottalized consonants as their onsets in PM, Chorote deglottalizes the onset of the first syllable in a development shared with Wichí (§9.1.1.9). (278) shows some irregularities regarding the place of articulation of the dissimilating consonants.

- (277) PM **k'ék'eh* ‘monk parakeet’ > Ni *t'et'e* || PCh **kék'eh* || PW **k'ék'je*
- (278) PM **ts'áts'ih*, **ts'áts'i-l* ‘rufous hornero’ > Mk *ts'its'i* (-*l*) || Ni *ts'ats'i* (-*k*) || PCh **sát'ih* || PW **táts'i*
- (279) PM **t'-á(j)k'i-l* ‘its saliva (PL)’ > Ni *t'-at'i-k* || PCh **t-ájk'i-l><is>* || PW **t-ák'i-l^h*
- (280) PM **[j]óp'ale(?)* ‘to hiccup’ > Ni *[j]op'akle* / -*?op'akle* ‘to choke’ || PCh **[j]óp'ale?* || PW **[j]óp'le*

8.1.1.9 Deglottalization of preglottalized codas

Most preglottalized codas of Proto-Mataguayan merge with their plain counterparts in Chorote by means of deglottalization. This includes the codas *[?]*p*, *[?]*t*, *[?]*ts*, *[?]*k*, *[?]*ɸ*, *[?]*t*, *[?]*s*, *[?]*x*, *[?]*χ*, and *[?]*j* (the latter coda actually yields PCh **j?*, but so does plain PM **j* in the word-final position thanks to the *?^t-insertion process).

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- (281) PM *-aje'k ~ *-ajé'k 'honey comb' > Ni -aje'tf || PCh *-q-ájek
- (282) PM *-á't, *-át-its 'drink' > Ni -á't, -át-is || PCh *-át (*-es) || PW *-t-át
- (283) PM *-á's 'son' > Mk -a's || Ni -á's || PCh *-ás || PW *-t-ás
- (284) PM *-á'j, *-áj-is 'yica bag' > Ni -á'j, -aj-is || PCh *-éj? (*-is) || PW *-t-éj (*-is)
- (285) PM *[ji]phá'x 'to cut down' > Mk *fex-inet-kiʔax* || Ni [ji]pha'f || PCh *[?i]hwáh-APPL || PW *[?i]xʷáχ
- (286) PM *phä'x ~ *phä'x 'field' > Ni pha'f || PCh *hwéh
- (287) PM *[ji]phi'j ~ *[ji]phi'j 'not to be afraid' > Ni [ji]phi'j || PCh *[?i]hwíj? || PW *[?i]xʷíj-eh
- (288) PM *[ji]phi'k ~ *[ji]phi'k 'to hide' > Ni [ji]phi'tf || PCh *[?i]hwík
- (289) PM *-phi't ~ *-phú't, *-phi' -ts 'flatulence' > Mk -ftu-ts || Ni -phi't, -ftu-ts || PCh *-hwút
- (290) PM *jijá'ts 'dew' > Mk *ije'ts* || Ni *jija's* || PCh *?ijés-tah || PW *?ijás
- (291) PM *jiju's ~ *jijú's 'wax' > Ni *jiju's* || PCh *?ijús
- (292) PM *jiná't, *jinát-its 'water' > Ni *jiná't*, *jinát-is* || PCh *?i'nát (*-es) || PW *?inát (*-es)
- (293) PM *-kå's, *-kås-él 'tail' > Ni -kå's, -kås-ek || PCh *-kås || PW *-kås, *-kås-el^h
- (294) PM *kowä'x / *kowä'x 'hole' > PCh *kowéh / *-kóweh || PW *kóweχ / *-kóweχ
- (295) PM *kula'j ~ *kulá'j 'sun' > Ni <xum>kuklá'j || PCh *kuláj?
- (296) PM *[ji]ku'ɬ 'to answer' > Mk [j]<e>ku'ɬ || Ni [ji]ku'ɬ || PCh *[?i]kuhl-APPL || PW *[ni]ku'ɬ
- (297) PM *(-)k'útsaχ, *(-)k'útscha-ts 'old' > Mk *k'utsaχ*, *k'utshe-ts* || Ni *k'utsaχ*, *k'utsxa-s* || PCh *-k'úsah, *-k'úsa-s || PW *-k'útsaχ
- (298) PM *[ji]lé'x 'to wash' > Mk [ji]lix-uʔ 'to clean' || Ni [ji]kle'f || PCh *[?i]léh || PW *[?i]léχ
- (299) PM *lo'p ~ *ló'p, *lop-íts ~ *lóp-its 'winter' > Mk *lo'p*, *lop-its* || Ni *klo'p*, *klop-is* || PCh *lóp || PW *lop ~ *lóp
- (300) PM *-li'x, *-lix-áj^h 'language, word' > Mk -'lix<e?> || Ni -'kli'f, -'klif-aj || PCh *-lih, *-lih-áj^h
- (301) PM *-ti'k ~ *-tí'k, *-tí-j^h 'thread' > Ni -ti'tf, -ti-j<is> || PCh *-hlík, *-hlí-j^h

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- (302) PM *-*tu*^h*k*, *-*tú-j*^h ‘yica bag, load’ > Mk -*tu*^h*k*, -*tu-j* || Ni -*tu*^h*k* || PCh *-*hlúk*, *-*hlúj*-... || PW *-*luk*^w, *-*tú-j**<is>*
- (303) PM *-*má*^h*k*, *-*mhá-j*^h ‘powder, flour’ > Ni -*má*^h*k*, -*mxá-j* || PCh *-*má*^h*k* || PW *-*mók*^w, *-*mhó-j*^h
- (304) PM *-*na*^h*x* ~ *-*ná*^h*x* / *-*nxa*- ~ *-*nxá-* ‘nose’ > Mk -*ne*^h*x* / -*nxe*- || Ni -*na*^h*f*, -*nfa-s* || PCh *-*hná**<tVwoh>* || PW *-*nh**<us>*
- (305) PM *-*nji*^h*x* ‘smell’ > Mk -*nji*^h*x* || Ni -*ni*^h*f* || PCh *-*níh* || PW *-*níχ*
- (306) PM *-*pás-e*^h*t* ‘lip’ > Ni -*pás**<e*^h*t>* || PCh *-*pás**<at>* ~ *-*pás**<át>* || PW *-*pás**<et>*
- (307) PM *-*p'o*^h*k* ~ *-*phi*^h*k* ‘fence’ > Ni -*p'o*^h*k* || PCh *-*p'ók* || PW *-*p'ok*^w
- (308) PM *-*p'o*^h*t* ‘lid’ > Mk -*p'ot**<o?**>* || Ni -*p'o*^h*t* || PCh *-*p'ót* || PW *-*p'ot*
- (309) PM **qati*^h*ts*, **qatis-él* ‘star’ > Ni *kati*^h*s* || PCh **qatés*, **qates-él* || PW **qates*, **qatéts-el*^h
- (310) PM *-*sá*^h*t* ‘vein’ > Mk -*sá*^h*sa*^h*t* || Ni -*sá*^h*t* || PCh *-*sát-* || PW *-*sát*
- (311) PM **tá*^h*t* ‘to sprout’ > Mk *ta*^h*t* || Ni *tá*^h*t* || PCh **táł* || PW **táł*
- (312) PM *-*táwá*^h*x*, *-*táwxá-ts* ‘(abdominal) cavity’ > Mk -*tawe*^h*x*, -*tawxe-ts* || Ni -*táβa*^h*f*, -*táβxa-s* || PCh *-*tóweh* || PW *-*tóweχ*
- (313) PM **ti*^h*ɸ* ‘to suck breast’ > Mk *tu*^h*f* / -*tu*^h*f* || Ni *ti*^h*ɸ* || PCh *[*i*]tí_M || PW **tip*
- (314) PM **tijá*^h*χ* ‘to shoot, to throw’ > Mk *tija*^h*χ* / -*lija*^h*χ* || Ni *tijá*^h*x* || PCh *[*i*]tí_Jah || PW **tijáχ*
- (315) PM *-*ti*^h*t* ‘to spin, to sew’ > Mk [*ji*]tit_I || Ni *ti*^h*t* || PCh *[*j*]<á>tit_I
- (316) PM **tiłá*^h*x* ‘to carry on one’s shoulders’ > Mk *tiło*^h*x* / -*liło*^h*x* || Ni *tiłá*^h*x* || PCh *[*i*]tí_Ihlåh || PW **tiłáχ*
- (317) PM **ti*^h*x* ‘to dig’ > Mk *ti*(^h)*x-APPL* / -*ti*(^h)*x-APPL* || Ni *ti*^h*f* || PCh *[*i*]tíh-ij? || PW **tiχ*
- (318) PM **tlú*^h*k* ‘blind’ > Ni *taklú*^h*k* || PCh **tłúk* || PW **tilúk*^w
- (319) PM *-*txo*^h*k* ~ *-*txó*^h*k*, *-*txóko-wot* ‘uncle’ > Mk -*txo*^h*k* || Ni -*txo*^h*k*, -*txoko-βot* || PCh *-*<i>tók*, *-*<i>tóko-wot* || PW *-*<wi>thok*^w
- (320) PM **tsänú*^h*k* ‘duraznillo trees’ > Ni *tsanu*^h*k* || PCh **sinúk* || PW **tsinúk*^w
- (321) PM *-*ú*^h*p*, *-*úp-its* ‘nest’ > Mk 3 *t-up* (-*its*) || Ni -*u*^h*p*, -*up-is* || PCh *-*úp* (*-*is*) || PW *-*t-up* (*-*is*)
- (322) PM *-*wá*^h*k* ‘bad mood’ > Mk -*wak* || Ni -*βá*^h*k* || PCh *-*wák* || PW *-*wák*^w
- (323) PM *-*wá*^h*x*, *-*w(á)x-áj*^h ‘burrow; anus’ > Ni -*βa*^h*f*, -*βaf-aj*^h || PCh *-*wéh* || PW *-*wéχ*, -*wh-áj*^h

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- (324) PM ²wäle²k ‘to walk’ > Mk -<i> ²welki- ²met‘to limp’ || Ni βaklē²tf || PCh *[?i]²wélek || PW ²weleq
- (325) PM ²wV²t ~ ²wV²t ‘to climb’ > Mk we²t || Ni βå²t || PCh *[?i]²wút || PW *[t]²wut ~ *[t]²wút
- (326) PM *(X₁₃on-)-xa²χ, *(X₁₃on-)-xáh-aj^h ‘night’ > Mk <na>xa²χ || Ni <xon>fa²x, <xon>fa²x-aj || PCh *<?a>h<n>áh ~ *<?á>h<n>áh || PW *<hon>aχ, *<hon>áh-aj^h
- (327) PM ²-xáte²k, ²-xáthe-j^h ‘head’ > Ni -sate²tf, -satxe-s || PCh ²-hétek, ²-héhte-j^h || PW ²-t-éteq, ²-t-éthe-j^h
- (328) PM ²...X₂₃a²t(*-its) ‘earth’ > Ni <kots>xa²t, <kots>xat-is || PCh *<?a>h<n>át ~ *<?á>h<n>át (*-es) || PW *<hon>hat, *<hon>hát-es
- (329) PM ²X₁₃ó²k ‘palo santo (*Bulnesia sarmientoi*)’ > Ni xo²k || PCh ²hók || PW ²hók^w
- (330) PM ²X₁₃ó²t ‘sandy place’ > Ni xo²t || PCh ²hót || PW ²hót
- (331) PM ²-X₁₃u²k, ²-X₁₃ú-j^h ‘firewood’ > Ni -xu²k, -xu-j || PCh ²-(?ítåh)-huk || PW ²-huk^w, ²-hú-j<is>
- (332) PM ²-?aqhu²ts ~ ²-aqhú²ts ‘knee’ > Mk -aqhu²ts || Ni -(?a)kxu²s || PCh ²-?aqús
- (333) PM ²ji²já²X₁₂ ‘jaguar’ > Ni ji²já²x || PCh ²?a²jáh || PW ²ha²jáχ
- (334) PM ²?atu²χ ~ ²?atú²χ ‘snake (*sp.*)’ > Ni ?atu²x || PCh ²?atúh
- (335) PM ²?o²t ~ ²?ó²t ‘chest’ > Ni -?o²t || PCh ²?ót

By contrast, the examples below show that PM ²m, ²n, ²l are preserved in Chorote. In Manjui and most likely in Iyo’awujwa’, they still contrast with their non-glottalized equivalents. Iyojwa’aja’ has innovated in that all word-final sonorants are now glottalized in that language, and the glottalization has ceased to be contrastive in that position.

- (336) PM ²-á²l ‘light, brightness’ > PCh 3 ²hl-á²l || PW ²-t-ál^h
- (337) PM ²-á²m ‘pronominal formative’ > PCh ²-á²m || PW ²-á²m
- (338) PM ²kó²l ‘locust’ > PCh ²kó²l || PW ²k’ól^h
- (339) PM ²k’utX₂₃á²n, ²k’utX₂₃án-its ‘thorn’ > Ni k’utxa²n, k’utxan-is || PCh ²k’utá²n, ²k’után-is || PW ²k^juthá²n, ²k^juthán-is
- (340) PM ²[ji]tá²m ‘to defecate’ > Mk <i>tá²m || Ni [ji]tá²m || PCh ²[?i]hlá²m || PW ²[t]<a>tá²m
- (341) PM ²stwú²n, ²stwún-its ‘king vulture’ > Ni staβu²n, staβun-is || PCh ²?stíu²n, ²?stíun-is || PW ²?istíwin

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- (342) PM *-ʔäsχaⁿ, *-ʔäsχán-its ‘meat’ > Mk -ʔeseⁿ, -ʔesen-its || Ni -(ʔa)sxaⁿ, -(ʔa)sxan-is || PCh *-ʔisáⁿ, *-ʔisán-is || PW *-t-’isaⁿ, *-t-’isán-is

8.1.1.10 PM **ɸ*, **s*, **t* > PCh **p*, **t*

Another sound change in Chorote, shared with Wichí and Nivaclé but not with Maká, consists of the fortition of the Proto-Mataguayan glottalized fricatives (phonologically possibly analyzable as tautosyllabic sequences of a fricative and a glottal stop) to glottalized stops: PM **ɸ*, **s*, **t* > PCh **p*, **ts*, **t*. (The sequence **kɸ*, however, changed to PCh **k’w* or possibly **k*.)

- (343) PM *(-)ɸ’elxVtséχ, *(-)ɸ’elxVtsé-ts ‘poor’ > Mk -f’ilxetsaχ, -f’ilxetsi-ts || PCh *p’ilusáh, *p’ihlusé-s || PW *p’elítsaχ, *p’elítse-s
- (344) PM *s’ám (*-its) ‘frog sp.’ > Mk s’am-s’am (-its) || PCh *ts’ám (*-its)
- (345) PM *t-’áX₂₃te(?)(*-j^h) ‘her female breast’ > Ni t-’axte(-j) || PCh *t-’áhate?(*-j^h) || PW *t-’áte (*-j^h)
- (346) PM *t-’åx ‘skin, bark’ > Mk t-’ax || Ni t-’åx || PCh *t-’åh || PW *t-’åχ
- (347) PM *t-’äsχaⁿ, *t-’äsχán-its ‘meat’ > Mk t-’eseⁿ, t-’esen-its || Ni t-’asxaⁿ, t-’asxan-is || PCh *t-’isáⁿ, *t-’isán-is || PW *t-’isaⁿ, *t-’isán-is
- (348) PM *t-’í (*-l) ‘liquid, juice’ > Mk t-’i?(-l) || Ni t-’i?(-k) || PCh *t-’i?(*-l) || PW *t-’í (*-l^h)
- (349) PM *t-’út ‘you urinate’ > Mk t-’ut || Ni t-’ut || PCh *<h^h>t-’út || PW *<h>t-’út
- (350) PM *t-’úlu(?) ‘her/his urine’ > Ni t-’ułu || PCh *t-’úhlu? || PW *t-’úłu

As a result of the sound change PM **t* > **t*, Chorote now displays a morphophonological rule which converts the underlying sequence */hl+ʔ/ into **t* (rather than *t*, as in Maká). The rule is no longer entirely productive in Chorote, since the sequence of /hl/ and /ʔ/ actually yields *hłl* at the stem-suffix/enclitic boundary, as in Iyojwa’aja’ /táhł+ʔe/ → *táhʔle?* ‘exits from’.

8.1.1.11 Syllabic consonants

The syllabic consonants of Proto-Mataguayan are reflected in Chorote as sequences of the shape PCh *C^o (see §8.1.2.6 on the status of PCh *^o), except for the syllabic nasal **n*. This is seen in the allomorphy pattern of several prefixes, which show up as PCh *C^o- before supraglottal consonants, but as PCh *C- before vowels (a position where the prefixes in question were not syllabic in PM) and

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before glottal consonants. In addition, the prefixes in question fuse with a stem-initial *ʔ-, resulting in a glottalized consonant (see also §8.1.10). Prefixes that show such allomorphy include the third-person T-class verbal prefix (PCh *t²- / *t- / *t-...), the third-person possessive prefix (PCh *h²- / *hl- / *t-...), the second-person active prefix (PCh *h²- / *hl- / *h²t-...), the feminine prefix in demonstratives (PCh *ha- ~ *hå- / *hl-).⁶ A similar pattern is seen in the first-person inactive realis prefix PCh *s²- / *s- / *ts-..., though its Proto-Mataguayan etymon is not known to have contained a syllabic consonant. The syllabic allomorphs in each Chorote lect are illustrated below; note that PCh *² is typically reflected as *i* in the contemporary varieties.

- (351) Iyojwa'aja' (Carol 2014b)

- a. ti-més
3.T.RLS-be_two
'they are two'
- b. ti-ɍáki'n
3.T.RLS-play/dance
's/he plays/dances'
- c. ta-kásit
3.T.RLS-stand
's/he stands'
- d. hi-kjó?
3.POSS-hand
'his/her hand'
- e. hi-t'ét-e
2.ACT-throw-APPL
'you throw it for her/him'
- f. ha-na
F-DEM:outside_hands'_reach
'this.F (outside one's hands' reach)'

- (352) Iyo'awujwa' (Gerzenstein 1983: 66, 74, 75)

- a. ti-lák^jen
3.T.RLS-play
's/he plays'

⁶We presently have no explanation for the occurrence of a low vowel – as opposed to *² – in the preconsonantal allomorph of the feminine prefix in demonstratives.

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- b. te-kénis^jen
3.T.RLS-sing
's/he sings'
- c. hi-pó?o
3.POSS-heel
'his/her heel'
- d. hi-pén
2.ACT-cook
'you cook'

(353) Manjui (Carol 2018)

- a. ti-khán
3.T.RLS-dig
's/he digs'
- b. hi-ljáhwa-aj
3.POSS-pet-PL
'his/her pets'
- c. hi-[?]wén
2.ACT-see
'you see her/him/it'
- d. ha-na
F-DEM:outside_hands'_reach
'this.F (outside one's hands' reach)'

The non-moraic allomorphs (identical to those found before vowels) also occur before underlying PCh $*h$ < PM $*x$, and PCh $*h$ is then elided, as in PCh $*hl$ -étek 'her/his head' (from $*-hétek$ 'head'); $*hl$ -ó? 'you go' (from $*-hó?$ 'to go'). This is quite likely an innovation.

There is a potential correspondence between the reportative enclitic PCh $*=h$ [?] n (> Ijw = *he*[?]*n*, I'w/Mj = *hen*) and Ni = *lån* 'id'. The comparison is doubtful since the vowel correspondences are not regular, but it is conceivable that the Proto-Chorote form derives from an earlier (pre-Proto-Chorote) $*=tn$ > $*=h$ [?] n . Interestingly, the initial consonant of Ijw/I'w/Mj = *he*([?])*n* never labializes to *hw* after a rounded vowel, feeding translaryngeal vowel assimilation instead (as in Mj *ni-jó-hon* 's/he/it became (hearsay)'), in stark contrast with the homonymous suffix Ijw/I'w -*he*([?])*n* 'downwards; verbal plural'.

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8.1.1.12 Consonant + guttural fricative

Proto-Mataguayan clusters of the shape $*MX$ (where M stands for a sonorant and X for any of x , $*χ$, or $*h$) yield PCh $*hM$. When the first consonant in the cluster is a plosive ($*PX$), the outcome is PCh $*P$ except after a stressed vowel, in which case the reflex is PCh $*hP$, and word-initially, where the reflex PCh $*PVh$ is found. Note that in all known cases the clusters of the shape PCh $*hP$ (where P stands for a stop) go back to PM $*Ph$ (as opposed to PM $*Px$ or $*Pχ$), which could be a coincidence or not. The clusters of the shape PM $*tsX$ yield PCh $*s$ (synchronously, [s] and [xs]/[hs] do not contrast in any Chorote variety, but rather occur as possible realizations of /s/ of any origin after vowels). The clusters of the shape PM $*Fx$ and PM $*Fχ$, where $*F$ is a fricative, lose the dorsal fricative in Proto-Chorote and evolve just like PM $*F$. Recall that clusters of the shape PM $*Fh$ are banned in Proto-Mataguayan (§5.2.4).

The examples below show the development PM $*MX > \text{PCh } *hM$. (372) is an exception, where the metathesis is prevented by irregular vowel insertion.

- (354) PM $*-φólXa^n$ ‘ankle’ > PCh $*-hwóhla^n$ || PW $*-x^wónha^n$
- (355) PM $*k'álxó(*-ts)$ ‘armadillo (sp.)’ > Mk $k'olo^x$ || Ni $k'akxo(-s)$ || PCh $*k'ihló?(*-s)$ || PW $*k^janhóh$
- (356) PM $*-k'ínxå? \sim *-k'ínxå?(*-wot)$ ‘younger sister’ > Mk $-k'inxa?$ || Ni $-tʃinxå(-bot)$ || PCh $*-k'ihnå?(*-wot)$ || PW $*-k^jínhå$
- (357) PM $*(-)níjhå-j^h$ ‘ropes, cords’ > Mk $(-)níjha-j$ || Ni $-níjxå-j$ || PCh $*níhjå-j^h$ || PW $*níjhå-j^h$
- (358) PM $*-nxå- \sim *-nxá-$ ‘nose’ > Mk $-nxé-$ || Ni $-nfa-$ || PCh $*-hná< tVwoh>$ || PW $*-nh<us>$
- (359) PM $*n-xåte?(*-l) \sim *n-xåti?$ ‘dream, sleepiness’ > Mk $-nixati?(-l)$ || Ni $nxåte(-k)$ || PCh $*ihnåti?$ || PW $*nahåti$
- (360) PM $*[ji]nxi^wän$ ‘to smell’ > Mk $[ji]nxi^wen$ || PCh $*[i]hní^wen$
- (361) PM $*-nX_{23}aq('åt$ ‘to snore’ > Ni $[ta]nxakåt$ || PCh $*[i]hnåq'åt$
- (362) PM $*-nX_{23}atå?$ ‘nasal mucus’ > Ni $-nxatå?$ || PCh $*-hnåt<ijah-PL>$
- (363) PM $*(-)nåjx-aj^h$ ‘paths’ > Ni $(-)nåjf-aj$ || PCh $*(-)nåhj-aj^h$ || PW $*(-)nåjh-aj^h$
- (364) PM $*[t]qåñhan$ ‘to fish with a hook’ > Mk $[ta]<qa>qanhen$ || PCh $*[t^o]qåñhan$ || PW $*[t]qåñhan$
- (365) PM $*-témh-aj^h \sim *-tämh-aj^h$ ‘bile.PL’ > PCh $*-téhm-aj^h$ || PW $*-témh-aj^h$

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- (366) PM *-whá'ja? 'spouse' > Mk -whe'je? || Ni -xa'ja || PCh *-hwá'ja?
- (367) PM *[t]wha'já-^j 'to marry' > Mk [te]whe'je-^j || Ni [t]xa'ja-^j || PCh *[t^j]hwa'jé-^j? || PW *[t]wháje<j>
- (368) PM *xunxátaχ 'tusca fruit' > Mk xunxetaχ || Ni xunxataχ || PCh *?ihnátaḥ || PW *xnhátaχ
- (369) PM *xunxáta-(ju)^k 'tusca tree' > Mk xunxete-^k || Ni xunxata-juk || PCh *?ihnáta-k || PW *xnháte-q
- (370) PM *xunxáta-kat 'tusca grove' > Mk xunxete-ket || Ni xunxata-tsat || PCh *?ihnáta-kat
- (371) PM *?ánhajex 'wild bean (*Capparis retusa*)' > Mk anhejajex || Ni ?ánxajex || PCh *?ohnajah || PW *?ánhajex
- (372) PM *[j]éjxåts-han 'to teach' > Mk [j]ixats<hen> || Ni [j]ejxats-xan / -ejxats-xan || PCh *-[j]éjåhås<an>

The following examples show that PM *Ph normally yielded PCh *hP after a stressed vowel. We are not aware of any clear examples of PM *Px or *Pχ in that environment, so we technically do not know what the Chorote reflexes of PM *Px, *Pχ would be after a stressed vowel.

- (373) PM *sláqha(?)j, *sláqhaj-its 'wild cat' > Ni sklåkxaj ~ sklåkxaj(-is) || PCh *s^jlåhqaj? ~ *s^jlåhqåj? (*-is) || PW *silåqhåj
- (374) PM *títhe-j^h 'plates' > Ni (-)titxe-j || PCh *tíhte-j^h
- (375) PM *wáth(å-j)u'k 'palo flojo tree' > Ni βåtxå-juk || PCh *wáht<uk>
- (376) PM *-xáthe-j^h 'heads' > Ni -satxe-s || PCh *-héhte-j^h || PW *-t-éthe-j^h
- (377) PM *-?ó'thale(?) ~ *-?ó'thåle(?) 'heart' > PCh *-?óhtale? ~ *-?óhtåle? || PW *-t-ótle

Word-initially, PCh *hC and *Ch are not permitted, and a vowel is then inserted to break up the illicit cluster.

- (378) PM *khǻt 'cactus' > Mk khat-u'k || Ni kxat || PCh *kåhǻt || PW *k^jåhǻt
- (379) PM *phǻm 'up' > Mk -pha'm || PCh *p^jhǻm || PW *-phå / *phåm-

The examples below show the development of PM *PX after an unstressed vowel.⁷

⁷ Whenever a stop is followed by an applicative/adpositional suffix starting with PM *x, or by PCh *-he'n(e?) 'downwards; verbal plural' < PM *-xå'n(e?), Iyo'awujwa' and Manjui show

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- (380) PM **k'utX₂₃á'n*, **k'utX₂₃án-its* 'thorn' > Ni *k'utxa'n*, *k'utxan-is* || PCh **k'utá'n*, **k'után-is* || PW **k'j'uthá'n*, **k'j'uthán-is*
- (381) PM *-*pxúse?*(*-*j^h*) 'beard' > Mk -<*a*>*pxusi?*(*-*j*) || Ni -*páse*(*-*j*) || PCh *-*púse?*(*-*j^h*) || PW *-*páse*(*-*j^h*)
- (382) PM *-*txo'k* ~ *-*txó'k*, *-*txóko-wot* 'uncle' > Mk -*txo'k* || Ni -*txo'k*, -*txoko-βot* || PCh *-<*i*>*tók*, *-<*i*>*tóko-wot* || PW *-<*wi*>*thok^w*
- (383) PM *-*aqhu'ts* ~ *-*aqhú'ts* 'knee' > Mk -*aqhu'ts* || Ni -*(?a)kxu's* || PCh *-*aqús*

Clusters of the shape PM **Fx* and **Fχ* always lose the guttural fricative (no clusters of the shape "fricative + **h*" existed in Proto-Mataguayan; see §5.2.4). Likewise, the cluster PM **tsh* yields PCh **s*; note that /s/ is often pronounced as [xs] or [hs] in the contemporary varieties of Chorote (see §8.2.2.11), but there is no contrast between [s] and [xs], thus the latter is not a true consonant cluster.

- (384) PM **φátshu-ts* 'centipedes' > Ni *φatsxu-s* || PCh **(h)wásu-s*
- (385) PM *[*ji*]*φχän-* ~ *[*ji*]*φχän-* 'to kill a bird' > Ni [*ji*]*φxan-APPL* || PCh *-<*a*>*hwén-(n)ah* 'bird' || PW *-<*2a*>*xʷén-k^je* 'bird'
- (386) PM *-*φχúx*, *-*φχú-ts* 'finger' > Mk -*fux* || Ni -*φxux*, -*φxu-s* 'toe' || PCh *-*hwu-ké?* || PW *-*xʷúx^w*, *-*xʷú-s*
- (387) PM **kéłχa-ju'k*, **kéłχa-jku-j^h* 'red quebracho' > Mk *kełe-jku-* || Ni *tsełxa-juk*, *tsełxa-ku-j* || PCh **kéhla-juk* / **kéhla-jku-* || PW **k'él-juk^w*, **k'él-k^ju-j^h*
- (388) PM *-*k'útsha-ts* 'old.PL' > Mk *k'utshe-ts* || Ni *k'utsxa-s* || PCh *-*k'úsa-s*
- (389) PM **wátshan* ~ **wátsχan* 'to be healthy, alive' > Ni *βatsxan* || PCh **wásá'n* || PW **wátshan*
- (390) PM **ł-xájk'u*(*-*l*) 'egg' > Ni *ł-sajk'u*(*-*l*) || PCh **hl-éjk'u?*(*-*l*) || PW **ł-ík^ju*(*-*l^h*)
- (391) PM **ł-xáte'k* 'head' > Ni *ł-satetʃ* || PCh **hl-étek* || PW **ł-éteq*
- (392) PM **(?a)X₁₃útsha-ts* 'crested caracaras' > Ni *xutsxa-s* || PCh **(?a)húsa-s* || PW **yahútsha-s*
- (393) PM **[j]éjxáts-han* 'to teach' > Mk *[j]ixats<hen>* || Ni *[j]ejxats-xan* / -*ejxats-xan* || PCh **[j]éjåhås<an>*

the reflex *hP* rather than the expected reflex **P*, as in Mj *téwahk^j-ap* 'by the river', from *téwak* 'river' and *-hap* 'by, surrounding' < PM **xop*. It is possible to account for this by positing an analogical leveling based on the default development of PM **x* > PCh **h*. Examples (381) and (382) instantiate the regular development. Furthermore, applicatives/adpositions and PCh *-he'n(e?)* might correspond to a phonological domain beyond the scope of the rule PM **Px* > PCh **P*.

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- (394) PM *-ʔäṣχa^hn, *-ʔäṣχán-its ‘meat’ > Mk -ʔese^hn, -ʔesen-its || Ni -(ʔa)sxa^hn, -(ʔa)sxan-is || PCh *-ʔisá^hn, *-ʔisán-is || PW *-t-’isa^hn, *-t-’isán-is

In a few cases, diagnostic cognates are lacking, and we have been unable to determine which guttural fricative is to be reconstructed for PM.

- (395) PM *kójXa(?)t ‘to be heavy’ > PCh *kóhjat-APPL || PW *k^jóhhat
- (396) PM *[ji]lXón ‘to roast’ > Ni [ji]kxon || PCh *[ʔi]hlón || PW *[t]nhón
- (397) PM *-lājX₂₃VnåX₁₃å ‘Azara’s night monkey’ > Ni kłajxenåxå || PCh *lēhjanåhå-ke?
- (398) PM *tútsX₂₃a(?) (*-jek) ‘girl’ > Ni tutsxa (-jetf) || PCh *hlúsa? (*-jek) || PW *tútsha
- (399) PM *kpénX₁₃a-ts ~ *kpánX₁₃a-ts ‘orphans’ > PCh *kpéhna-s || PW *k^jpénha-s
- (400) PM *[ji]-tXá(?)t ‘to throw, to put’ > PCh *[ʔi]tát-APPL || PW *[ʔi]thát
- (401) PM *-wánXåłåχ, *-wánXåłå-ts ‘rhea’ > Mk waatłax || Ni βånxåłåx, βånxåłå-s || PCh *-wánhlåh, *-wánhlå-s || PW *wá^hnłåχ, *wá^hnłå-s
- (402) PM *-?atsXa(?), *-?atsXá-l ‘dorado’ > PCh *-?asá?(*-l) || PW *-?atsha(?), *-?atshá-l^h

The word-final clusters PM *j^h and *l^h (underlying */jh/ and */lh/) are preserved in Chorote.

- (403) PM *-(á)j^h ‘PL’ > Mk -(e)j || Ni -(a)j || PCh *-(á)j^h || PW *-(á)j^h
- (404) PM *-ej^h ‘APPL:DISTAL’ > Mk -ij || Ni -ej || PCh *-ej^h || PW *-ej^h
- (405) PM *-sáq’ål^h, *-sáq’ål-its ‘soul, spirit’ > Mk (?) -si^hnq’al(-its) || Ni -såk’åkł<it> || PCh *-sáq’ål^h, *-sáq’ål-is

8.1.1.13 Other consonant clusters

Word-initially, multiple consonant clusters – such as PM *ɸk, *ɸts, *tk, *wk, *kt, *kɸ, *sl, *tl – undergo vowel insertion in Chorote. Most of them are broken by a *^o (compare this to the evolution of PM syllabic consonants, described in §8.1.1.11), but after *k (possibly articulated as [k̪]; §8.1.1.2) an *i is inserted instead. Unexpectedly, an inserted *i – rather than *^o – is also seen in (408). (407) is also an exception; in this example, the word-initial consonant is altogether lost. The status of PCh *^o is discussed in §8.1.2.6.

- (406) PM *ɸkéna(?)χ ‘north wind, north’ > Ni ɸtſenax || PCh *hw^okénah
- (407) PM *ɸtsána(?)χ ‘suncho (*Baccharis sp.*)’ > Ni ɸtſánax || PCh *sánah || PW *x^witsánaχ

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- (408) PM **ɸts-u'k* 'palm (*Copernicia alba*)' > Mk *fits-uk* || Ni *ɸts-u'k* || PCh **hwis<úk>* || PW **xʷits<ukʷ>*
- (409) PM **kɸáts'i*(?) 'Molina's hog-nosed skunk' > Ni *kxats'i* || PCh **kʷhwáts'i*?
- (410) PM **ktá'nih* 'Chaco tortoise' > PCh **kitá'nih* || PW **kʷtá'nih*
- (411) PM **ktéta*(?)~**ktáta*(?) 'white algarrobo fruit (*Prosopis elata*)' > PCh **kitéta*? || PW **kʷtéta*
- (412) PM **sláqha*(?)*j*, **sláqhaj-its* 'wild cat' > Ni *sklákxaj*~*sklákxaj(-is)* || PCh **sʷláhqaj*?~**sʷláhqaj?*(*-is) || PW **siláqhåj*
- (413) PM **tkéna*(?)*X₁₂*~**tkána*(?)*X₁₂*, **tkénX₁₃a-ts*~**tkánX₁₃a-ts* 'precipice; hill, mountain' > PCh **tʷkénah*, **tʷkéhna-s* || PW **tkʷénax*, **tkʷénha-s*
- (414) PM **tlú'k* 'blind' > Ni *taklú'k* || PCh **tʷlúk* || PW **tilúkʷ*
- (415) PM **wkína*(?)*X₁₂*, **wkínX₁₃a-ts* 'metal' > PCh **wʷkínah*, **wʷkínha-s* || PW **kʷínax*, **kʷínha-ts*

In the same position, the Proto-Mataguayan onset **st* receives a prosthetic **?* in Proto-Chorote.

- (416) PM **sténi*(?) 'white quebracho' > Mk *sitin-u'k* || PCh **?sténi?* || PW **?isté'nih*
- (417) PM **stwú'n*, **stwún-its* 'king vulture' > Ni *staɸu'n*, *staɸun-is* || PCh **?stúu'n*, **?stíun-is* || PW **?istíwin*
- (418) PM **stá-'q* 'toothpick cactus (*Stetsonia coryne*)' > PCh **?stá-k* || PW **?istá-q*
- (419) PM **stáɸe*(?) 'Chaco chachalaca' > PCh **?stáhwe?* || PW **?istáxʷe*

PM **l* is lost before another consonant in Chorote if the cluster occurs word-initially.

- (420) PM **(-)lká*(?)*t* 'nasal mucus, cold' > Mk *-leke*(?)*t* || PCh **kéł* || PW **kʷéł-taχ*, **kʷéł-ta-s*
- (421) PM **lkéte* 'squash' > Mk *lekiti* || PCh **kéte?*

The cluster PM **kɸ* changed to PCh **kʷw*, which yields Ijw *k^j* and I'w/Mj *k* (see §8.2.2.3). Similarly, the cluster **kɸ'* changed to PCh **k'w* or possibly **k'*.

- (422) PM **[j]ékɸa'x* 'to bite' > Mk *[j]ikfe'x* || PCh **[j]ókwah* || PW **[j]ókʷax*
- (423) PM **[ji]kɸ'ás*~**[ji]kɸ'ás* 'to be torn open' > Ni *[ji]k'as-APPL* || PCh **[?i]k'(w)ós* || PW **[hi]kʷ'és-APPL*

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- (424) PM **[j]ókφe(?)*(*t*)*s* ~ **[j]ókφä(?)*(*t*)*s* ~ **[j]ékφe(?)*(*t*)*s* ~ **[j]ékφä(?)*(*t*)*s* ‘to frighten’ > PCh **[j]ókwes* || PW **[j]ókwes*

The Proto-Mataguayan sequences **nj* and **ŋj* lose the palatal approximant in Chorote.

- (425) PM *-*nji*’*x* ‘smell’ > Mk *-nji*’*x* || Ni *-ni*’*s* || PCh *-*nih* || PW *-*niχ*

- (426) PM **njánxte?* ‘tapeti rabbit, cavy’ > Mk *nijaxti?* || Ni *nánxate* || PCh **náhåte?* || PW **xnáte*

Word-medially, vowel insertion is possibly found in the cluster PM **tsn* > PCh **sVn*.

- (427) PM **tátsna(?)*₁₂ ~ **tátsne(?)χ* ‘toad’ > PCh **tásVnah* || PW **tátnaχ*

PM **ɸ*, **n*, **q*, **w*, and **ŋw* are lost before another consonant in the word-medial position. In the cluster **qk*, the loss of **q* induces a compensatory doubling of the preceding vowel.

- (428) PM *-*ɸqató*(*-*l*) ‘elbow’ > Ni -(*?V*)*ɸkato*(-*k*) || PCh *-*qató?*(*-*l*) || PW *-*qáto*(*-*l^h*)

- (429) PM *(-)*háqke?* ‘well’ > Mk *haqqi?* ‘river’ || Ni *-xáke* ‘dry well’ || PCh *-*háåke?* ‘artificial well’

- (430) PM **njánxte?* ‘tapeti rabbit, cavy’ > Mk *nijaxti?* || Ni *nánxate* || PCh **náhåte?* || PW **xnáte*

- (431) PM *-*jáqsi?* ~ *-*jáqsi?* ‘finger’ > Mk *-jaqsi?* || PCh *-<*?*i>*jási-ke?* ~ *-<*?*i>*jási-ke?*

- (432) PM *-*wtli?* ~ *-*wtli?*, *-*wtli-ts* ‘rib’ > Mk *-*wetli?*(-*ts*) || Ni *-*βti* / *-*βtli?*(-*s*) || PCh *-*hlí*<*s*>

- (433) PM *-*w(t)s’é*(*-*l*) ‘belly’ > Ni *-βts’e*(-*k*) || PCh *-*ts’é?*(*-*l*) || PW *-*ts’é*(*-*l^h*)

Clusters with a PM guttural fricative followed by another consonant lose the guttural stem-initially – as in (435), (438), (439), (437) –, except in (436), where PM **Xp* yields PCh **?ip*. Word-medially (at least before a stop), the guttural consonant yields PCh **h*, and a vowel (a copy of the preceding vowel) is inserted to break the cluster apart, as in (434), (440).

- (434) PM **njánxte?* ‘tapeti rabbit, cavy’ > Mk *nijaxti?* || Ni *nánxate* || PCh **náhåte?* || PW **xnáte*

- (435) PM **xnáwå’p* ‘spring’ > Mk *xinawa’p* || Ni *fnåβåp* ~ *fnåβåp* || PCh **náwop* || PW **xnáwop*

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- (436) PM **xpå'k* ~ **xpå'k* ‘straw’ > Mk *xupa(?)k* ~ *xupek* || Ni *xpå'k* || PCh **?ipåk*
- (437) PM **Xmáwoh* ‘fox’ > PCh **máwo-tah* || PW **xmáwoh*
- (438) PM **(-)X₂₃pél* ‘shadow’ > Ni *xpek* || PCh **-pél* || PW **hpélh* / **-hpelh*
- (439) PM **X₂₃wé'lah*, **X₂₃wé'la-ts* ‘moon’ > Ni *xiße'la(-s)* || PCh **wé'lah*, **wé'la-s* || PW **xwé'lah*
- (440) PM **-?áX₂₃te(?)* (**-j^h*) ‘female breast’ > Ni *-?axte (-j)* || PCh **-?áhate?* (**-j^h*) || PW **-t-'áte* (**-j^h*)

The clusters PM **s'w* and **stw*, which are only found before PM **u*, yield PCh **s^o?* and **?^ostV*, respectively.

- (441) PM **stwú'n*, **stwún-its* ‘king vulture’ > Ni *staβu'n*, *staβun-is* || PCh **?stúu'n*, **?stúun-is* || PW **?istíwin*
- (442) PM **s'wúla'χ*, **s'wúla-ts* ‘anteater’ > Ni *s'βuklax*, *sβukla-s* || PCh **s'wúlah*, **s^owúla-s* || PW **súlaχ*
- (443) PM **[ji]s'wun* ~ **[ji]s'wún* ‘to like, to love’ > Mk *[ji]su?un* || Ni *[ji]s'βun* || PCh **[ji]s^o?ún*

The clusters PM **l?* and **m?* are apparently retained in the environment **_-...h#*; otherwise the glottal stop is lost.

- (444) PM **-φäl?u?* (**-ts*) ‘son-in-law, brother-in-law’ > Mk *-felu?(-ts)* || Ni *-φakl?u(-s)* ‘brother’ || PCh **-hwílu?* ~ *-hwélu?* (**-s*) ‘son-in-law’
- (445) PM **túm?a* ‘day’ > Ni *tum?a-* || PCh **hlúma?*
- (446) PM **?ám?åh*, **?ám?å-ts* ‘rat’ > Ni *?am?å (-s)* || PCh **?ám?ah* ~ **?ám?åh*, **?ám?a-s* ~ **?ám?å-s* || PW **?áma*
- (447) PM **?úl?åh*, **?úl?å-ts* ‘dove’ > Ni *?ukl?å (-s)* || PCh **?úl?åh*, **?úl?å-s*

Finally, a few clusters are retained in the medial position without any special change. These include **lφ*, **lts*, **sk*.

- (448) PM **-k'älφah* ‘spouse’ > Ni *-tf'akφa* || PCh **-k'élhwah* || PW **-k^jéx^wah*
- (449) PM **níltsa(?)X₁₂*, **níltsX₁₃a-ts* ‘white-lipped peccary’ > PCh **<?ih>nílsah*, **<?ih>nílsa-s* || PW **nítsaχ*, **nítsha-s*
- (450) PM **?åsk'åla(?)χ* ‘widower’ > Ni *?åstf'aklax* || PCh **?åsk'élah*

8.1 From Proto-Mataguayan to Proto-Chorote

8.1.2 Vowels

Chorote shows more or less the same reflexes of PM vowels as Wichí: most vowels are preserved intact except for PM *ä, which merges with *e or, if an accented syllable follows (§8.1.2.1), with *i. Three minor innovations shared with Wichí are the lowering of *e to *a before a *χ in the coda position (§8.1.2.2; also shared with Maká), the lowering of *i to *e in the environment *At/x...ts (§8.1.2.3) and to *a in the environment *#?...C'Á (§8.1.2.4), and the rounding of *e before the clusters *kw (§8.1.2.5).

8.1.2.1 Reflexes of PM *ä

The default reflex of PM *ä in Chorote is PCh *e. An irregular reflex is seen in (461). The reflex PCh *i in (459) is due to harmonic rising triggered by the following *u, a process that might be regular in the environment *W_Lu, where W stands for a labial and L for a coronal. Compare PCh *-pél ‘shadow’, but Mj -pélik ‘shadow’ < *-píl-uk; PM *φ'elxVtsé-ts ‘poor’, but PCh *p'ihlusé-s ‘poor’; (458), but (459).

- (451) PM *[j]áp'ä(?)t ~ *[j]áφ'ä(?)t ‘to burn’ > Ni [j]ap'a^t || PCh *[j]áp'e^t || PW *[j]áp'e^t
- (452) PM *-äφ, *-φä-ts ‘wing’ > Mk 3 t-ef, t-e-fe-ts || Ni -aφ, -<a>φa-s || PCh *-hw<és> || PW *-t-ex^w
- (453) PM *-äj, *-äj-is ‘yica bag’ > Ni -a^j, -aj-is || PCh *-éj?(*-is) || PW *-t-éj(*-is)
- (454) PM *t-äk ‘you go away’ > PCh *hl-ék || PW *t-eq
- (455) PM *[j]än ‘to put’ > Mk [j]en-APPL || Ni [j]an || PCh *[j]én || PW *[j]én
- (456) PM *[ji]φä[?]ja ~ *φä[?]ja ‘to fly’ > Ni [ji]φä[?]ja || PCh *[?i]hwé[?]ja? || PW *x^we[?]ja ~ *w- ~ *-i-
- (457) PM *[ji]φäl ‘to tell’ > Mk n(i)-fel-im || Ni n(i)-φak / n(i)-φakl- || PCh *[?i]hwél || PW *[?i]x^wél^h / *[?i]x^wél^h
- (458) PM *-φälits ‘daughter-in-law, sister-in-law’ > Mk -felits || Ni -φakl^{is}<2a> ‘sister-in-law’ || PCh *-hwélis ‘daughter-in-law’
- (459) PM *-φäl?u?(*-ts) ‘son-in-law, brother-in-law’ > Mk -feli?(-ts) || Ni -φakl?u(-s) ‘brother-in-law’ || PCh *-hwílu? ~ -hwélu?(*-s) ‘son-in-law’
- (460) PM *φä[?]x ~ *φä[?]x ‘field’ > Ni φa[?]f || PCh *hwéh
- (461) PM *(-)φétä[?]ts ‘root’ > Mk fitets || Ni -φeta[?]s || PCh *-hwéetus || PW *(-)x^wétes

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- (462) PM **phi*[?]*jät* ‘cold weather, south wind’ > Ni *phi*[?]*jat* || PCh **hwi*[?]*jét* || PW **x^wi*[?]*jét*
- (463) PM *-*phi*[?]*tä*([?])*k* ‘dream’ > PCh *-*hwihlek* || PW *-*x^wi*[?]*teq*
- (464) PM **phi*[?]*nä*([?])*χ* ‘crab’ > Ni *phinax* || PCh **hwíneh*
- (465) PM *[*ji*]*phi*[?]*än*- ~ *[*ji*]*phi*[?]*än*- ‘to kill a bird’ > Ni [*ji*]*phi*[?]*xan-APPL* || PCh *-<*a*>*hwén-(n)ah* ‘bird’ || PW *-<*a*>*x^wén-k[?]e* ‘bird’
- (466) PM **kowä*[?]*x* / *-*kówä*[?]*x* ‘hole’ > PCh **kowéh* / *-*kóweh* || PW **k^jowex* / *-*k^jóweχ*
- (467) PM *-*k* *älphah* ‘spouse’ > Ni -*tf*[?]*akpha* || PCh *-*k*’*élhwah* || PW *-*k^j*’*éx^wah*
- (468) PM *[*ji*]*k*[?]*än* ‘to stretch out’ > Ni [*ji*]*tf*[?]*an* || PCh *-*[?i]k*[?]*én-APPL* || PW *-*[hi]k*[?]*én*
- (469) PM *[*ji*]*k*[?]*ása*[?]*χ* ~ *[*ji*]*k*[?]*áse*[?]*χ* ‘to divide’ > Mk [*ji*]<*a*>*k’esa*[?]*χ* || PCh *-*[?i]k*[?]*ésah* || PW *-*[hi]k*[?]*ésax*
- (470) PM **lätseni*([?]) ‘chañar fruit’ > PCh **létseni*? || PW **létse*[?]*nih*
- (471) PM **lätsen*-*u*[?]*k* ‘chañar plant’ > Mk <*xu*>*letsin*-*u*[?]*k* || PCh **léseni*-*k* || PW **létsen*-*uk*^w
- (472) PM *-*(-lkä*([?])*l* ‘nasal mucus, cold’ > Mk -*leke*([?])*l* || PCh **kéł* || PW **k^jéł-taχ*, **k^jéł-ta-s*
- (473) PM **lääjX₂₃VnåX₁₃å* ‘Azara’s night monkey’ > Ni *klajxenåxå* || PCh **lähjanåhå-ke?*
- (474) PM **mät* ‘hither, nearby’ > Mk *met* ‘nearby’ || PCh **mét* ‘hither’
- (475) PM *[*ji*]*nxí*[?]*wän* ‘to smell’ > Mk [*ji*]*nxí*[?]*wen* || PCh *-*[?i]hní*[?]*wen*
- (476) PM **pútäh* ‘tapeti rabbit’ > Ni *puta* || PCh **púteh*
- (477) PM *[*ni*]-*tåphä*([?])*l-APPL* ‘to know, to be acquainted’ > Ni [*ni*]*tåphakl-APPL* || PCh *-*[?i]tåhwel-APPL* || PW *-*tåx^wel-APPL*/ *-*tåx^wnh-APPL*
- (478) PM *-*tåwä*[?]*x*, *-*tåwxä*-*ts* ‘(abdominal) cavity’ > Mk -*tawe*[?]*x*, -*tawxe*-*ts* || Ni -*tåβa*[?]*s*, -*tåβxa*-*s* || PCh *-*tóweh* || PW *-*tóweχ*
- (479) PM *-*tä*([?])*ts*, *-*täts*-*él* ‘trunk, base’ > PCh *-*tés* (*-*el*) || PW *-*tes*, *-*téts*-*el^h*
- (480) PM *-*täts*-*u*[?]*k*, *-*täts*-*ku*-*j^h* ‘trunk’ > Ni -*tats*-*uk*, -*tas*-*ku*-*j* || PCh *-*(-tés*-*uk*, *-*tés*-*ku*-*j^h*
- (481) PM *-*témä*([?])*k* ~ *-*tämä*([?])*k*, *-*témh*-*aj^h* ~ *-*támh*-*aj^h* ‘bile’ > PCh *-*témek*, *-*téhm*-*aj^h* || PW *-*témeq*, *-*témh*-*aj^h*
- (482) PM **wäk* ‘all’ > Mk *we:k* || Ni -*βatf* || PCh *-*wek* || PW *-*weq*
- (483) PM *-*wä*[?]*x*, *-*w(ä)x-áj^h* ‘burrow; anus’ > Ni -*βa*[?]*f*, -*βaf*-*aj^h* || PCh *-*wéh* || PW *-*wéχ*, -*wh-áj^h*

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- (484) PM *²wäle²k ‘to walk’ > Mk -<i>²welki-²met²to limp² || Ni βaklē²tf || PCh *[²i]²wélek
|| PW *²weleq
- (485) PM *[²ji]²wän ‘to see’ > Mk [²ji]²wen || Ni [²ji]²βan || PCh *[²i]²wén || PW *[²hi]²wén
- (486) PM *-²wät ‘place’ > Mk -²wet || Ni -²βat || PCh *-²wét || PW *-²wet
- (487) PM *-xäjk²u(?)²-l² ‘egg’ > Ni -sajk²u(-k) || PCh 3 *hl-éjk²u²l² || PW *-t-ík²j²u²l²
- (488) PM *-xä²n(e?)² ‘verbal plural (suffix)’ > Ni -fa²ne²?/-xa²ne²? || PCh *-he²n(e?)²
|| PW *-he²n
- (489) PM *-xäte²k, *-xäthe-j² ‘head’ > Ni -fate²tf, -satxe-s || PCh *-hétek, *-héhte-j²
|| PW *-t-éteq, *-t-éthe-j²

The regular reflex in Chorote seems to be ²i rather than ²e if an accented syllable follows. (490) further suggests that it is the position of the accent in PM (as opposed to PCh) that matters.

- (490) PM *pätóχ ‘to be deep’ > Ni [²a]patox || PCh *-pítōhw<ij?> || PW *pitóx^w
- (491) PM *tänúk(*-its) ‘feline’ > Mk tenuk(-its) || Ni tanuk(-is) || PCh *tinúk(*-is)
- (492) PM *tsänú²k ‘duraznillo trees’ > Ni tsanu²k || PCh *sinúk || PW *tsinúk^w
- (493) PM *-fäsχa²n, *-fäsχán-its ‘meat’ > Mk -fese²n, -fesen-its || Ni -(²a)sxa²n,
-(²a)sxan-is || PCh *-fisá²n, *-fisán-is || PW *-t-’isa²n, *-t-’isán-is

8.1.2.2 Lowering of ²e before ²χ

Before the uvular fricative ²χ, PM ²e has a special lowered reflex, PCh ²a. This is shared with Maká (§6.2.1.4) and Wichí (§9.1.2.2).

- (494) PM *[²j]áte(?)χ ‘to be fat’ > Ni [²j]åtex || PCh *[²j]áta²h || PW *[²j]átaχ
- (495) PM *påttséχ ‘jabiru’ > Ni pátsex || PCh *påtsáh || PW *påtsáχ
- (496) PM *påtse(?)χ ‘fast, quick’ > Ni pátsex || PCh *(-)påsah
- (497) PM *(-)tútse(?)χ ‘smoke’ > PCh *(-)túsah || PW *(-)tútsaχ
- (498) PM *tséχ-APPL ‘full (river)’ > Ni tsex-APPL || PCh *-sáh || PW *tsáχ-APPL
- (499) PM *?áwu(C)tsex ‘peccary’ > Ni ?aβuktsex ~ ?aβoktsex || PCh *?áwusah ||
PW *?áwutsaχ
- (500) PM *?á²jteχ, *?á²jte-ts ‘to hurt’ > Mk a?tax, a?ti-ts || Ni ?á²jtex ~ ?á²βtex ||
PCh *?áj²tah-APPL, *-?áj²te-s-APPL || PW *?ájtax, *?ájte-s
- (501) PM *?ál(V)tse(?)χ, *?ál(V)tse-ts ‘cháguar (*Deinacanthus urbanianum*)’ > Ni ?åktsex,
?åktse-s || PCh *?ál²sah, *?ál²se-s || PW *?åletsaχ

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- (502) PM **?ānhajex* ‘wild bean (*Capparis retusa*)’ > Mk *anhejax* || Ni *?ānxajex* || PCh **?ōhnajah* || PW **?ānhjaχ*
- (503) PM **?aX₁₃áje(?)χ* ‘mistol fruit’ > Ni *?axájex* || PCh **?ahájah* || PW **?ahájaχ*
- (504) PM **?uwáte(?)χ* ~ **C'uwáte(?)χ* ‘puma’ > Ni <xum>*p'uβatex* || PCh **k'uwáhlah* || PW **?owátaχ* ~ **C'owátaχ*

The lowering induced by the uvular fricative left behind a synchronically active alternation in Chorote. In forms that go back to PM etyma with a *χ, the lowering applies, and one finds PCh *a. By contrast, the reflexes of PM forms derived from the vocalic stems of the same etyma (see §5.2.2) show no lowering, because PM *χ was absent in the respective protoforms. Consequently, one finds PCh *e, raised to i in the unstressed position in the contemporary varieties.

- (505) Iyo'aja' (Drayson 2009: 96, 143, 144)
- pánsa* /pánsah/ ‘fast, quick.SG’ → *pánsi-s* /pánsi-s/ ‘fast, quick.PL’
 - p'élis^je* /p'ilusah/ ‘poor.SG’ → *p'ihl^júksi-s* /p'ilúsi-s/ ‘poor.PL’
 - ?á?t^jeh-e?* /?á?tah-hi(j)/ ‘it hurts’ → *?á?ti-s-i?* /?á?ti-s-hi(j)/ ‘they hurt’
- (506) Iyo'awujwa' (Gerzenstein 1983: 120, 166)
- álisa* /?ál^osah/ ‘cháguar.SG’ → *álisi-s* /?ál^osi-s/ ‘cháguar.PL’
 - tóxsa* /túsah/ ‘smoke.SG’ → *tóksi-s* /túsi-s/ ‘smoke.PL’
- (507) Manjui (Carol 2018)
- p'ilixsáh* /p'ilVsáh/ ‘poor.SG’ → *p'ilixsé-s* /p'ilVsé-s/ ‘poor.PL’

8.1.2.3 Lowering of *i in the environment *At/x...ts

In Chorote, PM *i lowers to *e before *ts, provided that there is a low vowel (*a or *å) in the preceding syllable. This most regularly happens when the syllable has *t as the onset, but one example with PM *x > PCh *h has also been identified. As a consequence, the nominal plural suffix *-is shows the allomorph *-es in Proto-Chorote, an alternation best described as an instance of progressive height harmony. This innovation is shared with Wichí (§9.1.2.3); in addition, a similar process operates dialectally in Nivaclé (§7.2.6).

- (508) PM *-åt-its ‘drink.PL’ > Ni -åt-is || PCh *-åt-es
- (509) PM *jinåt-its ‘water.PL’ > Ni *jinåt-is* || PCh *i?nåt-es || PW *?inåt-es

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- (510) PM **qati*⁷*ts*, **qatits-él* ‘star’ > Ni *kati*⁷*s* || PCh **qatés*, **qates-él* || PW **qates*, **qatéts-él^h*
- (511) PM *...*X₂₃a*⁷*t-its* ‘earth.PL’ > Ni <*kots>xat-is* || PCh *<*?a>h<n>át-es* ~ *<*?å>h<n>át-es* || PW *<*hon>hat-es*
- (512) PM *-*?åx-íts* ‘skins, barks’ > Mk -*?ax-its* || Ni -*?åx-is* || PCh *-*?åh-és* || PW *-*t-åh-és*

8.1.2.4 Lowering of *i before glottalized consonants followed by a low vowel

We have already seen that the sequence PM **ji* changed to **?i* word-initially in Proto-Chorote (§8.1.1.5). However, when followed by a glottalized consonant and a low vowel (PM **a* or **å*, but not **ä*), the vowel **i* was lowered, yielding **?a*. The development PM **ji* > **?i* > **?a* in this environment is shared with Wichí (§9.1.2.4).

- (513) PM **ji*⁷*jå*⁷*X₁₂* ‘jaguar’ > Ni *ji*⁷*jå*⁷*x* || PCh **?a*⁷*jåh* || PW **ha*⁷*jåχ*
- (514) PM **ji*⁷*lå?*, **ji*⁷*lå-j^h* ‘tree’ > Ni *ji*⁷*klå?*(-*j*) || PCh **?a*⁷*lå?*(*-*j^h*) || PW **ha*⁷*lå*, **ha*⁷*lå-j^h*
- (515) PM **jit*⁷*å?*, **jit*⁷*å-l* ‘vulture’ > Ni *jit*⁷*å?*(-*k*) || PCh **?at*⁷*å?*(*-*l*) || PW **hat*⁷*å?*(*?*)

8.1.2.5 Rounding of vowels next to *k(’)w

In two examples, accented PM **é* and **ä* appear to have acquired rounding in Chorote next to **kw* (from PM **kφ*) or **k’(w)* (from PM **kφ’*).

- (516) PM **[j]ékφa*⁷*x* ‘to bite’ > Mk *[j]ikfe*⁷*x* || PCh **[j]ókwah* || PW **[j]ók^waχ*
- (517) PM **[ji]kφ’äs* ~ **[ji]kφ’äs* ‘to be torn open’ > Ni *[ji]k’as-APPL* || PCh **[?i]k’(w)ós* || PW **[hi]k^wés-APPL*

Unaccented instances of **e* remained unaffected in Proto-Chorote. However, in the only known example vowel rounding is seen in the Iyojwa’aja’ variety, as shown in (901) below.

- (518) PM **[j]ókφe*⁷*(t)s* ~ **[j]ókφä*⁷*(t)s* ~ **[j]ékφe*⁷*(t)s* ~ **[j]ékφä*⁷*(t)s* ‘to frighten’ > PCh **[j]ókwes* || PW **[j]ók^wes*

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8.1.2.6 The emergence of Proto-Chorote ${}^{\circ}$

The insertion of an intrusive ${}^{\circ}$ in certain consonant clusters (§8.1.1.13) and the decomposition of syllabic consonants into sequences of the type ${}^{\circ}C{}^{\circ}$ (§8.1.1.11) is shared by all Chorote varieties and must have been complete by the Proto-Chorote stage. All Chorote varieties have since merged ${}^{\circ}$ with other vowels, especially ${}^{\circ}i$ (§8.2.3.4), but this latter merger took place independently in the varieties of Chorote: PCh ${}^{\circ}$ differs from PCh ${}^{\circ}i$ in not constituting the environment for the first palatalization (§8.2.1.1). However, the reflexes of both sounds did feed the second palatalization, which occurred in Iyojwa’aja’ and, with some restrictions, in Manjui (§8.2.1.2).

In Hall’s (2006) typology of inserted vowels, PCh ${}^{\circ}$ is probably better characterized as an intrusive vowel rather than as a full-fledged epenthetic segment: its quality does not match any other vowel phoneme already present in the inventory, and it typically occurs in heterorganic clusters. Its only property untypical of intrusive vowels is that its main function is that of repairing illicit structures. It is therefore quite possible that PCh ${}^{\circ}$ was absent from the phonological representations of Proto-Chorote forms, as in ${}^{\circ}/wkinah/$ (likely pronunciation: ${}^{\circ}[wə'kinah]$) ‘metal’. However, in the contemporary Chorote lects its reflexes are clearly segmental, which is in any case a common fate of erstwhile intrusive vowels in many languages (Hall 2006: 422–424).

It is difficult to reconstruct the exact phonetic realization of the intrusive vowel symbolized as ${}^{\circ}$ here; possible values include [i], [ə], and [ɪ]. It was certainly distinct from PCh ${}^{\circ}e$ (which also sometimes yields [i] in the modern varieties), since the sound change PCh ${}^{\circ}e$ > modern Chorote [i] fed the first palatalization, as in PCh ${}^{\circ}ya-selán-eh$ ‘I prepare, I make’ > I’w a-silén-e ‘id.’.

8.1.2.7 Other vowel changes

There are some cases of PM ${}^{\circ}a$ > PCh ${}^{\circ}o$ in the environment ${}^{\circ}_k{}^{\circ}(-)o$.

- (519) PM ${}^{\circ}-pák'o$ ‘heel’ > PCh ${}^{\circ}-pók'o?$ || PW ${}^{\circ}-pák'o$
- (520) PM ${}^{\circ}-t(á)ko?$ (${}^{\circ}-l$) ‘face’ > Mk $-tko<je$ || Ni $-tako?$ ($-k$) || PCh ${}^{\circ}-tóko?$ (${}^{\circ}-l$) || PW ${}^{\circ}-ták'o$ (${}^{\circ}-l^h$)
- (521) PM ${}^{\circ}-t(á)ko-se?$ (${}^{\circ}-j^h$) ‘eyebrow’ > Mk $-tko-si?$ (${}^{\circ}-j$) || PCh ${}^{\circ}-tóko-se?$ (${}^{\circ}-j^h$) || PW ${}^{\circ}-ták'o-se$ (${}^{\circ}-j^h$)

Before the plural non-human suffix ${}^{\circ}-wá?$, found in demonstratives, the vowels ${}^{\circ}a$, ${}^{\circ}â$, and ${}^{\circ}e$ change to ${}^{\circ}o$, as in the forms ${}^{\circ}ko-wá?$ ‘those (outside the

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speaker's sight)', **no-wá?* 'these (outside one's hands' reach)', **?no-wá?* 'these (within one's hands' reach)', **po-wá?* 'those (outside the speaker's sight and never seen before)', **so-wá?* 'those (within the speaker's sight)' (compare the masculine singular forms **ká?*, **ná?*, **?ná?*, **pá?* ~ **?pá?*, **sé?*). In the form **ha-wá?* ~ **hå-wá?* 'those (outside the speaker's sight but seen before)', the rounding of the vowel is perhaps prevented by the preceding glottal fricative (in the Manjui variety this form has subsequently changed to *ho-wa*, thus eliminating the irregularity).

8.1.3 Word-level prosody

Chorote has contrastive stress. In our proposal, Iyo'awujwa' and Manjui are conservative with regard to the position of the stress, whereas Iyojwa'aja' underwent stress retraction in some cases, as will be shown in §8.2.4. Synchronously, the stress of any given Chorote word form can be determined based on the accentual properties of individual morphemes as follows. The leftmost underlying accent is the one that appears in the surface realization, whereas all subsequent accents are deleted. If no morpheme in a given Chorote word contains an underlying accent, a default accent is inserted in the peninitial syllable (or in the only syllable in the case of monosyllabic words). The following examples from Manjui illustrate.⁸ The lowering of the pretonic vowel in (522d) is not a productive process (see also §8.2.3.9).

(522) Manjui (Carol 2018, Hunt 1994)

- a. /hl-úp-ís/ ['hlüpɪs]
3.POSS-nest-PL
'its nests'
- b. /tós-ís/ ['tɔxʃɪs]
snake-PL
'snakes'
- c. /túsah/ ['tɔxsa]
smoke
'smoke'

⁸A note is due on the realization of the prefixes in the examples below. The prefixes /i-/, /hl-/, /s-/, /Vn-/ take moraic allomorphs (?i-, hi-, fi-, ?in-) before supraglottal consonants; non-moraic allomorphs (j-, t-..., ts-..., 'n-) before /l/; and maintain the underlying moraicity distinction before /h/ (as ?i-, hl-, s-, ?in-). Before vowels, /i-/, /hl-/, and /s-/ take non-moraic allomorphs (j-, hl-, s-), and /Vn-/ remains moraic (?in-).

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- d. /ʔis-ís/ [ʔax'seis]
good-PL
'they are good'
- e. /hup-ájh/ [hu'pajh]
maize-PL
'grass'
- f. /i-k^joj/ [ʔix'soj]
1SG.POSS-hand
'my hand'
- g. /kihwijh/ [ki'hwijh]
below
'inside, below, beneath'
- h. /k^joweh/ [k^jo'wəh]
hole
'burrow'
- i. /hl-túsah/ [hi't^juxsa]
3.POSS-smoke
'its smoke'
- j. /Vn-láhwah-ájh/ [ʔin'lahwaaj]
GNR-pet-PL
'one's pets'
- k. /Vn-k^joj-ájh/ [ʔinki'jejh]
GNR-hand-PL
'one's hands'
- l. /Vn-^jlih-ájh/ [ʔin^jla'hajh]
GNR-language-PL
'one's words'
- m. /s-kihwijh/ [ʃi'keihwi]
1PL-below
'inside us, below us, beneath us'
- n. /hl-k^joweh/ [hi'k^jowe]
3.POSS-hole
'her/his abdomen'

We propose that the Chorote stress straightforwardly continues the accent of Proto-Mataguayan with minor changes, and that the underlying accentual

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properties of specific morphemes were also inherited from PM. The accented vowels of Proto-Mataguayan are normally reflected as stressed in Chorote, and the unaccented ones as unstressed. As discussed in Chapter 4, already in Proto-Mataguayan only the leftmost underlying accent in any given word made it to the surface, whereas all subsequent underlying accents were eliminated; this rule is still active in (Proto-)Chorote. In addition, as shown in §4.3.2, Proto-Mataguayan had a rule whereby a default peninitial accent is inserted in words without an underlying accent within the trisyllabic window at the left edge: $\sim\sim(\dots) \rightarrow \sim\sim(\dots)$. This rule has extended its operation to shorter words in (Proto-)Chorote: unlike Proto-Mataguayan, where some monosyllabic or disyllabic words (including content words) may lack an accent altogether, Chorote requires that at least one syllable in a word be stressed, with the possible exception of some grammatical elements.

The Chorote reflexes of unaccented monosyllabic words of Proto-Mataguayan receive stress on their only syllable, as shown below.

- (523) PM 1 **h-åk*, 2 **t-åk*, 3 *[*j*]ik; CISL **n-äk* ‘**to go away**’ > Mk 1 *h-ak*, 2 *t-ak*, 3 *ik*; CISL *n-ek* || Ni 1 *x-åk*, 2 *t-åk*, 3 [*j*]itf; CISL *n-atf* || PCh 1 ?åk, 2 **hl-ék* || PW 2 **t-eq*, 3 *[*j*]iq; CISL **n-eq*
- (524) PM *-åp, 3 *'[*j*]ip ‘**to cry**’ > Mk -ap, 3 *ip* || Ni -ap, 3 [*j*]ip || PCh *[*j*]áp || PW *'[*j*]ip
- (525) PM **t-åq* ‘**its food**’ > Mk *t-aq* || Ni *t-åk* || PCh **hl-åk* || PW **t-åq*
- (526) PM **t-e* ‘**its thorn**’ > Mk *t-i?* || Ni *t-e?* || PCh **hl-é?* || PW **t-e*
- (527) PM **tå'ł* ‘**to sprout**’ > Mk *ta'ł* || Ni *tå'ł* || PCh **tåł* || PW **tåł*
- (528) PM **tså(?)j* ‘**spill!**’ > PCh **såj?* || PW **tsåj*
- (529) PM **xu(?)p* ‘**grass**’ > Mk *xup<el>* || PCh **húp* || PW **hup*
- (530) PM **t-'a(?)q* ‘**its rope, its cord**’ > PCh **t-'ák* || PW **t-'aq*
- (531) PM *-?å(?)l, 3 *'[*j*]i(?)l ‘**to die**’ > PCh *'[*j*]á(?)l || PW *'[*j*]il^h
- (532) PM *[*t*]ås ‘**to step**’ > Ni [*t*]ås || PCh *[*t*]ås || PW *[*t*]ås-APPL
- (533) PM **t-'åx* ‘**skin, bark**’ > Mk *t-'ax* || Ni *t-'åx* || PCh **t-'åh* || PW **t-'åχ*
- (534) PM *?is ‘**good**’ > Ni ?is || PCh *?is || PW *?is

The Chorote reflexes of unaccented disyllabic words of Proto-Mataguayan receive stress on their final syllable, as shown below.

- (535) PM **ji'jå'X₁₂* ‘**jaguar**’ > Ni *ji'jå'x* || PCh **?a'jåh* || PW **ha'jåχ*

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- (536) PM **ji'lå?* 'tree' > Ni *ji'klå?* || PCh **2a'lå?* || PW **ha'lå*
- (537) PM **ji'no* 'man' > PCh **2i'nó?* || PW **hi'no*
- (538) PM **jit'å?* 'vulture' > Ni *jit'å?* || PCh **2at'å?* || PW **hat'å?*(?)
- (539) PM **kowä'x* 'hole' > PCh **kowéh* || PW **k'owex*
- (540) PM **ntå(?)k* 'two' > PCh **nták* || PW **nitåk^w*
- (541) PM **qati'ts* 'star' > Ni *kati's* || PCh **qatés* || PW **qates*
- (542) PM **wije?* 'caraguatá (*Bromelia serra*)' > Ni *βije?* ~ *jije?* || PCh **wijé?* || PW **wuje?*(?)
- (543) PM **X₁₃on-xa'χ* 'night' > Ni <*xon>fa'x* || PCh *<*2a>h<n>åh* ~ *<*2å>h<n>åh* || PW **<hon>aχ*
- (544) PM **X₁₃on-X₂₃a't* 'earth' > PCh *<*2a>h<n>åt* ~ *<*2å>h<n>åt* || PW **<hon>hat*
- (545) PM **t'ałå?*(?) 'fat' > PCh **t'-ahlå?* || PW **t'-ałå?*(?)
- (546) PM **2at'e(?)t(s)* ~ **2at'ä(?)t(s)* 'aloja drink' > PCh **2at'és* || PW **hat'és*
- (547) PM **2atsXa?*(?) 'dorado' > PCh **2asá?* || PW **2atsha?*(?)
- (548) PM **t'-äsχa'n* 'meat' > Mk *t'-ese'n* || Ni *t'-asxa'n* || PCh **t'-isá'n* || PW **t'-isa'n*

The same combination obtains when an unaccented moraic prefix is added to an unaccented monosyllabic root. The following roots typically show up with a moraic prefix:

- (549) PM *-*kå's* 'tail' > Ni *-kå's* || PCh *-*kås* || PW *-*k'ås*
- (550) PM **[ji]kå?* 'to be torn' > PCh **[2i]kå?* || PW **[2i]k'å?*
- (551) PM *-*ko(?)j* 'hand, arm' > Mk *-koj* || PCh *-*kój?*
- (552) PM *-*k'u* 'horn, club' > Mk *-k'u* || Ni *-k'u?* || PCh *-*k'ú?* || PW *-*k'j'u*
- (553) PM *-*li'x* 'language, word' > Mk *-'lix<e?* || Ni *-'klî'ʃ* || PCh *-*lîh*
- (554) PM *-*ka* 'tool, skillful person' > Ni *-tsa?* || PCh *-*k'á?* || PW *-*k'á*
- (555) PM **(-)ta?* 'louse' > Mk *-<ij>te?* || Ni *-ta?* || PCh *-*hlá?* || PW **ta?*
- (556) PM *-*tu'k* 'yica bag, load' > Mk *-tuk* || Ni *-tu'k* || PCh *-*hluk* || PW *-*tuk^w*
- (557) PM **[ji]må* 'to sleep' > Mk *[i]ma?* || Ni *[ji]må?* || PCh **[2i]må?* || PW **[2i]må*
- (558) PM *-*nji'x* 'smell' > Mk *-nji'x* || Ni *-ni'ʃ* || PCh *-*nih* || PW *-*nix*
- (559) PM *-*pe?*(?) 'fat' > Ni *-<a>pe?* || PCh *-*pé?* || PW *-*pe?*(?)
- (560) PM *-*p'o'k* ~ *-*ɸ'o'k* 'fence' > Ni *-p'o'k* || PCh *-*p'ók* || PW *-*p'ok^w*

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- (561) PM *-p'o⁷t 'lid' > Mk -p'ot<o?> || Ni -p'o⁷t || PCh *-p'ót || PW *-p'ot
- (562) PM *-tä(?)ts, *-täts-él 'trunk, base' > PCh *-tés (*-el) || PW *-tes, *-téts-el^h
- (563) PM *[ji]tså(?)j 'to spill' > PCh *[?i]sáj? || PW *[?i]tsåj
- (564) PM *-wät 'place' > Mk -wet || Ni -βat || PCh *-wét || PW *-wet
- (565) PM *-wo 'neck' > Mk -wo<nxe?> || Ni -βo? || PCh *-wó? || PW *-wo
- (566) PM *-wu(?)j 'clothes, blanket' > PCh *-wúj? || PW *-wuj

Most verbs that took a zero third-person realis prefix in Proto-Mataguayan underwent a morphological change in Chorote: they now take the third-person realis prefix *?i-. The verbs that were affected by this change are underlyingly unaccented in Proto-Mataguayan; in Chorote, they receive a default stress on the peninitial syllable.

- (567) PM *ti⁷ɸ 'to suck breast' > Mk tu⁷f / -tu⁷f || Ni ti⁷ɸ || PCh *[?i]tíℳ || PW *tip
- (568) PM *tim 'to swallow' > Mk tim-xu? / -tim-xu? || Ni tim || PCh *[?i]tíℳ || PW *tim
- (569) PM *tis 'to invite, to pay' > Mk tis-ix / -tis-ix || Ni tis || PCh *[?i]tíℳ || PW *tis
- (570) PM *ti⁷x 'to dig' > Mk ti(?)x-APPL / -ti(?)x-APPL || Ni ti⁷ʃ || PCh *[?i]tíh-ij? || PW *tiχ
- (571) PM *tux 'to eat.TR' > Mk tux / -tux || Ni tux || PCh *[?i]túℳ || PW *tux^w
- (572) PM *tija⁷χ 'to shoot, to throw' > Mk tija⁷χ / -tija⁷χ || Ni tija⁷χ || PCh *[?i]tíjåh || PW *tijaχ
- (573) PM *ti⁷lå⁷x 'to carry on one's shoulders' > Mk ti⁷lo⁷x / -ti⁷lo⁷x || Ni ti⁷lå⁷x || PCh *[?i]tíhlåh || PW *ti⁷låχ
- (574) PM *wälé⁷k 'to walk' > Mk -<i>welki-⁷met⁷ 'to limp' || Ni βaklé⁷tf || PCh *[?i]wélek || PW *weleq

Chorote retains the mobile paradigms of Proto-Mataguayan to some extent. For example, underlying unaccented monosyllables retain their behavior in Chorote: when they are followed by an underlyingly accented plural suffix, the stress moves to the suffix.

- (575) Iyojwa'aja' (Carol 2014a: 92)
- ?és 'it is good' → ?if-ís 'they are good'
 - t-'ák 'its rope, cord' → t-'ak-á? ~ t-'ak-á?l 'its ropes, cords'
 - t-'áx 'its skin' → t-'eh-éś 'its skins'

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- (576) Iyo'awujwa' (Gerzenstein 1983: 176)
- hóp* 'maize' (etymologically 'grass.SG') → *hup-áj* 'grass' (etymologically 'grass.PL')
- (577) Manjui (Carol 2018)
- hóp* 'maize.SG' → *hup-ájh* 'maize.PL, grass'
 - ?eis* 'it is good' → *?as-eis* 'they are good'
- This differs from the behavior of underlyingly accented monosyllables, which keep their stress even when followed by an underlyingly accented plural suffix.
- (578) Iyojwa'aja' (Drayson 2009: 131, 132)
- hl-é?* 'her/his/its name' → *hl-éj-is* 'her/his/its names'
 - hl-óp* 'its nest' → *hl-óp-is* 'its nests'
- (579) Iyo'awujwa' (Gerzenstein 1983: 125, 176, 176, 183)
- éj* 'yica bag' → *-éj-is* 'yica bags'
 - hl-úp* 'its nest' → *hl-úp-is* 'its nests'
 - hók* 'palo santo tree' → *hók-i?* 'palo santo trees'
 - tóxs* 'snake' → *tóxs-is* 'snakes'
- (580) Manjui (Carol 2018)
- át* 'drink.SG' → *-át-es* 'drink.PL'
 - éj?* 'name' → *-éj-is* 'names'
 - éj?* 'yica bag' → *-éj-is* 'yica bags'
 - 'mók* 'zorzar bird' → *'mók-is* 'zorzar birds'
 - hók* 'palo santo tree' → *hók-ej* 'palo santo trees'
 - hót* 'sand.SG (small quantity of sand)' → *hót-ej* 'sand.PL (large patch of sand)'
 - hl-úp* 'its nest' → *hl-úp-is* 'its nests'
 - tóxs* 'snake' → *tóxs-is* 'snakes'

Chorote also retains the behavior of underlyingly unaccented disyllabic nouns and adpositions. When they occur without a prefix, they receive a default peninitial stress on their *second* syllable, as explained above. However, when a moraic prefix is added, the default peninitial stress falls on the *first* syllable of the stem.

- (581) Iyojwa'aja' (Carol 2014a: 92)

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- a. *k'ijé* 'for' → *si-k'óje* 'for us'
 - b. *?apé?e* 'above' → *si-típe?e* 'above us'
 - c. *k'ahwéh* 'below' → *si-k'ahwe* 'below us'
- (582) Manjui (Carol 2018, Hunt 1994)
- a. *?ijé?* 'for' → *hi-?óje?* 'for her/him'
 - b. *?apé?e?* 'above' → *hi-tépe?e?* 'on top of it'
 - c. *kihwíjh* 'below' → *si-kéihwi* 'below us'

In verbs, however, the pattern in question no longer occurs. Instead, fixed stem-initial stress was apparently generalized in verbs in these cases, as in PCh **qásit* 'stand up!' (compare 'Wk *qasít* 'id.').

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Chorote shows more dialectal diversity than any other Mataguayan language in terms of the nature of the linguistic differences. The variety spoken by the Iyo'jwa'aja' people of Argentina, also known as Riverine Chorote or variety #1 (= V1), is particularly divergent, whereas all other varieties are closer to each other and are collectively referred to as Forest Chorote or variety #2 (= V2). This latter group of dialects, in turn, is subdivided into what we call Iyo'awujwa' (spoken in Argentina as well in the community of San Eugenio, located in the surroundings of Pedro P. Peña, Paraguay) and Manjui (spoken especially in Misión Santa Rosa = Wonta and Abizai). Note that the Iyo'awujwa' speakers from San Eugenio are locally known as Manjui.

Iyojwa'aja', Iyo'awujwa', and Manjui are all further subdivided into a number of subvarieties. Subdialectal variation within these varieties remains understudied, however. Gerzenstein (1978) states that the Iyojwa'aja' are divided into *Isiam jlele* 'Downriver People' and *Pijiam jlele* 'Upriver People', a claim whose linguistic validity we have been unable to confirm (perhaps due to drastic demographic changes that affected the Iyojwa'aja' people during the 20th century), though there certainly are lexical differences between subvarieties of Iyojwa'aja'. The Iyo'awujwa' were historically (before the Chaco War) subdivided into two groups, *Jla'wáj jlele* 'Lake People'⁹ and *Jwej jlele* 'Field People'; it is unclear whether this division is related to the linguistic variation attested within contemporary Iyo'awujwa'. The Manjui are subdivided into *Jlimnájnas* 'Forest People'

⁹Carol (2014b: 8) mistakenly analyzes Siffredi's (1982) attestation of this ethnonym as *Jlawá'a jlele* 'Outsiders'.

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and *Jlawá'a Wos* ‘Outsiders’, which historically spoke slightly different subdialects, according to Carol (2014b: 5–8) and Hunt (1994: 5). Although nowadays descendants of both groups have settled in Santa Rosa (Wonta), and the subdialects in question have mixed to some extent in the speech of the speakers born in the 1970s or later (Carol 2018: 8), some minor lexical and phonetic differences persist (Hunt 1994, Carol forthcoming).

This section describes the phonological evolution of Iyojwa’aja’, Iyo’awujwa’, and Manjui.

8.2.1 Palatalization

Palatalization is a pervasive phenomenon in Chorote. It affects consonants only in the onset position. Most consonants palatalize by acquiring a secondary articulation, i.e. $*C > [C^j]$: $*t > [t^j]$, $*m > [m^j]$, $*l > [l^j]$, etc., a phenomenon known as **secondary palatalization** (Bateman 2007). For others, it involves a change in the place of articulation (Bateman’s (2007) **full palatalization**). This is the case with $*k^j()$; $*s$ and $*ts$ ’ (except in Iyojwa’aja’, where palatalization is most commonly realized as $[C^j]$); and $*w$, $^{*}w$, $^{*}hw$, with some nuances (labiovelars are subject to full or secondary palatalization, depending on the environment and dialect; §8.2.1.1). As for $*h$, it becomes hj , realized as [hj] or [xj].

In Manjui, secondary palatalization ($[C^j]$) is often imperceptible or hardly perceptible, depending on the speaker, target, and phonological environment, as in $[?i?n^j)o?]$ ‘man’, $[?i'hl^j)o?]$ ‘armadillo’, which explains its frequent absence in Gerzenstein’s (1983) transcriptions of that dialect. However, acoustic analysis shows that in most cases the secondary articulation does exist, as shown by the characteristic lowering of the second formant after the consonant (Ladefoged & Maddieson 1996: 364), although the lowering is much shorter than in Iyojwa’aja’ and Iyo’awujwa’. The effects of the palatal articulation could be reflected in the following closed vowel [o] (instead of the otherwise expected [ɔ]), even though a different explanation for the closed vowel cannot be ruled out (§8.2.3.2). In other cases, no acoustic traces of palatalization are found, as is the case for /n/ before [e] derived from /a/ (§8.2.3.1): /i-najin/ > $[?i'nejin]$ ‘s/he goes first’. An extensive account of the phonetic details of palatalization in Manjui is beyond the scope of the present book; see Carol (forthcoming) for details.

As a diachronic sound change, palatalization occurred at least four times in the history of the Chorote varieties. We dub these sound changes **first, second, third palatalization**, and **regressive palatalization**, keeping in mind that they were not shared by the extant varieties of Chorote but rather applied independently, with slightly differing results. The first palatalization is triggered by PCh $*i$ or

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$*(?)j$ (and, at least in Iyo'awujwa' and Manjui, also by $*e > [i]$ in pretonic position). The second palatalization, which affects only coronal consonants (except /s/ and /ts'/ in Manjui) and does not apply in Iyo'awujwa', is triggered by [i]'s of different origins (including from PCh $*(?)$), but also by PCh $*u$, PCh $*hw$, and, sporadically in Manjui, by PCh $*e$. The third palatalization, triggered by PCh $*i$, applies only in Iyo'awujwa' and Manjui and affects PCh $*q(?)$, which had been immune to the first palatalization. The regressive palatalization is a marginal phenomenon whereby /s ts'/ are palatalized to [ʃ tʃ'] before an [i]; it is most common in Manjui. In what follows, we discuss in detail the first (§8.2.1.1), the second (§8.2.1.2), the third (§8.2.1.3), and the regressive (§8.2.1.4) palatalizations; the depalatalization process (§8.2.1.5); as well as cases which we cannot explain at present (§8.2.1.6).

8.2.1.1 First palatalization

The first (progressive) palatalization took place in all Chorote varieties. It affects all consonants in the onset position except $*(?)j$ and $*q(?)$. Arguably $*q$ and $*q'$ were still phonetically uvular in Proto-Chorote (though their reflexes are sometimes articulated as velar in the daughter languages), and palatalized uvulars are much more difficult to articulate than palatalized consonants with a more front place of articulation.¹⁰ The triggers include PCh $*i$, $*j$, and $*j'$, but also $*e > i$ in pretonic position, suggesting that this latter change had taken place early enough. Despite the fact that the first palatalization affected all Chorote varieties, there is evidence suggesting that it took place (or remained active) after the split of Proto-Chorote. A case in point is the lack of the first palatalization in (589) in Iyojwa'aja', where the stress retraction (§8.2.4) bled the change $*e > i$, necessary for the palatalization to occur; other dialects, where the stress retraction did not apply, do show both $*e > i$ and the first palatalization.

- (583) PCh $*?ipák$ 'straw' > Ijw $?ip^ják$ || I'w $ip^jék$ [our normalization: $?ip^jék$] || Mj —
- (584) PCh $*k'ihló?$ 'armadillo' > Ijw $k'ihl^jó?$ || I'w $ihl^jó?$ [our normalization: $?ihl^jó?$] || Mj $?ihl(j)ó?$
- (585) PCh $*?i-hlá'm$'s/he defecates' > Ijw $?i-hl^já'm$ || I'w — || Mj $?i-hl(j)é'm$
- (586) PCh $*?i-má?$'s/he sleeps' > Ijw $?i-m^já?$ || I'w — || Mj $?i-m^jé? ~ ?i-má?$ s/he camps'

¹⁰It is fairly common for a language to have a uvular series, a palatalized series, but no palatalized uvulars, as is the case in Xong (< Hmongic < Hmong–Mien; [Sposato 2021](#)) and in Tsakhur (< Lezgic < East Caucasian; [Kodzasov 1999](#)).

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- (587) PCh **ʔihnáta-k* ‘*tusca tree*’ > Ijw *ʔihn'éta-k* || I'w *ihn'éta-k* [our normalization: *ʔihn'éta-k*] || Mj *ʔihn^(j)éta-k*
- (588) PCh **ʔi'no?* ‘*man*’ > Ijw *ʔi'n^jo?* || I'w *in^jo?* [our normalization: *ʔi'n^jo?*] || Mj *ʔi'n^(j)o?*
- (589) PCh *-selán- ‘*to prepare*’ > Ijw -léxsan- || I'w -sil^jén- || Mj -si(l)^jén-
- (590) PCh *-ʔelák ‘*pus*’ > Ijw -ʔil'ák || I'w — || Mj —
- (591) PCh **ʔi-nájin* ‘*s/he goes first*’ > Ijw *ʔi-n^já'n* || I'w — || Mj *ʔi-néjin*

PCh **w*, **w̄*, and **hw* palatalize to *j*, *ɟ*, and *hj*, respectively, before any vowel in Manjui, but only before rounded vowels in Iyojwa'aja' (Gerzenstein 1978: 64) and Iyo'awujwa' (Gerzenstein 1983: 44). In these varieties they yield *w*, *w̄*, and *hw* before [i], but *w^j*, *w̄^j*, and *hw^j* before [a] and [e].

- (592) PCh **ʔi-wún* ‘*s/he burns*’ > Ijw *ʔi-jú'n* || I'w — || Mj *ʔi-jún*
- (593) PCh **ʔi-ʷwén* ‘*s/he sees*’ > Ijw *ʔi-ʷwí'n* || I'w *ʔi-ʷwín* || Mj *ʔi-ʷjín*
- (594) PCh **ʔi-ʷwét* ‘*my place*’ > Ijw *ʔi-ʷwít* || I'w *ʔi-ʷwít* || Mj *ʔi-ʷjít*
- (595) PCh **ʔi-ʷwút* ‘*s/he climbs*’ > Ijw *ʔi-ʷjúlh* || I'w — || Mj *ʔi-ʷjút*
- (596) PCh **ʔi-hwé'ja?* ‘*s/he flies*’ > Ijw *ʔi-hwí'ja?* || I'w — || Mj *ʔi-hjí'je?*
- (597) PCh **ʔi-hwík* ‘*s/he hides*’ > Ijw *ʔi-hwík* || I'w — || Mj *ʔi-hjík*
- (598) PCh **ʔi-hwéhl-a'm* ‘*s/he tells*’ > Ijw *ʔi-hwíhl-a'm* || I'w *ʔi-hwíhl-a'm* || Mj *ʔi-hjíhl-a'm*
- (599) PCh **ʔi-hwáts'un-APPL* ‘*s/he spits*’ > Ijw *ʔi-hw^jéts^j'un-APPL* || I'w *i-hjátsen-APPL* [our normalization: *ʔi-hw^játs'en-APPL*] || Mj *ʔi-hjéts'an-APPL*
- (600) PCh **ʔi-ʷwáah̄t-ij* ‘*s/he shakes*’ > Ijw *ʔi-ʷwáti?* || I'w — || Mj *ʔi-ʷjéeh̄tij?*
- (601) PCh **ʔi-wáqahl-CAUS* ‘*s/he prepares, brings up*’ > Ijw *ʔi-w^jákah̄l-anit* || I'w — || Mj *ʔi-jákah̄l-at*
- (602) PCh **ʔi-hwán-hlih* ‘*s/he is one*’ > Ijw *ʔi-hw^jén-hli* || I'w *ʔi-hw^jén-hli* || Mj *ʔi-hjén-hi?*

PCh **s* palatalizes to *(x)s^j*, *(h)s^j* in Iyojwa'aja' except before [i], where one finds *[(x)]*, *[(h)]*. In Iyo'awujwa' and Manjui, PCh **s* palatalizes to *(x)f*, *(h)f* or, less frequently, to *(x)s^j*, *(h)s^j*. But after **(')* the outcome *tf* is found in Iyojwa'aja', as in (605) and (606). Here PCh **ts* (underlying **/s/*; see §8.1.1.1) goes back to PM **ts*; we do not know if PM **s* yields the same outcome.

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- (603) PCh **hwisúk* ‘palm (*Copernicia alba*)’ > Ijw (*h*)*wis^júk* || I’w (*h*)*wis^júk* || Mj (*h*)*wisúk*
- (604) PCh **?is-i?* ‘it is clear/transparent’ > Ijw *?éf-i?* || I’w — || Mj *?éixf-i?*
- (605) PCh *-*kéjtsås* ‘grandchildren’ > Ijw -*kítsas* || I’w — || Mj -*kíxses*
- (606) PCh *-*?ájtsi?* ‘to feel disgust’ > Ijw -*?ájtsi?* || I’w -*ájsij-e* || Mj -*?ájfi(j)?*

PCh **ts*’ becomes *ts^j* in Iyojwa’aja’ (often realized [tʃ’], especially before *i*), except before [i], where /*ts*’/ is found, typically realized as [tʃ’]). In Iyo’awujwa’ and Manjui, PCh **ts*’ yields *tʃ’* and, less frequently, *ts^j*.

- (607) PCh **?i-ts’ú-* ‘s/he sucks’ > Ijw *?i-ts^jú-* || I’w *?i-ts^jú-* || Mj *?i-tʃ’ú-*
- (608) PCh **?i-ts’é?* ‘my belly’ > Ijw *?i-ts’í?* ~ *?i-tʃ’í?* || I’w *?i-tʃ’í?* ~ *?i-ts’í* || Mj *?i-tʃ’í?*
- (609) PCh **?i-ts’át* ‘s/he/it is wet’ > Ijw *?i-ts^ját* || I’w — || Mj *?i-tʃ’át*

PCh **k* and **k*’ palatalize (or rather ‘dedorsalize’) to (*x*)*s^j* ~ (*h*)*s^j* ~ (*x*)*f* ~ (*h*)*f* ~ *tʃ’* and *ts^j* ~ *tʃ’*, respectively, thus merging with PCh **s* and **ts^j* in the same environment (Gerzenstein 1983: 45). The postalveolar (or perhaps more precisely alveopalatal) allophones are typical of Manjui, but they have also been documented in Iyo’awujwa’ and Iyojwa’aja’ (especially before [i]; see §8.2.1.4).

- (610) PCh **?i-kúni?* ‘my sweat’ > Ijw *?i-s^júni?* || I’w *i-s^júni?* [our normalization: *?i-s^júni?*] || Mj —
- (611) PCh **?i-kéjås* ‘my grandson’ > Ijw *?i-síjas* || I’w *i-síjas* [our normalization: *?i-síjas*] || Mj *?i-síjes*
- (612) PCh **?i-káju?* ~ *?i-kájuh* ‘my back’ > Ijw *?i-s^jáji* || I’w *i-s^jáji* [our normalization: *?i-s^jáji*] || Mj *?i-séju?*
- (613) PCh **?i-k(’ásAmAh* ‘s/he scratches’ > Ijw *?i-ts^jéxsima* || I’w *i-s^jéxsama* [our normalization: *?i-s^jéxsama*] || Mj *?i-séxsama*
- (614) PCh **?i-kú’m-e?* ‘s/he grabs’ > Ijw *?i-sí’m-e?* || I’w *i-sí’m-e?* [our normalization: *?i-sí’m-e?*] || Mj *?i-sú’m-e?*
- (615) PCh **?i-k’úu-ah* ‘s/he listens’ > Ijw *?i-ts^jú-ji* || I’w *i-ts^jú-je* [our normalization: *?i-ts^jú-je*] || Mj *?i-tʃ’úuw-a*
- (616) PCh **?i-k’óke?* ‘my waist’ > Ijw *?i-ts^jóki* || I’w *i-ts^jóki?* [our normalization: *?i-ts^jóki?*] || Mj *?i-tʃ’óki?*
- (617) PCh **?i-k’élhwah* ‘my spouse’ > Ijw (?) *?i-ts^jémhla* || I’w *i-ts^jílfw-a?* [our normalization: *?i-ts^jílhwa*] || Mj *?i-tʃ’ílhwa*

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- (618) PCh **ʔi-k’ésah* ‘s/he tears’ > Ijw *ʔi-ts’íksa* || I’w *i-tsíksa-ji* [our normalization: *ʔi-ts’íksa-ji*] || Mj *ʔi-tf’íksa-ha’m*
- (619) PCh **ʔi-k’úu-ej^h* ‘s/he waits’ > Ijw *ʔi-ts^j’ú-je* || I’w *i-ts^jú-jije* [our normalization: *ʔi-ts^j’ú-je^h*] || Mj *ʔi-tf’úuw-ej^h* **she listens to something distant**

After PCh *(^j)j the outcome in Iyojwa’aja’ is usually *tf* (best synchronically analyzed as a realization of /s/ in that environment); in one cognate set (620), Drayson (2009: 136) documents <s> (<kijlasip>), which we take to be a graphic representation of *f*.¹¹ In Manjui and Iyo’awujwa’ the outcome is *f*.

- (620) PCh **kéhla-jku-p* ‘fall season’ > Ijw *kíhla-ʃi-p* || I’w — || Mj *kíhle-se-p*
- (621) PCh *-*péj-kej?* ‘to listen’ > Ijw *-pé-tsi?* || I’w *-péj-si?* [our normalization: *-péj-ʃi?*] || Mj *-péj-ʃi(j)*
- (622) PCh **ŋk’á-jk-e?* ‘new (fem.)’ > Ijw — || I’w — || Mj *?ink^jé-ʃf-i?*
- (623) PCh **hwaʔáj-ku-j^h* ‘white algarrobo trees’ > Ijw *hwaʔá-tʃu-’l* || I’w *f^waáj-si-?* [our normalization: *hwaʔáj-ʃi-j*] || Mj *hwaʔáj-ʃi-j*

The first palatalization also affected consonant clusters composed of two coronals, as well as those composed of a glottal and a supraglottal. In Iyojwa’aja’ only, palatalization of *kt* after PCh **i* is also subdialectally documented, as in *jikt^je* ~ *jíkta* ‘s/he would have left’.

8.2.1.2 Second palatalization

The second palatalization only occurs in Iyojwa’aja’ and Manjui. It only affects coronal consonants (except for /s/, /ts’/ in Manjui) as well as clusters of the shape /LL/, /hL/, where *L* stands for a coronal. It is triggered by most, but not all, surface [i]’s of diverse origins (notably from PCh **ə* and **u*, but not **e*), as well as by /u/ and /hw/ and, in a few cases, by stressed /e/. Iyo’awujwa’ is notable for lacking the second palatalization (Gerzenstein 1983: 41–42).

In the following examples the second palatalization applies both in Iyojwa’aja’ and Manjui.

- (624) PCh **h^ə-túm* ‘you eat’ > Ijw *hi-t^júm* || I’w *hi-t^júm* || Mj *hi-t^júm* ~ *hi-túm*
- (625) PCh **s^ə-tój?* ‘I am tall’ > Ijw *si-t^jój?* || I’w *fi-t^jój?* || Mj *fi-t^jój?*
- (626) PCh **ʔúlʔáh* ‘scaled dove’ > Ijw — || I’w *ólah* [our normalization: *ʔvílaʔa*] || Mj *ʔvíl^j(e)?e* ~ *ʔvíl(a)?a*

¹¹Drayson (2009) consistently uses <s> for both allophones of /s/, [s] and [ʃ].

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- (627) PCh *s^o?úlah ‘anteater’ > Ijw so?olⁱe || I^ow so?óla || Mj sa?óla ~ sa?olⁱe?
- (628) PCh *túhw-na?a ‘eat it (later)’ > Ijw tóhw-nⁱe?e || I^ow tóhw-na?a || Mj tóhw-nⁱe?e ~ tóhw-na?a
- (629) PCh *?stúuⁿ ‘king vulture’ > Ijw — || I^ow ?ist^júuⁿ || Mj ?ist^júuⁿ ~ ?ist^júuⁿ
- (630) PCh *?asétatah ~ *?ásétatah ‘gualacate; armadillo’ > Ijw ?asét^jeta || I^ow ?asétata [our normalization: ?asétata] || Mj ?asét^jeta

In the following examples, the second palatalization applies only in Iyojwa’aja’ but not in Manjui. In (638) and (640), an Iyojwa’aja’ cognate is lacking, but if such cognates existed one would expect them to show the second palatalization.

- (631) PCh *s^oláhqaj? ~ *s^oláhqáj? ‘wild cat’ > Ijw silⁱáka? || I^ow siláhkaj [our normalization: siláhkaj?] || Mj siláhkaj?
- (632) PCh *h^o-ná? ‘her/his father’ > Ijw hi-n^já? || I^ow hi-ná? || Mj hi-ná?
- (633) PCh *kuláj? ‘sun’ > Ijw kilⁱé? ~ kili?é || I^ow kiláj || Mj kiláj?
- (634) PCh *k’utáⁿ ‘thorn’ > Ijw k’itⁱéⁿ || I^ow ?itán [our normalization: ?itáⁿ] || Mj ?itáⁿ
- (635) PCh *p’ilusáh ‘s/he is poor’ > Ijw p’ilⁱúxs^je ~ p’élis^je || I^ow -pelíxsa || Mj p’ili(x)sáh
- (636) PCh *k’usáh ‘cháguar’ > Ijw k’isⁱéh || I^ow isáh [our normalization: ?isáh] || Mj ?isáh
- (637) PCh *túsah ‘smoke’ > Ijw tóxs^je || I^ow tóxsa [our normalization: tóxsa] || Mj tóxsa
- (638) PCh *h^o-s^o?ún ‘you love’ > Ijw — || I^ow hi-sv?ún || Mj hi-sv?ún
- (639) PCh *h^o-sínán ‘you roast’ > Ijw hi-sín^jaⁿ || I^ow hi-sénjan || Mj hi-séinjan
- (640) PCh *nts’ik ‘four’ > Ijw — || I^ow — || Mj ints’éik ~ ints’ík
- (641) PCh *h^o-nájin ‘you go first’ > Ijw hi-n^jáⁿ || I^ow — || Mj hi-nájin

The examples above show that second palatalization fails to apply in Manjui before a low vowel, and also when the target is /s, ts’/. This is quite puzzling, and we lack a convincing explanation for it. As for /s/, a typical realization in all Chorote varieties is [xs], and the velar articulation could be responsible for blocking the second palatalization.¹² However, [xs] (as well as [hs]) is only common after a stressed vowel, but not in other contexts, such as those shown above. Furthermore, no velar articulation is found in /ts’/.

¹²In fact, this is our main reason to prefer [(x)s] over [(h)s] in our transcriptions.

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The cluster *st* is immune to the second palatalization for some Manjui speakers, whereas for others it does palatalize to *ſt*(?).

- (642) PCh *?^ostáhwe? ‘Chaco chachalaca’ > Ijw ?istáhwe || I’w istáf^we [our normalization: ?istáhwe?] || Mj ?istáhwe? ~ ?istáhwe?
- (643) PCh *?^ostá-k ‘cactus (*Stetsonia coryne*)’ > Ijw ?istá-k || I’w ?istá-k || Mj ?istá-k ~ ?istá-k
- (644) PCh *?^osténi? / *?^osténi-k ‘white quebracho’ > Ijw ?istíni-k || I’w isténi-k [our normalization: ?istíni-k] || Mj ?isténi? ~ ?istíni?
- (645) PCh *k’ústah ‘barn owl’ > Ijw k’ústa || I’w k’ústah [our normalization: k’ústah] || Mj ?ústa ~ ?ústa

A number of homophonous prefixes of the shape *?in-*, which go back to PCh **ŋ-* (second-person inactive, indefinite possessor, and third-person nominative irre-alis; see §8.2.2.12), trigger the second palatalization in Manjui, but not in Iyo-jwa’aja’: compare Mj *?in-hlúk* ‘caraguatá bag’ and Ijw *?in-hlók* ‘id.’. Interestingly, the palatalization is triggered even if [i] does not surface, as in Mj *ka-n-t’ún* ‘that s/he brings it’ (underlying /ka-Vn-tún/).

The instances of [i] derived from PCh **e* by means of vowel raising (§8.2.3.1) fail to trigger the second palatalization even in coronals.

- (646) PCh *hw^okénah ‘north wind, north’ > Ijw *wikína* || I’w *wikína* || Mj *hwikína*
- (647) PCh *kék’eh ‘monk parakeet’ > Ijw *kík’i* || I’w *kík’ih* || Mj *kí?ih*
- (648) PCh *kéhla-juk ‘red quebracho’ > Ijw *kíhla-jik* || I’w *kíhla-jik* || Mj *kíhlⁱe-ek* ~ *kíhlⁱa-jik* ~ *kíhli-jik*
- (649) PCh *kitéta-k ‘tree (*Prosopis elata*)’ > Ijw *kitíta-k* || I’w — || Mj *kitíta-k*

Finally, non-coronal consonants are not affected by the second palatalization.

- (650) PCh *s^opúp ‘Picui dove’ > Ijw *sipóp* || I’w *sipóp* [our normalization: *sipúp*] || Mj *ſipóp*
- (651) PCh *s^o-pásah ‘I am quick’ > Ijw *si-pánsa* || I’w *si-páxsa* ~ *tsi-páxsa* || Mj *ſi-páxsa*
- (652) PCh *k’uwáhlah ‘puma’ > Ijw *k’iwáhla* || I’w *iwáhla* [our normalization: *?iwáhla*] || Mj *?iwáhla*
- (653) PCh *t^okéhna-ke? ‘mountain’ > Ijw *tikíhna-ki?* || I’w *takíhna-ki?* || Mj *takíhnⁱe-ki?*
- (654) PCh *hw^okénah ‘north wind, north’ > Ijw *wikína* || I’w *wikína* || Mj *hwikína*
- (655) PCh *túkus ‘ant’ > Ijw *tókis* || I’w *tókis* [our normalization: *tókis*] || Mj *tókis*

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8.2.1.3 Third palatalization

As noted by [Gerzenstein \(1983: 43\)](#) and [Carol \(2014a: 100, fn. 36\)](#), Iyo'awujwa' and Manjui differ from Iyojwa'aja' in that /k/ (from PCh *q) does palatalize after /i/ in these varieties. This palatalization clearly occurred late enough, when the vowel raising after palatal(ized) consonants ([§8.2.3.1](#)) was no longer productive; the latter process, in turn, was fed by the first two palatalizations ([§8.2.1.1–§8.2.1.2](#)), as seen from the fact that the sequence *iqa yields *ik'á* and not *ik'áe in Iyo'awujwa' and Manjui. The sequence *iqe, however, yields *iki* at least in Manjui (probably through the stages *ik'áe and *ik'í, with vowel raising followed by depalatalization), as in (662), suggesting that the raising of *e after palatalized consonants was still productive even after the third palatalization.

- (656) PCh *?i-qÁhla'm 'it is sharp' > Ijw ?ja-káhla'm || I'w i-k'áhla'm [our normalization: ?i-k'áhla'm] || Mj ?i-k'áhla'm
- (657) PCh *?i-qá-nt'ek 'my father-in-law' > Ijw ?ja-ká-nt'ek ~ ?i-ká-nt'ek || I'w — || Mj ?i-k'á-nt'ek
- (658) PCh *?i-qóhwah 'my enemy' > Ijw ?i-kóhwa ~ ja-kóhwa || I'w i-k'óf'ah [our normalization: ?i-k'óhwah] || Mj ?i-k'ohwa
- (659) PCh *?i-qÁhlek 'my liver' > Ijw ?i-káhlik ~ ja-káhlik || I'w i-k'áhlek [our normalization: ?i-k'áhlek] || Mj ?i-k'áhlek
- (660) PCh *?i-qÁsan 'my calf' > Ijw ?i-káxsa'n ~ ja-káxsa'n || I'w i-k'áxsan [our normalization: ?i-k'áxsan] || Mj ?i-k'áxsen
- (661) PCh *?i-qVján 's/he is used to' > Ijw ?ja-kája'n || I'w i-k'ojén-e [our normalization: ?i-k'ojén-e] || Mj —
- (662) PCh *?i-qélAh 's/he encourages' > Ijw ?i-kéla || I'w — || Mj ?i-kíla

8.2.1.4 Regressive palatalization

The regressive palatalization occurs systematically in Manjui and, less categorically, in Iyo'awujwa'. It palatalizes /s ts'/ to [ʃ tʃ'] before an [i] ([Gerzenstein 1983: 21](#)). In Iyojwa'aja' the allophones [ʃ tʃ'] have also been documented, mostly (but not exclusively) when an /i/ precedes the consonant in question, probably conditioned by subdialectal variation. Notice that in Iyojwa'aja' this is the only environment in which [ʃ] is the usual realization of palatalized /s/, as seen in (666).

- (663) PCh *s'wálák 'spider' > Ijw siwálak ~ siwálak || I'w siwálak ~ siwálak || Mj siwálak

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- (664) PCh **tos-is* ‘snakes’ > Ijw — || I’w *tóxs-is* [our normalization: *tóxs-is*] || Mj *tóxf-is*
- (665) PCh *-áás-*ij?* ‘to sharpen’ > Ijw -á(x)s-*i?* || I’w -áxs-*i?* ~ -áxf-*i?* || Mj -áaf-*ij?*
- (666) PCh **?is-ís* ‘they are good’ > Ijw *?if-ís* || I’w *?if-ís* || Mj *?as-éis*

8.2.1.5 Depalatalization

Consonants whose articulation involves a secondary articulation (i.e., [C^j]) – this includes both /k^j(‘)/ and palatalized allophones derived by palatalization – do not contrast with their non-palatal(ized) counterparts before [i] in any Chorote variety.¹³ We represent the allophones that occur before [i] as non-palatalized in our transcriptions. In a number of cases, it is clear that these consonants were palatalized in the past, since they trigger raising in the following vowel (§8.2.3.1) and block the lowering of the following stressed vowel (§8.2.3.2). We attribute the fact that the consonants in question are no longer audibly palatalized to a sound change we dub **depalatalization**, even though, strictly speaking, we cannot always ascertain there ever was a palatalization process which was later reversed. Indeed, this was not the case for /k^j(‘)/ before [i], where the pre-velar articulation of the contemporary varieties seems to continue that of Proto-Chorote, see §8.1.1.2.

- (667) PCh *-*hwíhlek* ‘dream’ > Ijw -*hwéhlik* || I’w -*f^wéhlik* [our normalization: -*hwíhlik*] || Mj -*hwíhlik*
- (668) PCh **hwíneh* ‘crab’ > Ijw *hwíni* || I’w — || Mj *hwíni*
- (669) PCh **hw^wkénah* ‘north wind, north’ > Ijw *wikína* || I’w *wikína* || Mj *hwikína*
- (670) PCh **?i-pén* ‘s/he cooks’ > Ijw *?i-píñ* || I’w *?i-pín* || Mj *?i-pín*

Consonants that were diachronically affected by palatalization but with an outcome that does not involve secondary palatalization do not undergo depalatalization. This includes **w* > *j*, *^w*w* > ^j*j*, **hw* > *hj*, **h* > *hj*, as well as sibilants. Recall

¹³Although not strictly speaking a contrast between [C^ji] and [Ci], there is a contrast in Iyojwa’aja’ between [k] (the realization of /k^j/ before [i]) and [k] in the environment [i]: [na^{ki}wo?] ‘moro bee honey (comb)’ vs. the two-word expression [(?)na^{ki}wo?] ~ [(?)na^{ki}wo?] ‘warehouseman’ (underlying /Vn-ák hl-wó/), see Carol (2014a: 79, fn. 6). While it is true that the former probably contains a reflex of PCh **k* and the latter undoubtedly instantiates PCh **q*, one should keep in mind that, in the two-word expression, /k/ < PCh **q* is word-final, a position where the opposition between /k^j/ and /k/ is neutralized (see §8.1.1.2).

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that in Manjui, less categorically in Iyo'awujwa', and even less frequently in Iyo'ojwa'aja', the palatalized counterparts of /k^j/, /k^j/ (or /?^j/ in dialects that show debuccalization), /s/, and /ts/ are articulated as [tʃ], [tʃ'], [(x)ʃ]/[(h)ʃ], and [tʃ'], respectively.¹⁴ These sounds do not depalatalize even before [i]: Ijw *?il^júxfina* 'tijera net', *?éxf-ihí?* 'it is good; thank you', *kasótʃi* 'six-banded armadillo'; Mj *kaséʃi* 'snake's rattle', *?i-fin* 's/he sends'.

In Manjui and maybe in Iyo'awujwa, the absence of a secondary palatal articulation has extended to *k^j(?)* before [e], as in PCh *ŋk'á?* 'new, recently' > Mj [?ink'é?], cf. Ijw [?ink'^jé?]. However, for simplicity we still represent it as *k^j(?)* in our transcriptions.

It is possible that in Manjui the depalatalization has extended to other positions, as in PCh **?i-nájin* > **?i-nájin* > **?i-n'ájin* > **?i-n'éjin* > Mj *?i-néjin* 's/he goes first'; see §8.2.1.

The process in question seems subject to variation and its conditions are still poorly understood, with multiple doublet forms in our corpus: Mj *?i-n(^j)éwetij?* 'cigarette', *?ihn(^j)éta-k* 'tusca tree', *?i-hl(^j)é'm* 's/he defecates'. It is likewise possible that the variants with a non-palatalized consonant do not result from a diachronic depalatalization but rather from progressive vowel harmonization (**iCa* or **iCá* > *iCe*), on which matter see Carol (forthcoming).

8.2.1.6 Unexplained palatalization

Instances of palatalization of /hl/ and /t/ in the environment *A_u* are documented in Iyo'ojwa'aja' and, less frequently, in Iyo'awujwa' and Manjui, which we cannot account for at present.

- (671) PCh **sátuk* 'lecherón tree (*Sapium haematospermum*)' > Ijw *sát(j)uk* || I'w *sát(j)uk* || Mj *sátuk*
- (672) PCh **?áhlu?* 'iguana' > Ijw *?áhl^ju?* || I'w *?áhlu?* || Mj *?áhlu?*
- (673) PCh **?alátu?* 'hail' > Ijw *?alát^ju?* || I'w *?alát^ju?* || Mj *?alátv?*
- (674) PCh *-*qá?tu?* 'yellow' > Ijw — || I'w *ká?ts^ju<ts^ju?* || Mj *ká?at^ju?*

The PM reconstructed forms that gave rise to the cognate sets in (671), (672), and (674), namely **sátu'k*, **?álu(?)*, and *-*qá?tu(?)*, respectively, do not contain the necessary environment for the palatalization processes described above. The

¹⁴Carol (2014a: 79) actually describes these sounds as alveopalatal: [tç], [tç'], [(x)c], and [tç']. Such narrow transcription is not commonly employed in Chorote studies, and throughout this chapter we will use the symbols [tʃ], [tʃ'], [(x)ʃ], and [tʃ'].

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word for ‘hail’ is a possible borrowing, but the related forms in other languages do not explain palatalization, either (see ‘hail’ in the section on loanwords in Chapter 10).

8.2.2 Consonants

This section deals with the evolution of Proto-Chorote consonants in the contemporary varieties.

8.2.2.1 PCh *q

PCh *q is normally reflected as /k/ in all contemporary Chorote varieties. The phoneme in question is in fact still articulated as uvular between back vowels, as described by Carol (2014a: 79) for Iyojwa’aja’, but representing it as k in the modern Chorote lects is unproblematic, as the erstwhile velar–uvular contrast has ceased to exist synchronically due to the sound change *k > k^j in onsets (§8.2.2.2). PCh *q is unequivocally reconstructed as a uvular stop based on two notable properties of this phoneme: it fails to undergo the first palatalization in the contemporary Chorote varieties (§8.2.1.1) and triggers a lowering effect in the preceding vowels (§8.2.3.6). Some examples of its development in the daughter lects follow.

- (675) PCh *qa ‘in order to’ > Ijw ka || I’w ka || Mj ka
- (676) PCh *-qahlek ~ *-qáhlek ‘liver’ > Ijw -káhlik || I’w -káhlik || Mj -káhlik
- (677) PCh *qajáh ‘Muscovy duck’ > Ijw — || I’w kajé || Mj kajéh
- (678) PCh *-qáka? ‘medicine’ > Ijw -kák^je? || I’w -kák^je? || Mj —
- (679) PCh *-qáku? ‘to distrust’ > Ijw -kák^ju? || I’w — || Mj -kák^ju?
- (680) PCh *-qa’lá? ~ *-qá’lá? ‘leg’ > Ijw — || I’w -kalá? [our normalization: -ka’lá?] || Mj -ka’lá?
- (681) PCh *qasiwo?oh ‘limpkin’ > Ijw kaséwo?o || I’w — || Mj kaséiwo?o
- (682) PCh *-qásit ‘to stand’ > Ijw -káxsit || I’w -ká(x)sit || Mj -káxfit
- (683) PCh *qatés ‘star’ > Ijw katés || I’w katés [our normalization: katés] || Mj katés
- (684) PCh *-qató?/-qató-ke? ‘elbow’ > Ijw -káto-ki? || I’w -kató?/-kató-ki? [our normalization: -kató?/-kató-ki?] || Mj -kató?
- (685) PCh *-qáwak ‘belt’ > Ijw -qá’wak || I’w -káwak || Mj —
- (686) PCh *-qáhna-t ‘fishhook’ > Ijw -káhnat || I’w -káhnat || Mj —

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- (687) PCh **-qá-s* ‘foods’ > Ijw *-ká-s* || I’w — || Mj *-ká-s*
- (688) PCh **-qásile-j^h* ‘guts’ > Ijw *-káxsili-*Ø || I’w *-káxsili-*Ø || Mj *-káxfili-*Ø
- (689) PCh **-qéj?* ‘costume’ > Ijw *-kéj?* || I’w — || Mj *-kéj?*
- (690) PCh **-qósó-ke?* ‘node’ > Ijw *-kóxso-ki* || I’w *-kóxso-ki?* [our normalization: *-kóxso-ki?*] || Mj —
- (691) PCh **s^hláhqaj?* ~ **s^hláhqáj?* ‘wild cat’ > Ijw *siláka?* || I’w *siláhkaj* [our normalization: *siláhkaj?*] || Mj *siláhkaj?*
- (692) PCh **taqám* ‘pacu fish’ > Ijw *taká’m* || I’w *takám* || Mj —
- (693) PCh **t-’aq-áj?* ‘its ropes’ > Ijw *t-’ak-á?* || I’w *t-ak-áj* [our normalization: *t-’ak-áj?*] || Mj *t-’ak-áj’*
- (694) PCh **-aqús* ‘knee’ > Ijw *-?akós* / *-kós-ki* || I’w *-kós* [our normalization: *-kós*] || Mj *-(?a)kós*

Before a stressed low vowel, the Manjui reflex of PCh **q* has been documented dialectally (in the speech of the Jlimnájnas) as [kx] or [kh]: [‘kxa?atij?'] ‘mate, tereré (drink)’, [‘kxaawa?'] ‘amount’, [wa’kxaj?'] ‘man who has sons/daughters’, alongside [ka?atij?], [kaawa?], [wah’kaj?]. Note that the feminine counterpart of the latter noun, where the stress shifts to the last syllable, shows only [k] in the speech of the same Jlimnájnas speaker: [wakajé?] ‘woman who has sons/-daughters’. We believe that the occurrence of [kx] or [kh] is purely allophonic as opposed to being a reflex of PCh **qh*, since [‘kxa?atij?'] is evidently related to Paraguayan Guaraní *ka?a* ‘grass; mate’, where there is no reason to assume **qh*. See the entry PM **[t]qXán* ‘to dig’ in §10.8 for a possible reflex of **qh* in the Chorote varieties.

8.2.2.2 PCh **k*

PCh **k* is retained in the coda position in the daughter lects, but in onsets its default reflex is *k^j* in all daughter varieties, unless palatalization (§8.2.1.1) or de-palatalization (§8.2.1.5) applies. In addition, the realization [k] is usual in Manjui and probably in Iyo’awujwa’ before [e], and before [i] this is true for every Chorote lect. (As stated in §8.2.1.5, we represent this sound conventionally as *k^j* before [e] and as *k* before [i]; see also §8.2.3.1 on surface [e] and [i] after PCh **k*.) We surmise that the sound change PCh **k* > *k^j* took place after the disintegration of Proto-Chorote. The central piece of evidence for our claim is the fact that this sound change was bled by the first palatalization (§8.2.1.1).

- (695) PCh **-ká?* ‘tool’ > Ijw *-ké?* || I’w — || Mj —

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- (696) PCh *ká'lah 'lizard' > Ijw *kjé'la* || I'w *kjé'la* || Mj *kjé'la*
- (697) PCh *-kánt'ijaha? 'kidney' > Ijw *-kjént'ije?* || I'w *-kjéntije?* [our normalization: *-kjént'ije?*] || Mj *-kjéntijee?*
- (698) PCh *kåhát-uk 'cactus (*Cereus forbesii*)' > Ijw *k'ahát'-uk* || I'w - || Mj *k'ehét-uk*
- (699) PCh *-kánis 'testicle' > Ijw *-kjánis* || I'w - || Mj *-kjénis*
- (700) PCh *-kás 'tail' > Ijw *-kjás* || I'w *-kjés* || Mj *-kjés*
- (701) PCh *-ká? 'to be torn' > Ijw *-kjá?* || I'w *-kjé?* || Mj *-kjé?*
- (702) PCh *-kat 'collective of plants' > Ijw *-kjet* || I'w *-kj(j)et* || Mj *-kjet*
- (703) PCh *-kóhjaht-ij? 'heavy' > Ijw *-kjóhjet-i?* || I'w *-kjóhje(h)t-i?* || Mj *-kjóhjiht-ij?*
- (704) PCh *-kój? 'hand' > Ijw *-kjо?* || I'w *-kjój* [our normalization: *-kjój?*] || Mj *-kjój?*
- (705) PCh *kó'l 'locust' > Ijw *kjó'l* || I'w *kjól* [our normalization: *kjó'l*] || Mj *kjó'l*
- (706) PCh *-kóweh 'middle, center' > Ijw *-kjówe* || I'w *-kjówe* || Mj *-kjówe*
- (707) PCh *-kúhl-APPL 'to answer' > Ijw *-kjúhl-APPL* || I'w - || Mj *-kjúhl-APPL*
- (708) PCh *kús-APPL 'to be hot' > Ijw - || I'w *kjúxs-APPL* || Mj *kjús-APPL*
- (709) PCh *-kút-eh 'to meet' > Ijw *-kjút-i* || I'w *-kjút-e?* [our normalization: *-kjút-e*] || Mj *-kjút-e*
- (710) PCh *-qáka? 'medicine' > Ijw *-kákje?* || I'w *-kákje?* || Mj -
- (711) PCh *-qáku? 'to distrust' > Ijw *-kákju?* || I'w - || Mj *-kákju?*
- (712) PCh *-tóko? 'face' > Ijw *-tókjо?* || I'w *-tókjо?* [our normalization: *-tókjо?*] || Mj *-tókjо?*

In the following examples, PCh **k* yields *k* in the daughter varieties due to the depalatalization process (§8.2.1.5); that is, we posit the following pathway of sound change: **k* > **k^j* > *k*. The intermediate stage **k^j* is posited in order to account for the raising effect seen in the following vowel. In (725), the depalatalization is seen only in Iyo'awujwa' and Manjui, but not in Iyojwa'aja', which retained the Proto-Chorote vowel *o* due to accent retraction (§8.2.4) and no longer shows the context necessary for the depalatalization to occur. Similarly, in (714) and (727) the depalatalization applies only in those Chorote varieties where the reflex of PCh **k* is now followed by a high front vowel.

- (713) PCh *hw^okénah 'north wind, north' > Ijw *wikína* || I'w *wikína* || Mj *hwikína*
- (714) PCh *t^o-jákun 's/he eats (intr.)' > Ijw *ti-’jékju'n* || I'w *-jékju'n* || Mj *ti-’jékin*

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- (715) PCh **kék’eh* ‘monk parakeet’ > Ijw *kík’i* || I’w *kík’ih* || Mj *kí?i*
- (716) PCh **két* ‘nasal mucus, cold’ > Ijw *kílt* || I’w – || Mj *kít*
- (717) PCh **kéhla-juk* ‘red quebracho’ > Ijw *kíhla-jik* || I’w *kíhla-jik* || Mj *kíhl’e-ek*
~ *kíhl’ja-jik* ~ *kíhli-jik*
- (718) PCh *-*kéjås* ‘grandson’ > Ijw *-kíjas* || I’w *-kíjas* ~ *-kíjes* || Mj *-kíjes*
- (719) PCh *-*kén* ‘to send’ > Ijw – || I’w – || Mj *-kín*
- (720) PCh **kéte?* ‘squash’ > Ijw – || I’w *kítí?* || Mj *kít’e?* ~ *kítí?*
- (721) PCh *-*kilá-wot* ‘elder brothers’ > Ijw *-kíl’e-wot* || I’w – || Mj *-kil’é-wat*
- (722) PCh **kitá’nih* ‘Chaco tortoise’ > Ijw – || I’w *kit’éne?* [our normalization:
kit’é’ni] || Mj *kítí’ni* ~ *kítí’n’e*
- (723) PCh *-*kitá-wot* ‘elder sisters’ > Ijw *-kít’e-wot* || I’w – || Mj *-kit’é-wat*
- (724) PCh **kitéta-k* ‘tree (*Prosopis elata*)’ > Ijw *kitíta-k* || I’w – || Mj *kitíta-k*
- (725) PCh *-*koj-áj^h* ‘hands’ > Ijw *-kój-e* || I’w *-kij-éj* || Mj *-kij-éjh*
- (726) PCh **kuláj?* ‘sun’ > Ijw *kil’é?* ~ *kili?* || I’w *kiláj* [our normalization: *kiláj?*]
|| Mj *kiláj?*
- (727) PCh *-*kúm-APPL* ‘to grab’ > Ijw *-kím-APPL* || I’w *-kíúm-APPL* || Mj *-kíúm-APPL*
- (728) PCh **t^okéhna-ke?* ‘mountain’ > Ijw *tikíhna-ki?* || I’w *takíhna-ki?* || Mj *takíhn’e-ki?*
- (729) PCh **túkus* ‘ant’ > Ijw *tókis* || I’w *tókis* || Mj *tókis*

8.2.2.3 PCh **k(’w*

PCh **kw* is reconstructed in order to account for the correspondence between Ijw *k^j* and I’w/Mj *k*. Note the sound change PCh **e* > Ijw *o* in *j-ók’os*.

- (730) PCh **j-ókwah* ‘s/he bites’ > Ijw *j-ók’e* || I’w *-óka* || Mj *j-óka*
- (731) PCh **j-ókwes* ‘s/he frightens away’ > Ijw *j-ók’os* || I’w – || Mj *j-ókes*

The reconstruction of PCh **k’w* is tentative: in the only potential example, it appears to have merged with **k*’ in Manjui, yielding Mj ? (or *tʃ*’ in palatalizing contexts), whereas cognates in Iyojwa’aja’ or Iyo’awujwa’ are not presently known. The cluster is reconstructed for Proto-Chorote based on evidence from Wichí, but it is likewise possible that PCh **k*’ should be reconstructed instead.

- (732) PCh **?i-k’(w)ós* ‘it is torn open’ > Ijw – || I’w – || Mj *?i-tʃ’ós*

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8.2.2.4 PCh *q'

PCh *q' is normally reflected as k' in the contemporary Chorote varieties.

- (733) PCh *-q'áh 'tongue' > Ijw - || I'w -káh [our normalization: -k'áh] || Mj -k'áh
- (734) PCh *-sáq'ál^h 'soul' > Ijw -sák'al || I'w -sákal [our normalization: -sák'al] || Mj —

In Manjui, PCh *q' sometimes debuccalizes to ? between vowels.

- (735) PCh *-hnáq'át 'to snore' > Ijw -hnák'at || I'w -hnakát [our normalization: -hnak'át] || Mj -na?át
- (736) PCh *[?i]túq'ah 'to cook in ashes' > Ijw [?i]t'ók'a / -tók'a || I'w — || Mj [?i]t'ú?u / -tó?u

8.2.2.5 PCh *k'

Just like PCh *k in onsets (§8.2.2.2), PCh *k' acquired palatalization in non-palatalizing environments in the history of all Chorote lects, yielding *k^j, except that it yielded [k^j] before /i/ and, at least in Manjui, also before /e/ derived from a low vowel. This sound, however, was subject to further change in some varieties. In Manjui, PCh *k' > *k^j was debuccalized to ?^j (and depalatalized to ? before i) in non-palatalizing environments, with very few exceptions. The same sound change often operated in Iyo'awujwa', where Gerzenstein (1983) attests the resulting sound as ?^j or j, but there are equally many cases where the original articulation remains; in this case, Gerzenstein (1983) attests the sound in question as k^j or k^j. In Iyojwa'aja', PCh *k' is mostly retained, but in a few cases one finds a debuccalized variant with j (these exceptions are probably best viewed as dialectal borrowings). Note that in Iyo'awujwa' and Manjui ?^j contrasts both with ? and j, whereas the product of debuccalization of PCh *k' in Iyojwa'aja' is not distinct from j < PCh *j.

- (737) PCh *-k'áló? 'cheek' > Ijw -k^j'ólo? || I'w -k'áló? [our normalization: -k^j'áló?] || Mj -?eló?
- (738) PCh *-k'éhn-a'm 'to extend' > Ijw -k'íhn-a'm || I'w — || Mj -?íhn-a'm
- (739) PCh *-k'ésah 'to divide' > Ijw -k'íxsa || I'w — || Mj -?íxsah-APPL
- (740) PCh *k'íhló? 'armadillo' > Ijw k'íhló? || I'w ihl^jó? [our normalization: ?ihl^jó?] || Mj ?ihl(^j)ó?

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- (741) PCh *-k'íhna? 'younger sister' > Ijw -k'íhn̩a ~ -jíhn̩a || I'w -kíhn̩e? [our normalization: -k'íhn̩e?] || Mj -?íhn̩e?
- (742) PCh *-k'ínih 'younger brother' > Ijw -k'íni ~ -jíni || I'w -jíni [our normalization: -?íni] || Mj -?íni
- (743) PCh *-k'ó-ke? 'waist' > Ijw -k'ó-ki? || I'w -k'ó-ki? || Mj -?ó-ki?
- (744) PCh *-k'óote? 'ear' > Ijw -k'óte? || I'w -k'óte? [our normalization: -k'óte?] || Mj -?óote?
- (745) PCh *k'új? 'cold' > Ijw - || I'w -júj-APPL [our normalization: -?új-APPL] || Mj ?új?
- (746) PCh *k'usáh 'cháguar' > Ijw k'iséh || I'w isáh [our normalization: ?isáh] || Mj ?isáh
- (747) PCh *k'ústah 'barn owl' > Ijw k'ústa || I'w k'ústah [our normalization: k'ústah] || Mj ?ústa ~ ?ústa
- (748) PCh *k'utá'n 'thorn' > Ijw k'it'é'n || I'w ?itán [our normalization: ?itá'n] || Mj ?itá'n
- (749) PCh *-k'ú? 'horn' > Ijw -k'ú? || I'w -k'ú? [our normalization: -k'ú?] || Mj -?ú?
- (750) PCh *k'VlésAh 'Jacararia corumbensis' > Ijw k'ilíxsah ~ ?ilíxsah || I'w ?ilíxsa || Mj ?ilíxsa
- (751) PCh *-pók'o? 'foot' > Ijw -pók'o? || I'w -pók'o? [our normalization: -pók'o?] || Mj -pó?o?
- (752) PCh *-ték'uhlu? 'brain, marrow' > Ijw -ték'ihli? || I'w -tékihlí [our normalization: -ték'ihli?] || Mj -té?ihl'u?

One notable exception is the Manjui reflex of PCh *nk'á? 'new' and its derivatives, where the velar articulation is preserved: ?ink'é? ~ k'é? 'recently', ?ink'é-jik 'new (masculine)', ?ink'é-jf-i? 'new (feminine)'.

In palatalizing environments, the debuccalization does not apply, suggesting that by the time when the sound change PCh *k' > *k' > ? took place the first palatalization (§8.2.1.1) had already transformed PCh *k' into an affricate. For example, the Manjui reflexes of PCh *n-k'óote? 'a'nd *?i-k'óote? 'my ear' are, respectively, ?in-?óote? and ?i-tf'óote?. For examples from Iyo'awujwa', see Gerzenstein (1983: 45).

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8.2.2.6 Word-final sonorants in Iyojwa’aja’

In Iyojwa’aja’, word-final sonorants receive obligatory glottalization (Carol 2014a: 87–88) and surface as sequences of the type ?C. An intrusive vowel shows up optionally (dialectally?) if the last syllable is stressed. For example, the forms /A-lán/ ‘I kill’ and /Vn-tate-l/ ‘one’s eyes’ surface as [?a’la?an], [?in’tate?l]. In addition, the approximants /j/ and /w/ not only acquire glottalization but are themselves deleted in the coda position in Iyojwa’aja’: /A-k^jéw/ ‘I stick’ surfaces as [?ak^je?].

As a consequence, Iyojwa’aja’ no longer distinguishes between plain and glottalized sonorants in the word-final position, a contrast clearly present in Proto-Chorote. For example, the pronoun *j-á’m ‘I’ and the third-person unrealis form *j-á’m ‘that s/he go away’ are now homophonous in Iyojwa’aja’ and surface as já’m (phonetically [ja?am], underlying representation /jám/). The erstwhile contrast is preserved in Manjui, where j-é’m ‘I’ contrasts with j-é’m ‘that s/he go away’.

8.2.2.7 Loss of *h word-finally

In all modern varieties of Chorote, /h/ is usually deleted word-finally in unstressed syllables, as in Ijw *ti-lák’iñ-e* ‘one dances’ (underlying /t-lák’iVn-ah/). As argued in detail by Carol (2014a: 85–89), /h/ is still present in the underlying representation in such cases, since it prevents the insertion of [?] before a pause (§8.1.1.6). It sometimes appears in Gerzenstein’s (1983) transcriptions of Iyo’awujwa’ in unstressed syllables (and, conversely, there are also unexpected instances of its absence even in stressed syllables in her transcriptions, as in I’w *ili* ‘s/he washes’).

- (753) PCh *-átaħ ‘to be fat’ > Ijw -áta || I’w -átaħ || Mj -áta
- (754) PCh *hwíneh ‘crab’ > Ijw hwéni || I’w — || Mj hwéni
- (755) PCh *hw^wkénah ‘north wind, north’ > Ijw wikína || I’w wikína || Mj hwikína
- (756) PCh *ká’lah ‘lizard’ > Ijw k^jé’la || I’w k^jé’la || Mj k^jé’la
- (757) PCh *kék’eh ‘monk parakeet’ > Ijw kík’i || I’w kík’ih || Mj kí?i
- (758) PCh *-koj-áj^h ‘hands’ > Ijw -k^jój-e || I’w -kij-éj || Mj -kij-éjh
- (759) PCh *k’uwáhlah ‘puma’ > Ijw k’iwáhla || I’w iwáhla [our normalization: ?iwáhla] || Mj ?iwáhla
- (760) PCh *pá’jih ‘frog (*Leptodactylus sp.*)’ > Ijw pá’ji || I’w páji [our normalization: pá’ji] || Mj pá’ji ~ pá?i

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- (761) PCh *-sáq’al^h ‘soul’ > Ijw -sák’al || I’w -sákal [our normalization: -sák’al] || Mj –
- (762) PCh *túsah ‘smoke’ > Ijw tóxs^e || I’w tóxsa [our normalization: tóxsa] || Mj tóxsa
- (763) PCh *wóp’ih ‘snowy egret’ > Ijw wóp’i || I’w – || Mj wóp’ih
- (764) PCh *?áwusah ‘peccary’ > Ijw ?áus^e || I’w – || Mj ?áwasa

8.2.2.8 Loss of *h in Manjui

In Manjui, PCh *h is typically lost in unstressed syllables between vowels: compare I’w wótaha and Mj wótaa ‘chicken’ (likely borrowed from Ni βotåxåx), I’w ajéh-es and Mj ?a’jé-es ‘jaguars’. In some cases Iyo’awujwa’ also undergoes this process.

- (765) PCh *’náhåte? ‘Chacoan mara’ > Ijw ’náhate || I’w náate? [our normalization: ’náate?] || Mj ’náate?
- (766) PCh *-?áhate? ‘female breast’ > Ijw -?áhate || I’w – || Mj -?áate?
- (767) PCh *j-í-heⁿ(e?) ‘s/he sits’ > Ijw j-í-hiⁿ || I’w – || Mj j-í-iⁿe?

However, a sequence of /h/ and /h/ at morpheme boundaries always yields h in Manjui.

- (768) Manjui (Carol 2018)
- a. /i-’jas-eh-heⁿe?/ [?i’?jesehe?ne?]
3.I.RLS-ask-APPL-PL
's/he asks something to someone'

8.2.2.9 Sequences of PCh *h plus stop

Proto-Chorote clusters of the type *h + stop are preserved in Manjui but are lost in Iyojwa’aja’. Iyo’awujwa’ usually preserves them, but some variation is attested.

- (769) PCh *s^hláhqaj? ~ *s^hláhqåj? ‘wild cat’ > Ijw sil’áka? || I’w siláhkaj [our normalization: siláhkaj?] || Mj siláhkaj?
- (770) PCh *-?óhtale? ~ *-?óhtåle? ‘heart’ > Ijw -?ótale || I’w -óhtele? ~ -óhtale? [our normalization: -?óhtele? ~ -?óhtale?] || Mj -?óhtele? ~ -?óhtale?

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- (771) PCh *wáhtuk ‘plant sp.’ > Ijw (*h*)wátok ‘Enterolobium contortisiliquum’ || I’w wáhtok ‘*Albizia inundata*’ || Mj wáhtuk ‘*Albizia inundata*’
- (772) PCh *kóhjat-ij? ‘to be heavy’ > Ijw *k’óhjet-i?* || I’w *k’óhje(h)t-i?* || Mj *k’óhjiht-ij?*
- (773) PCh *-héhte- ‘head’ > Ijw -héte- || I’w -héte- [our normalization: -héte-] || Mj -héte- (vocalic stem)
- (774) PCh *tíhete- ‘plate’ > Ijw títe- || I’w téjti- || Mj téihti- (vocalic stem)

As a consequence of this sound change, Iyojwa’aja’ has a synchronically active alternation whereby the underlying sequences of a stop and /h/ do not yield /hC/ (as in other dialects) but rather /C/.

- (775) Iyojwa’aja’ (Carol 2014b)
- a. /tát-hen/ ['tate?n]
throw-APPL:downwards
'throw it to her/him!'
 - b. /i-é-háp/ hA-ná Asíhnå/ ['jihapaná'sehn'a?]
3.I.RLS-be-APPL:near FEM-this woman
's/he is next to the woman'

8.2.2.10 Loss of *h in PCh *hw, *hl

PCh *hw sporadically yields w in pretonic syllables in all Chorote varieties.

- (776) PCh *(-)hwVhlek ‘mortar’ > Ijw (-)(*h*)wánhlek || I’w wihlík || Mj (*h*)wihlík
- (777) PCh *hwisúk ‘palm (*Copernicia alba*)’ > Ijw (*h*)wisjúk || I’w (*h*)wisjúk || Mj (*h*)wisúk
- (778) PCh *hw^wkénah ‘north wind, north’ > Ijw wikína || I’w wikína || Mj hwikína
- (779) PCh *hwi^wjét ‘ice, frost’ > Ijw wi^wjít || I’w — || Mj hwi^wjít

Gerzenstein (1983: 22–23) documents a number of cases of synchronic variation of *f^w* and *w*, *hl* ([^xl] in her transcription) and [l] in Iyo’awujwa’, as in *naf^wáxlek* ~ *nawáhlek* ‘wasp (*Brachygastra lecheguana*)’, *-f^wés^we* ‘bad’ / *si-wíxs^we* ‘I am bad’, *hlóxsa* ~ *lúxsa* ‘girl’, *hlémi?* ~ *lémi?* ‘white’. She further states that the occurrence of [l] as a reflex of PCh *hl is predominant in the third-person pronouns (*l-ám* ‘s/he’, *l-ám-is* ‘they’) and in the second-person active prefix (*l-éj* *álsa-ham* ‘you are in the forest’). In Carol’s Iyo’awujwa’ records, /hl/ is systematically realized as [l] after a pause.

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8.2.2.11 PCh *s

In the contemporary varieties of Chorote, the pronunciation of /s/ varies between [s], [xs], and [hs] intervocally (Carol 2018, 2014a: 79). This happens both in Iyojwa’aja’ ([?ɔxsɔ?] ~ [?ɔhso?]) for /óso/ ‘squash’) and in Iyo’awujwa’ and Manjui ([t̪axsina] ~ [tahsena] for /tásVnah/ ‘toad’). The realization [xs] ~ [hs] is especially frequent after a stressed syllable, and our transcriptions regularly reflect this.

For some speakers of Manjui, /s/ may surface as [ʃ] in the environments /i_t/, /u_t/, and /_k^j/: *ʔistáh* ‘cactus fruit (*Stetsonia coryne*)’, *ʔústa* ‘barn owl’, *hóskije* ‘be careful’, *náafk’u?* ‘hello’.

8.2.2.12 Syllabic *n

PCh *n is a straightforward retention from PM *n. Most instances of this sound correspond to the allomorphs of three homophonous prefixes that occur word-initially before supraglottal consonants (but not after a particle that ends in a vowel): the second-person inactive prefix, the indefinite possessor prefix, or the third-person nominative irrealis prefix. It is reflected as *ʔin* in Iyojwa’aja’ and Manjui, whereas in Iyo’awujwa’ the attested reflexes include *in*, *en*, *n*, and *n̪*. The syllabic nasal is synchronically documented, for example, in Iw *n-tók’o?* ‘one’s face’ (Gerzenstein 1983: 69). In addition, this sound assimilates its place of articulation to that of the following consonant, as in Ijw *ʔim-pá’n* ‘that s/he swim’, *ʔim-pél-is* ‘movie’ (literally ‘one’s shadows’), Iw *im-pélisa* ‘you are poor’, *ŋ-póxse-j* ~ *im-póxse-j* ‘one’s beards’, and is deleted before a nasal, as in Ijw *ʔi-náhj-e’n* ‘s/he gives you a bath’, *ʔi-má?* ‘that s/he sleep’, *ʔi-ní-’wé’n* ‘s/he sees herself/himself’; Iw *i-nálen* ‘you are hungry’, *i-mánis’em* ‘you are the last’, *i-má-ju?* ‘you feel sleepy’ (Carol 2014b, Gerzenstein 1983: 75–79).

The insertion of a vowel (documented as [i] in all three modern varieties, and sporadically as [e] in Iyo’awujwa’) must have occurred fairly late, when the first palatalization (§8.2.1.1) and the second palatalization (§8.2.1.2) were already complete. This is evident from the fact that the innovative vowel [i] fails to trigger palatalization of coronals in Iyojwa’aja’, as would be expected if one were to reconstruct PCh *ʔ^on, *ʔin, or *ʔen.

- (780) PCh *n-tój? ‘you are tall’ > Ijw *ʔin-tíj?* || Iw *in-tój* [our normalization: *ʔin-tój?*] || Mj *ʔin-t’ój?*
- (781) PCh *n-pásat ‘one’s lip’ > Ijw *ʔim-páxsat* || Iw *im-páxsat* [our normalization: *ʔim-páxsat*] || Mj *ʔim-páxsat*

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- (782) PCh **n-tóweh* ‘one’s belly’ > Ijw *?in-tówe* || I’w *in-tówe* [our normalization: *?in-tówe*] || Mj –
- (783) PCh **n-púse-j^h* ‘one’s beards’ > Ijw *?im-póksi-l* || I’w *im-póxse-j ~ m-póxse-j* [our normalization: *?im-póxse-j ~ m-póxse-j*] || Mj *?im-póxse-j*
- (784) PCh **n-tóko?* ‘one’s face’ > Ijw *n-tók^jo?* || I’w *n-tók^jo?* [our normalization: *n-tók^jo?*] || Mj *?in-tók^jo?*
- (785) PCh **n-ta-té?* ‘one’s eye’ > Ijw *?in-táte?* || I’w – || Mj *?in-ta-té?*

In Iyojwa’aja’ and Manjui, the allomorph *?in-* (or similar), originally found before supraglottal consonants only, has been extended to vowel-initial stems, as in Ijw *?in-ámtik* ‘one’s word’, Mj *?in-éj-is* ‘one’s names’.¹⁵ This development has also occurred in many *?-*initial stems, where it affected the second-person inactive prefix and the third-person nominative irrealis prefix, but not the indefinite possessor prefix, which retained its original allomorphy pattern (Ijw/Mj *?nót* ‘one’s chest’, underlying /n-?ot/). In Iyo’awujwa’, the development in question did not affect at least the second-person inactive prefix: *n-é’le?* ‘you are dry’, *n-óppaleen* ‘you hiccup’, *n-átaḥ* ‘you are fat’ (Gerzenstein 1983: 77).

Another morpheme that may have contained a syllabic nasal in Proto-Chorote, albeit in a different position, is the pluralational suffix *-*?n*, with a probable cognate in Nivaçle. In Iyo’awujwa’ and Manjui, it behaves as an independent phonological word: I’w *?en*, Mj *?in*. The Iyojwa’aja’ reflex is the unstressed enclitic or suffix *-ni* (underlying /-nih/).

8.2.2.13 Epenthetic glides

A glide is inserted between vowels at base/suffix or base/enclitic boundary. The glide is /j/ in Iyojwa’aja’ and /w/ in Iyo’awujwa’ and Manjui.

- (786) PCh **?i-hlú-ah* ‘s/he orders’ > Ijw *?i-hl^jú-j-e* || I’w – || Mj *?i-hl^jú-w-a*
- (787) PCh **t^o-pó-eh* ‘it is full of’ > Ijw *ti-pó-j-i* || I’w *ti-pó-w-e* || Mj *ta-pó-w-e*
- (788) PCh **?i-hó-ej^h* ‘s/he goes to’ > Ijw *?i-h^jó-j-i* || I’w *?i-h^jó-w-ej* || Mj *?i-h^jo-w-ej*

¹⁵ Carol (2014b) has also documented a variant with a geminate *n* in Iyojwa’aja’ in such cases, as in *?inn-áhak* ‘you were beaten’ (as opposed to PCh **n-áh-ak*). Our contention is that *?in-* was historically added to the etymological form with the allomorph **n-* when the latter ceased to be productive.

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8.2.2.14 Consonant clusters with *l* in Manjui

In Manjui, several consonant clusters reconstructible to Proto-Chorote undergo a seemingly irregular change, whereby the initial consonant is replaced with /l/, often pronounced as [t̪] in this environment (Gerzenstein 1983: 26).

- (789) PCh **kempénah* ‘orphan’ > Ijw *kimpéna* || I’w *kimpéna* [our normalization: *kimpéna*] || Mj *kilpéna*
- (790) PCh **?askúna?* ‘spotted sorubim’ > Ijw *?askjún̪e?* || I’w *askjúna?* [our normalization: *?askjúna?*] || Mj *?alkjúna?*
- (791) PCh **?a-skúhn-e?* (e?) ‘I wander’ > Ijw *?a-skjúhn-i?* || I’w *a-skjúhn-en* [our normalization: *?a-skjúhn-e?*] || Mj *?a-lkjúhn-e?*

Yet in other cases, the change seems to be regular: PCh **m* and **t̪* (allophones of PCh */hw/ and */hl/, respectively, in codas) are reflected as Manjui *l* before a stop, dialectally realized as **t̪* in that position, whereas the other dialects show *h* in the same environment.

- (792) PCh **nałqá-p* ~ *-å- ‘year’ > Ijw *nahkáp* || I’w *nahkáp* || Mj *nalkáp*
- (793) PCh **t-’amqós* ‘s/he crawls’ > Ijw *t-’ahkós-*̄ || I’w — || Mj *t-’alkós*

8.2.2.15 Other consonantal changes

Sporadic alternations are documented between nasal and oral labial sonorants. For example, PCh **m* yielded Ijw *’w* in PCh **[?a]’mánhli?* > Ijw *’wán-hle-?e* ‘to stay’, whereas PCh **lhw* yielded Ijw *mhl* in **-k’élhwah* ‘spouse’ > Ijw *-k’émhla*. Synchronic variation is attested in Mj *-kí’wehnán* ~ *-ki’mehnán* ‘to be pregnant’ (compare Ijw *-k’ú?uhn̪e?*).

8.2.3 Vowels

This section deals with the evolution of Proto-Chorote vowels in the contemporary varieties.

8.2.3.1 Vowel raising after palatal and palatalized consonants

In all three contemporary varieties of Chorote, the vowels **a* and **e* are raised to [e] and [i], respectively, after palatal consonants, as in (794)–(808), and after palatalized consonants, derived through the first palatalization, as in (809)–(812), or the second palatalization, as in (813)–(815). Recall that palatalization is not

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perceptible before a surface *i* (except in consonants that change their place of articulation when palatalized, such as **w* > *j*, **w* > *Ȑj*, **hw* > *hj*, **h* > *hj*, **w* > *Ȑj*, **k* > *f*, **k'* > *tf'*, **s* > *f*, **ts'* > *tf'*); this depalatalization process (§8.2.1.5) is fed by the raising of PCh **e* after palatal(ized) consonants, resulting in the development **C'e* > **C'i* > *Ci*. Similarly, the depalatalization before *e* in Manjui was fed by the raising of **a* and **Ȑa* after palatal(ized) consonants, as in PCh **?i-nájin* > **?i-nájin* > **?i-nájин* > **?i-néjin* > *Mj ?i-néjin* ‘s/he goes first’.

- (794) PCh **hwi'jét* ‘ice, frost’ > Ijw *wi'jít* || I'w — || Mj *hwi'jít*
- (795) PCh **-ját* ‘breath’ > Ijw *-jét* || I'w *-jél* || Mj *-jét*
- (796) PCh **-jámuk* ‘feces’ > Ijw *-jémuk* || I'w *-jémuk* [our normalization: *-jémuk*] || Mj *-jémuk*
- (797) PCh **-jákun* ‘to eat (intr.)’ > Ijw *-jék'u'n* || I'w *-jék'un* [our normalization: *-jék'un*] || Mj *-jékin*
- (798) PCh **j-é-?e?* ‘s/he is in’ > Ijw *j-í?i?* || I'w *j-í?i?* || Mj *j-í?i?*
- (799) PCh **qajáh* ‘Muscovy duck’ > Ijw — || I'w *kajé* || Mj *kajéh*
- (800) PCh **kél* ‘nasal mucus, cold’ > Ijw *kíl* || I'w — || Mj *kíl*
- (801) PCh **kék'eh* ‘monk parakeet’ > Ijw *kik'i* || I'w *kik'ih* || Mj *kí?i*
- (802) PCh **kéhla-juk* ‘red quebracho’ > Ijw *kíhla-jik* || I'w *kíhla-jik* || Mj *kíhl'e-ek* ~ *kíhl'a-jik* ~ *kíhli-jik*
- (803) PCh **kéte?* ‘squash’ > Ijw — || I'w *kíti?* || Mj *kít'e?* ~ *kíti?*
- (804) PCh **-koj-áj^h* ‘hands’ > Ijw *-k'ój-e* || I'w *-kij-éj* || Mj *-kij-éjh*
- (805) PCh **ká'lah* ‘lizard’ > Ijw *ké'la* || I'w *ké'la* || Mj *ké'la*
- (806) PCh **wós^ok'at* ‘red-crested cardinal’ > Ijw — || I'w *wóxsijét* [our normalization: *wóksi?et*] || Mj *wóxse?et*
- (807) PCh **?éja?* ‘mosquito’ > Ijw *?éje?* || I'w *?éje?* [our normalization: *?éje?*] || Mj *?éje?*
- (808) PCh **?ijéstah* ‘dew’ > Ijw *jísta* || I'w *-jísta* ~ *-jíste* || Mj *?ijísta* ~ *?ajísta*
- (809) PCh **?ihnatá-k* ‘tusca tree’ > Ijw *?ihn'éta-k* || I'w *ihn'éta-k* [our normalization: *?ihn'éta-k*] || Mj *?ihn(^j)éta-k*
- (810) PCh **-hwíhlek* ‘dream’ > Ijw *-hwéhlik* || I'w *-f^wéhlik* [our normalization: *-hwíhlik*] || Mj *-hwíhlik*
- (811) PCh **?i-?wén* ‘s/he sees’ > Ijw *?i-?wí'n* || I'w *?i-?wín* || Mj *?i-?jín*
- (812) PCh **?i-?wét* ‘my place’ > Ijw *?i-?wít* || I'w *?i-?wít* || Mj *?i-?jít*

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- (813) PCh **ʔulʔåh* ‘scaled dove’ > Ijw – || I’w ólaha [our normalization: *ʔólaʔa*]
 || Mj *ʔól(j)eʔe* ~ *ʔól(a)ʔa*
- (814) PCh **s^oʔúlah* ‘anteater’ > Ijw *soʔól^je* || I’w *svʔóla* || Mj *saʔóla* ~ *saʔól^je*
- (815) PCh **túhw-naʔa* ‘eat it (later)’ > Ijw *tóhw-n^jeʔe* || I’w *tóhw-naʔa* || Mj *tóhw-n^jeʔe*
 ~ *tóhw-naʔa*

In Manjui and (somewhat less systematically) in Iyo’awujwa’, not only PCh **a*, but also PCh **å* is raised to [e] after palatal and palatalized consonants, on which see §8.2.3.3.

- (816) PCh *-*hwéʔjå?* ‘to fly’ > Ijw -*hwéʔja?* || I’w -*f^wéje?* [our normalization: -*hwéʔje?*] || Mj -*hwéʔje?*
- (817) PCh *-*kánis* ‘testicle’ > Ijw -*k^jánis* || I’w – || Mj -*k^jénis*
- (818) PCh *-*kås* ‘tail’ > Ijw -*k^jås* || I’w -*k^jés* || Mj -*k^jés*
- (819) PCh **ʔi-hláʔm* ‘s/he defecates’ > Ijw *ʔi-hl^jáʔm* || I’w – || Mj *ʔi-hl^jéʔm*
- (820) PCh *-*kéjås* ‘grandchildren’ > Ijw -*kíjas* || I’w -*kíjas* ~ -*kíjes* || Mj -*kíjes*
- (821) PCh **ʔi-kåt* ‘it is red’ > Ijw *ʔi-s^jåt* || I’w *ʔi-s^jåt* ~ [i]s^jé | Mj *ʔi-sé*
- (822) PCh **j-ås* ‘my son’ > Ijw *j-ås* || I’w *j-és* || Mj *j-és*
- (823) PCh **j-åp* ‘s/he cries’ > Ijw *j-åp* || I’w *j-ép* || Mj *j-ép*
- (824) PCh **ʔipåk* ‘straw’ > Ijw *ʔip^jåk* || I’w *ip^jék* [our normalization: *ʔip^jék*] || Mj –
- (825) PCh **ʔi-hláʔm* ‘s/he defecates’ > Ijw *ʔi-hl^jáʔm* || I’w – || Mj *ʔi-hl^jéʔm*
- (826) PCh **ʔi-må?* ‘s/he sleeps’ > Ijw *ʔi-m^jå?* || I’w – || Mj *ʔi-m^jé?* ~ *ʔi-må?* s/he camps’

The third palatalization (§8.2.1.3) occurred late enough to counteract the raising of **a* to *e* in the varieties that undergo it (Iyo’awujwa’ and Manjui). That way, PCh **iqa* and **iqå* are reflected as *ik^ja* and not as **ik^je* in these varieties. Interestingly, the sequence **iqe* does yield *iki* at least in Manjui (probably through the stages **ik^je* and **ik^ji*, with vowel raising followed by depalatalization), suggesting that the raising of **e* after palatalized consonants was still productive even after the third palatalization, when the raising of **a* no longer applied.

- (827) PCh **ʔi-qÁhlaʔm* ‘it is sharp’ > Ijw *ja-káhlaʔm* || I’w *i-k^jáhlaʔm* [our normalization: *ʔi-k^jáhlaʔm*] || Mj *ʔi-k^jáhlaʔm*

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- (828) PCh **ʔi-qá-nt'ek* ‘my father-in-law’ > Ijw *ʔja-ká-nt'ek* ~ *ʔi-ká-nt'ek* || I'w – || Mj *ʔi-k'á-nt'ek*
- (829) PCh **ʔi-qÁhlek* ‘my liver’ > Ijw *ʔi-káhlik* ~ *ja-káhlik* || I'w *i-k'áhlek* [our normalization: *ʔi-k'áhlek*] || Mj *ʔi-k'áhlek*
- (830) PCh **ʔi-qÁsan* ‘my calf’ > Ijw *ʔi-káxsa'n* ~ *ja-káxsa'n* || I'w *i-k'áxsan* [our normalization: *ʔi-k'áxsan*] || Mj *ʔi-k'áxsen*
- (831) PCh **ʔi-qélAh* ‘s/he encourages’ > Ijw *ʔi-kéla* || I'w – || Mj *ʔi-kíla*

8.2.3.2 Stressed vowel lowering/laxing

In Chorote, mid and high vowels have special lowered or diphthongized allophones, which occur in stressed syllables. The process is blocked following a [+high] segment: this includes palatalized allophones of consonants, underlying palatal consonants and, for back vowels, the labial consonants /w/, /hw/, /'w/.

The phenomenon is most clearly notable in Iyojwa'aja', where the open allophones of /i u/ are [e o], and thus overlap with the non-lowered allophones of /e o/. Although no merger takes place – since /e o/ are lowered to [ɛ ɔ] in the same environments where /i u/ are lowered to [e o] – the vowels in question are not distinguished in the practical spelling.¹⁶

In Iyo'awujwa', the open allophones of /i u e o/ are, respectively, [i ʊ ε ɔ]. Note that [Gerzenstein \(1983\)](#) does not employ the symbols in question in her study; instead, she variably represents [i ʊ] as <e o> or as <i u>, and consistently represents [ɛ ɔ] as <e o>. We retain her transcription when citing forms documented in [Gerzenstein \(1983\)](#), unless when explicitly stated otherwise, but it should be kept in mind that the characters *e* and *o* can each stand for two different sounds (and phonemes). In forms documented by Carol, on the other hand, we do use [i, ʊ].

In Manjui, the lowered or lax allophones of /i u e o/ are, respectively, [ɛɪ/ɪʊ/ɔʊ/ɛ/ɔ]. Lowering is less frequent in /u/ in that variety (as in ['tum] ‘eat!’) and is not systematically reflected in our data. However, it does consistently occur after a glottal consonant: [sa'ʔwla] ‘anteater’, ['humi] ‘bring it (here)’. In one of the subdialects of Manjui spoken in Santa Rosa (probably the Jlimnájnas subdialect), the

¹⁶This spelling is used, for example, in [Drayson's \(2009\)](#) vocabulary, where the grapheme <e> stands for /i/ [e], /e/ [ɛ], and /e/ [e], whereas <o> stands for /u/ [o], /o/ [ɔ], and /o/ [o], though [Drayson \(2009: 91\)](#) does explicitly recognize that the language has “a second *e*” and “a second *o*”. [Gerzenstein \(1978, 1979\)](#) also confuses the lowered allophones of /i u/ with /e o/, though she acknowledges the existence of the allophone [ow], which she suspects to map to an independent phoneme.

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realization [o] after *hw* was documented in /ahwú/ [ʔahwó?] ‘woman’, which is quite unexpected, given that /hw/ behaves as [+high] in other Chorote varieties and does not trigger lowering of a following vowel.¹⁷

The monophthongized allophone of /i/ appears regularly in the Jlawá'a Wos subdialect in closed syllables, where the other subdialect shows a diphthong (as in *?ints'ík* ~ *?ints'éik* ‘four’), but sometimes also in open syllables: *lími?* ‘white’. The diphthongized realization of /e/ is frequent in the Jlimnájnas subdialect, also in open syllables, in contrast with a monophthongized realization in the other dialect, as in *?áile?* ~ *?éle?* ‘parrot’, *?a-páiñ-a* ~ *?a-pén-a* ‘we cook it’. Our transcriptions do not usually reflect these diphthongued realizations of /e/. Preliminarily, the vowels in the Jlimnájnas subdialect seem more lax than those of the Jlawá'a Wos subdialect.

In the Jlimnájnas subdialect, PCh *^o*Ci* (where C is not a coronal) yields [iCi], whereas the other variety shows [iCej]: *fi-hwíse* ~ *fi-hwéise* ‘I am angry’, *hi-p’ílisen* ~ *hi-p’éilisen* ‘you feel sorry for her/him’. By contrast, PCh **iCi* yields [iCi] in all subdialects of Manjui (*?i-hwíse* ‘s/he is angry language’, *?i-p’ílisen* ‘I feel sorry for her/him’), apparently not a retention but rather a combination of the first palatalization (§8.2.1.1) and depalatalization (§8.2.1.5). The stressed vowel lowering must have postdated the former process and predated the latter.

8.2.3.3 PCh *å and *a

PCh *å and *a were clearly distinct in Proto-Chorote, but no contemporary variety of Chorote preserves the opposition in question in all environments. After non-palatal(ized) consonants, both are reflected as *a* in all dialects (except when reduction in unstressed syllables applies, on which see §8.2.3.8).

After palatal(ized) consonants, however, the contrast between PCh *å and *a is preserved in Iyojwa’aja’, where PCh *å is reflected as Ijw *a*, and PCh *a is reflected as Ijw *e*. Recall from §8.2.3.1 that PCh *a and *e after palatal and palatalized consonants are raised to [e] and [i], respectively, in all Chorote varieties. In Manjui and, somewhat less systematically, in Iyo’awujwa’, not only PCh *a, but also PCh *å is raised to [e] in that environment, whereas Iyojwa’aja’ reflects the vowel in question as [a]. That way, the underlying opposition between /a/ and

¹⁷In a couple of words, [u] alternates with [ʊ] or [o] after /hw/ in unstressed syllables: [hlahwu?] alongside [hlahwɔ?] ‘strong wind’, [(ʔa)jehwu?] alongside [ʔa:jehwɔ?] ‘jabiru’. This suggests that /hw/ is specified as [-high] in that subdialect, which could interestingly constitute a retention from Proto-Mataguayan, since PCh *hw goes back to a fricative, PM *ɸ. The unexpected behavior of /hw/ in the Jlimnájnas subdialect can hardly be attributed to language contact with a Mataguayan variety where Chorote /hw/ actually corresponds to a fricative, since Santa Rosa is located at the periphery of the Mataguayan-speaking area.

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/å/, posited by Carol (2014b: 83) for Iyojwa'aja', is non-existent in Manjui and virtually non-existent in Iyo'awujwa'.¹⁸

- (832) PCh *-hwé'ja? 'to fly' > Ijw -hwé'ja? || I'w -f^wéje? [our normalization: -hwé'je?] || Mj -hwé'je?
- (833) PCh *-kánis 'testicle' > Ijw -k^jánis || I'w - || Mj -k^jénis
- (834) PCh *-kás 'tail' > Ijw -k^jás || I'w -k^jés || Mj -k^jés
- (835) PCh *?i-hlá'm 's/he defecates' > Ijw ?i-hl^já'm || I'w - || Mj ?i-hl^jé'm
- (836) PCh *-kéjas 'grandchildren' > Ijw -kíjas || I'w -kíjas ~ -kíjes || Mj -kíjes
- (837) PCh *?i-kát 'it is red' > Ijw ?i-s^ját || I'w ?i-s^ját ~ ?i-s^jét || Mj ?i-s^jét
- (838) PCh *j-ás 'my son' > Ijw j-ás || I'w j-és || Mj j-és
- (839) PCh *j-áp 's/he cries' > Ijw j-áp || I'w j-ép || Mj j-ép
- (840) PCh *-k'áló? 'cheek' > Ijw -k^jólo? || I'w -k^jaló? [our normalization: -k'áló?] || Mj -?eló?

8.2.3.4 PCh *^ø

The emergence and the status of the intrusive vowel *^ø in Proto-Chorote is discussed in §8.1.2.6. In the contemporary varieties of Chorote, *^ø has mostly merged with *i as [i], but this latter merger took place independently in the varieties of Chorote: it fed the second palatalization, which occurred in Iyojwa'aja' and, with some restrictions, in Manjui (§8.2.1.2), but not the first palatalization (§8.2.1.1). That way, PCh *^ø differs from PCh *i in not constituting the environment for the first palatalization. The default development of PCh *^ø (> i in all Chorote varieties) is exemplified below.

- (841) PCh *h^ø-nájin 'you go first' > Ijw hi-n^já'n || I'w - || Mj hi-nájin
- (842) PCh *h^ø-ná? 'her/his father' > Ijw hi-n^já? || I'w hi-ná? || Mj hi-ná?
- (843) PCh *h^ø-p'ot-és 'its lids' > Ijw hi-p'ót-is || I'w - || Mj hi-p'at-és
- (844) PCh *h^ø-sínân 'you roast' > Ijw hi-sín^ja'n || I'w hi-sén^jan || Mj hi-séin^jan
- (845) PCh *h^ø-túm 'you eat' > Ijw hi-t^júm || I'w hi-t^júm || Mj hi-t^júm ~ hi-túm
- (846) PCh *hw^økénah 'north wind, north' > Ijw wikína || I'w wikína || Mj hwikína
- (847) PCh *p^øhá'm 'I am tall' > Ijw pihjá'm || I'w - || Mj -

¹⁸ Carol (2014b: 83, fn. 12) states that [a] is exceedingly rare after palatalized consonants in Iyo'awujwa', but does occur, for example, in k'a'hwijh 'beneath'.

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- (848) PCh **s^oláhqa(j)?* ~ **s^oláhqa(j)?* ‘**wild cat**’ > Ijw *siláka?* || I’w *siláhkaj* [our normalization: *siláhkaj?*] || Mj *siláhkaj?*
- (849) PCh **s^o-pásah* ‘**I am quick**’ > Ijw *si-pánsa* || I’w *si-páxsa* ~ *tsi-páxsa* || Mj *si-páxsa*
- (850) PCh **s^opúp* ‘**Picui dove**’ > Ijw *sipóp* || I’w *sipóp* [our normalization: *sipóp*] || Mj *si-póp*
- (851) PCh **s^o-tój?* ‘**I am tall**’ > Ijw *si-tój(j)?* || I’w *si-tój(j)?* || Mj *si-tój(j)?*
- (852) PCh **s^owálák* ‘**spider**’ > Ijw *siwálak* ~ *siwálak* || I’w *siwálak* ~ *siwálak* || Mj *siwálak*
- (853) PCh **t^o-hwa’jéj?* ‘**s/he marries**’ > Ijw *ti-hwá’ji* || I’w — || Mj *ti-hwa’jí(j)?*
- (854) PCh **t^o-péj-kej?* ‘**s/he hears**’ > Ijw *ti-pé-tfí(j)?* || I’w — || Mj *ti-péj-fí(j)?*
- (855) PCh **t^o-jákun* ‘**s/he eats (intr.)**’ > Ijw *ti-’jék’u’n* || I’w — || Mj *ti-’jékin*
- (856) PCh **w^okínah* ‘**metal**’ > Ijw *wikín’e* || I’w — || Mj —
- (857) PCh **?stáhwe?* ‘**Chaco chachalaca**’ > Ijw *?istáhwe* || I’w *istáf’e* || Mj *?istáhwe?* ~ *?istáhwe?*
- (858) PCh **?stá-k* ‘**cactus (*Stetsonia coryne*)**’ > Ijw *?istá-k* || I’w *?istá-k* || Mj *?istá-k* ~ *?istá-k*
- (859) PCh **?sténi?* / **?sténi-k* ‘**white quebracho**’ > Ijw *?istíni-k* || I’w *isténi-k* [our normalization: *?isténi-k*] || Mj *?isténi?* ~ *?istíni?*
- (860) PCh **?stúu’n* ‘**king vulture**’ > Ijw — || I’w *?istúu’n* || Mj *?istúu’n* ~ *?istúu’n*

Before a ?, including those resulting from debuccalization of an ejective dorsal consonant, PCh *^o typically assimilates to the following vowel, though in (862) the reflex *a* is attested in Manjui.

- (861) PCh **h^o-s^o’ún* ‘**you love**’ > Ijw — || I’w *hi-sv?ón* || Mj *hi-sv?ón*
- (862) PCh **s^o?úlah* ‘**anteater**’ > Ijw *so?ól’e* || I’w *sv?óla* || Mj *sa?óla* ~ *sa?ól’e?*
- (863) PCh **wós^ok’at* ‘**red-crested cardinal**’ > Ijw — || I’w *wóxsijét* [our normalization: *wóxsí?et*] || Mj *wóxsí?et*

In a handful of cases, PCh **t^o* yields *ta* instead of the expected **ti* in Manjui and occasionally also in Iyo’awujwa’.

- (864) PCh **t^okénah* ‘**precipice**’ > Ijw *tikína*‘**ravine**’ || I’w — || Mj *takína*
- (865) PCh **t^okéhna-ke?* ‘**mountain**’ > Ijw *tikíhna-ki?* || I’w *takíhna-ki?* || Mj *takíhn’e-ki?*

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- (866) PCh **t²lúk* ‘blind’ > Ijw — || I’w *talók* [our normalization: *talók*] || Mj —
 (867) PCh **t²-pó-eh* ‘it is full of’ > Ijw *ti-pó-j-i* || I’w *ti-pó-w-e* || Mj *ta-pó-w-e*

Finally, PCh *² has distinct reflexes before uvular consonants. These are discussed in §8.2.3.6.

8.2.3.5 Unstressed PCh **u* and **o* after palatal and palatalized consonants

In the unstressed position, PCh **u* and **o* quite regularly yield **i* after PCh **k(’)* > **k^j(’)* and **j* in all contemporary varieties, with few exceptions, such as (868) in Iyojwa’aja’ and Iyo’awujwa’. (869) shows that this sound change was fed by the stress retraction in Iyojwa’aja’ (§8.2.4), suggesting that it occurred independently in different Chorote varieties.

- (868) PCh **t²-jákun* ‘s/he eats (intr.)’ > Ijw *ti-’jék^ju[’]n* || I’w *-jék^jun* || Mj *ti-’jékin*
 (869) PCh *-*koj-ájh* ‘hands’ > Ijw *-k’ój-e* || I’w *-kij-éj* || Mj *-kij-éjh*
 (870) PCh **kuláj?* ‘sun’ > Ijw *kil^jé?~kili^jé?* || I’w *kiláj* [our normalization: *kiláj?*] || Mj *kiláj?*
 (871) PCh **k’utá’n* ‘thorn’ > Ijw *k’it^jé’n* || I’w *?itán* [our normalization: *?itá’n*] || Mj *?itá’n*
 (872) PCh **k’uwáhlah* ‘puma’ > Ijw *k’iwáhla* || I’w *iwáhla* [our normalization: *?iwáhla*] || Mj *?iwáhla*
 (873) PCh **túkus* ‘ant’ > Ijw *tókis* || I’w *tókis* || Mj *tskis*
 (874) PCh **kéhla-juk* ‘red quebracho’ > Ijw *kíhla-jik* || I’w *kíhla-jik* || Mj *kíhl^je-ek* ~ *kíhl^ja-jik* ~ *kíhli-jik*

Unstressed PCh **u* may also sometimes change to *i* in the modern varieties after other consonants, but details are thus far unclear, and we consider this a sporadic change.

- (875) PCh *-*hwétus* ‘root’ > Ijw *-hwétis* || I’w *f^wétis* [our normalization: *hwétis*] || Mj *-hwétus*
 (876) PCh **p’ilusáh* ‘poor’ > Ijw *p’il^júxs^je* ~ *p’élis^je* || I’w *-pelíxsa* [our normalization: *-p’ilíxsa*] || Mj *p’ilisáh*

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8.2.3.6 Vowel lowering before *q(’)

Chorote has a number of alternations that consist of vowel lowering before the consonant *q(’) (reflected as *k*(’) in the contemporary varieties). For example, the homophonous first-person singular inactive and first-person inclusive possessive prefixes (PCh *s²) usually surface as *fi*- before consonants in Manjui, but as *si*- (or, more rarely, *se*-) before /k(’)/. In Iyojwa’aja’, the cognate prefix has the allomorphs *si*- and *sa*- in the same respective contexts.

- (877) Manjui (Carol 2018)

- a. fi-táhwel-e
1.INACT-know-APPL
'I know her/him'
- b. fi-’wét
1+2.POSS-place
'our (incl.) place'
- c. si-káa?
1.INACT-choke
'I choke'
- d. si-ká'mat
1+2.POSS-meat
'our (incl.) meat'

In Iyojwa’aja’, the first-person possessive prefix (PCh *?i-) and the third-person I-class verbal prefix (PCh *?i-) are usually reflected as ?i- before consonants but as *ja*- ~ ?i- before /k(’)/ (878), whereas the third-person T-class verbal prefix (PCh *t²) is normally reflected as *ti*- before consonants but as *ta*- before /k(’)/ (879).

- (878) Iyojwa’aja’ (Carol 2014b)

- a. ?i-p^já'n
3.I.RLS-swim
's/he swims'
- b. ?i-hn^jétis^je'n
3.I.RLS-sneeze
'it makes her/him sneeze'
- c. ja-k'áhoko?
3.I.RLS-cough
'it makes her/him cough'

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- d. ja-kóhn^je[’]n
3.I.RLS-feed
's/he feeds'
- e. ?i-p^júxsi? (*ja-póxsi?)
1SG.POSS-beard
'my beard'
- f. ja-ká-nt'ek ~ ?i-ká-nt'ek
1SG.POSS-ALZ-grandfather
'my father-in-law'

(879) Iyojwa'aja' (Carol 2014b)

- a. ti-l^jáki[’]n
3.T.RLS-dance
's/he dances'
- b. ti-més
3.T.RLS-be_two
'they are two'
- c. ti-póxsi?
3.T.RLS-have_beard
'he has a beard'
- d. ta-káxsit
3.T.RLS-stand
's/he stands'
- e. ta-kélis^je[’]n
3.T.RLS-sing
's/he sings'
- f. ta-k'óhoko?
3.T.RLS-cough
's/he coughs'
- g. ta-kóhn^je[’]n
3.T.RLS-feed
's/he feeds someone'

At least in the case of the prefixes of the shape PCh *?i- in Iyojwa'aja', one may suspect the influence of the neighboring dialects of Wichí, such as 'Weenhayek, which show an identical phenomenon (§9.2.2.5).

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8.2.3.7 Pretonic PCh *å, *o

Pretonic PCh *å yielded *i* in the contemporary varieties, late enough to counter-feed the second palatalization. It seems that this process is still underway: note that both variants have been synchronically attested in Iyojwa'aja' *pisáh* ~ *pit-sáh* ~ *pasáh* 'jabiru' (Drayson 2009: 143–144). The term Ijw *kiláji*, Mj *kiláji?* ~ *kiláju?* 'non-indigenous person' is likely borrowed from some western Guarani variety, from a form close to Ava Bolivian Guarani [ka'rai] (Daviet 2016: 76).

There are no clear examples of PM *o in pretonic position, but Ijw *sihnát* 'knife', a possible early loanword from PW **tsonhat*, suggests that pretonic *o merged with PM *å as å, since the Iyojwa'aja' reflex of both vowels is an *i* that fails to palatalize a following coronal: PM *påttséχ* > PCh **påtsáh* 'jabiru' > Ijw *pi(t)sáh* ~ *pasáh* || I'w *pisáh* || Mj *pisáh*; cf. also Ijw -<*te*>*sahnat* 'knife (relational)'. The Iyo'awujwa' and Manjui term for woman, *'nikí?*, can be likely traced back to PCh **ii'no-ké?* ' ; where a root meaning 'man, person' is accompanied by a feminine suffix.

8.2.3.8 Unstressed vowel reduction in Iyojwa'aja'

In word-medial and word-initial unstressed syllables after a coronal or palatal(ized) sound, PCh *e, *a, and *å are raised to *i* in Iyojwa'aja', as in Ijw *táxsina* 'toad' (compare Mj *táxsena* 'id.'). After consonants that are not coronal or palatal(ized), the raising fails to occur, as in Ijw *pu-wá?* 'those (unknown)' and *ha-wá?* 'those (absent)', except that PCh *e does get raised after non-coronals when it is preceded by a coronal (880e).

(880) Iyojwa'aja'

- a. *?éle?* 'parrot' / *?éli-wa?* 'parrots'
- b. *s'ún'e?* 'this' / *s'úni-wa?* 'these'
- c. *k'ia?* ~ *s'u-k'ia?* 'that (gone)' / *ki-wá?* ~ *s'ú-ki-wa?* 'those (gone)'
- d. *?ahwéna* 'bird' / *?ahwéhni-ki?* 'little bird'
- e. *t-'óhwe'n* 's/he wakes up' / *t-'óhwin-'ni* 's/he wakes up repeatedly'

Raising of PCh *e to *i* may also occur in final syllables in Iyojwa'aja' (and sometimes in Iyo'awujwa') before, at least, *s* and *n*.

(881) PCh **?ahnát-es* ~ **?ahnát-es* 'lands' > Ijw *?ahnát-is* || I'w *ahnát-is* [our normalization: *?ahnát-is*] || Mj *?ahnát-es*

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- (882) PCh *-káhnat-es ‘fishhooks’ > Ijw -káhnat-is || I’w káhnat-es || Mj –
- (883) PCh *-lák’en ‘to dance’ > Ijw -láki’n || I’w -lák’en || Mj -lák’en

8.2.3.9 Pretonic lowering in Manjui

Pretonic vowels are sometimes lowered to *a* in Manjui (and, less frequently, also in Iyo’awujwa’).

- (884) PCh *?is-ís ‘they are good’ > Ijw ?is-ís || I’w – || Mj ?as-éis
- (885) PCh *kates-él ‘stars’ > Ijw katés-e'l || I’w kates-éj [our normalization: *kates-éjh*] || Mj *katas-éjh*
- (886) PCh *(h^o)-p’ot-és ‘(its) lids’ > Ijw hi-p’ót-is || I’w -pót-es [our normalization: -p’ót-es] || Mj (*hi-*)p’at-és
- (887) PCh *?i’nát ‘water’ > Ijw ?i’nájt || I’w ?anát [our normalization: ?a’nát] || Mj ?a’nát
- (888) PCh *?ijéstah ‘dew’ > Ijw jísta || I’w -jísta ~ -jíste || Mj ?ijísta ~ ?ajísta

8.2.3.10 Simplification of “double” vowels

Proto-Chorote had heterosyllabic sequences of identical vowels that exceptionally were not separated by a glottal stop. These are retained in Manjui but simplified in Iyojwa’aja’ and Iyo’awujwa’.

- (889) PCh *-jáan ‘to watch’ > Ijw -’jé’n || I’w -jén- [our normalization: -’jén-] || Mj -’jéen
- (890) PCh *-áaj? ‘mouth’ > Ijw – || I’w -áj [our normalization: -áj?] || Mj -áaj?
- (891) PCh *-hááke? ‘ditch’ > Ijw -háki? || I’w -háki? || Mj -háaki?
- (892) PCh *-k’óote? ‘ear’ > Ijw -k^jóte? || I’w -k^jóte? [our normalization: -k^jóte?] || Mj -?óote?
- (893) PCh *?stúu’n ‘king vulture’ > Ijw – || I’w ?istó’n || Mj ?istjúu’n
- (894) PCh *hl-úut ‘scales’ > Ijw hl-ót ‘placenta’ || I’w hl-ót-is [our normalization: *hl-ót-is*] || Mj *hl-óvt*

The Mataguayan background of such sequences is poorly understood at present. We assume that in some cases they result from loss of an intervocalic **h*, yet in other cases they arose due to simplification of certain consonant clusters, as in *stwV > *?stVV, *qk > *V^jk. They are not in any way related to the long vowels of ’Weenhayek.

8.2 From Proto-Chorote to the contemporary varieties

8.2.3.11 Other vowel changes

This section describes other minor or subregular vowel changes in the Chorote varieties.

The alternation *a* ~ *o* includes environments other than those discussed in §8.2.3.9. Note that the variation in (896) has a parallel in Nivaclé, where both *toβåk* and *toβok* ‘river’ are attested. The alternation in (897) and (898) could reflect the sound change PM **o* > *å* that might have been blocked in some varieties before a labiovelar, but in the absence of reliable cognates the directionality of the change cannot be ascertained.

- (895) PCh **må(h)* ‘go!’ > Ijw *má(h)* || I’w — || Mj *måh*
- (896) PCh **téwok* [?] ~ **téwåk* ‘river’ > Ijw *téwuk* || I’w *téwak* [our normalization: *téwak*] || Mj *téwak*
- (897) PCh **ʔi-t’owás* [?] ~ **ʔi-t’awás* ‘to punch’ > Ijw *ʔi-t’owás* || I’w *-t’awás* || Mj *ʔi-t’owás* ~ *-t’awás*
- (898) PCh **ts’ahwá?* [?] ~ **ts’ohwá?* ‘woodpecker (*Colaptes sp.*)’ > Ijw *ts’ahwá?a* || I’w — || Mj *ts’ahwá?* ~ *ts’ohwá?*

Variation of this type is also attested in Manjui words that do not reconstruct to Proto-Chorote, such as Mj *[j]áwaset* ~ *[j]áwoset* ‘to address directly’. Curiously enough, the subdialectal variation in Manjui may also affect stressed vowels, as in *Wónta* ~ *Wánta* ‘Santa Rosa’.

The sequence **ji* after a stressed low vowel is deleted in Iyojwa’aja’.

- (899) PCh *-*nájin* ‘to go first’ > Ijw *-ná’n* || I’w *-nájin* || Mj *-nájin*

PCh **u* was lowered to /o/ ([o], [ɔ]) in Iyojwa’aja’ before PCh **q*. Only one example is known.

- (900) PCh *-*túk’ah* ‘to cook in ashes’ > Ijw *-tók’á* || I’w — || Mj *-tví?v*

PCh **e* has apparently yielded *o* in Iyojwa’aja’ after PCh **kw* > Ijw *k^j*, though only one example is known.

- (901) PCh **j-ókwes* ‘to frighten away’ > Ijw *j-ók’os* || I’w — || Mj *j-ókes*

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8.2.4 Word-level prosody

Iyo'awujwa' and Manjui quite faithfully retain the position of the stress reconstructed for Proto-Chorote. By contrast, Iyojwa'aja' innovated in that it no longer allows postpeninitial stress, licit in Proto-Chorote (and Proto-Mataguayan), and systematically retracts the stress to the peninitial syllable, as can be seen in the following examples.

- (902) PCh **kates-él* ‘stars’ > Ijw *katés-e'l* || I'w *kates-éj* [our normalization: *kates-éjh*] || Mj *katas-éjh*
- (903) PCh *-*qató?* / -*qató-ke?* ‘elbow’ > Ijw -*káto-ki?* || I'w -*kató?* / -*kató-ki?* [our normalization: -*kató?* / -*kató-ki?*] || Mj -*kató?*
- (904) PCh *-*kilá?* ‘elder brother’ > Ijw -*kíl'a* || I'w -*kil'é?* || Mj -*kil'é?*
- (905) PCh *-*koj-ájh* ‘hands’ > Ijw -*kój-e* || I'w -*kij-éj* || Mj -*kij-éjh*
- (906) PCh *-*ta-té?* ‘eye’ > Ijw -*tá-te?* || I'w -*ta-té?* [our normalization: -*ta-té?*] || Mj -*ta-té?*
- (907) PCh **?i-t'owás* ~ *?i-t'awás* ‘to punch’ > Ijw *?i-t'ówas* || I'w -*t'awás* || Mj *?i-t'owás* ~ *?i-t'awás*
- (908) PCh **?i-selán* ‘to prepare’ > Ijw *?i-léxsan-e* || I'w *?i-silén-* || Mj *?i-silén-*

As a consequence of this accent retraction, all stems that take obligatory syllabic prefixes (this includes all stems that start with a supraglottal consonant) and receive stress on their second syllable in Iyo'awujwa'/Manjui correspond to stems with initial stress in Iyojwa'aja' (Carol 2014a: 91, fn. 22). By contrast, stems that take non-syllabic prefixes – such as -*?ahán* ‘to know’ or -*?ahwélh* ‘to be ashamed’ – retain the original accent in Iyojwa'aja', because the accretion of a prefix to the stem does not result in an illicit postpeninitial stress: *ts-’ahán-e* ‘I know’, *ts-’ahwélh* ‘I am ashamed’. Non-initial stress is likewise allowed in non-prefixed stems: *?ahwéna* ‘bird’, *?a'lá?* ‘tree’, etc.

9 Wichí

This chapter deals with the historical phonology of Wichí [wich1261].

§9.1 discusses the development of PM consonants, vowels, and prosody from the PM stage to Proto-Wichí. §9.2 is concerned with the diversification of the Wichí varieties.

For the 'Weenhayek variety, we rely on [Claesson \(2016\)](#)'s dictionary as well as [Alvarsson & Claesson's \(2014\)](#) grammatical description and [Claesson, Claesson's \(1994, no date\)](#) phonological descriptions. For Vejoz, we have consulted the vocabularies by [Viñas Urquiza \(1974\)](#) and [Gutiérrez & Osornio \(2015\)](#). For the Lower Bermejeño variety, we rely on [Nercesian \(2014\)](#)'s grammar and on [Braunstein \(2009\)](#)'s vocabulary as a secondary source; in addition, many flora and avifauna terms have been extracted from [Spagarino \(2008\)](#) and [Spagarino et al. \(2013 \[2011\]\)](#). [Suárez \(2014\)](#) is a useful source on plant names in the Southeastern variety as spoken in Salta. The consonantal inventory we assume for Proto-Wichí is given in Table 9.1. The vocalic inventory we assume for Proto-Wichí includes six or seven vowels, */i (i) e a å o u/.

Table 9.1: Proto-Wichí consonants

	labial	dental	alveolar	palatal	dorsal	dorsal labialized	glottal
plain stops	*p	*t	*ts	*k ^j	*q *[q ~ k]	*k ^w *[k ^w ~ q ^w]	*?
ejective stops	*p'	*t'	*ts'	*k ^{j'}	*q'	*k ^{w'}	
fricatives	*f	*s			*χ *[χ ~ x]	*x ^w	*h
plain approximants	*w	*l		*j			
gl. approximants	*w	*l		*j			
plain nasals	*m	*n					
glottalized nasals	*m	*n					

Individual Wichí lects depart from this scheme in a number of ways. Regarding the consonant system, in a number of (sub)dialects PW *k^j and *k^{j'} are replaced with /tʃ/ and /tʃ'/, whereas *PW *x^w is often replaced with /f^w/ or /h^w. Contemporary Wichí lects also have aspirated stops, voiceless approximants, and voiceless nasals, though their phonological status is debated. No contemporary Wichí lect is known to retain the hypothetical phoneme PW *l, and many varieties also lack *å.

9 *Wichí*

9.1 From Proto-Mataguayan to Proto-Wichí

This section deals with the development of PM consonants (§9.1.1), vowels (§9.1.2), and prosody (§9.1.3) from the Proto-Mataguayan stage to Proto-Wichí. §9.1.4 presents evidence for the regular operation of Watkins' Law in the historical development of Proto-Wichí, whereby forms with third-person inflection were reanalyzed as uninflected forms.

9.1.1 Consonants

The historical development of the PM consonants in Wichí includes the following sound changes: the sound change PM $^*\phi$ > PW $^*x^w$ (§9.1.1.1), the palatalization of PM $^*k(')$ to PW $^*k^i(')$ in the onset position and the labialization of PM *k to PW $^*k^w$ in the coda position after a back vowel (§9.1.1.2), the merger of the fricatives PM *x and $^*\chi$ > PW $^*\chi$ (in codas, except that PM $^*o\chi$, $^*u\chi$, *ux > PW $^*ox^w$, $^*ux^w$, $^*ux^w$) or *h (in onsets, merging with PM *h) (§9.1.1.3), the deaffrication of PM *ts to PW *s in the coda position (§9.1.1.4), the loss of contrastive glottalization in non-nasal codas (§9.1.1.5), the fortition of glottalized fricatives (§9.1.1.6), the change of word-initial PM $^*ji-$ to PW $^*?i-$ preceding non-dorsal consonants (§9.1.1.7), the sound change PM $^*[?]$ > PW *h in onset of syllables followed by a syllable with a glottalized consonant (§9.1.1.8), the deglottalization of glottalized onsets of syllables followed by a syllable with a glottalized consonant (§9.1.1.9), the loss of word-final PM *h following syllables with a glottalized obstruent (§9.1.1.10), the insertion of a word-final PW *h following an accented vowel (§9.1.1.11), the change of word-final PM $^*-nV$ to PW $^*-\bar{n}Vh$ (§9.1.1.12), the change of word-final PM $^*(')l$ to PW $^*l^h$ (§9.1.1.13), the loss of word-final PM $^*?$ in posttonic syllables (§9.1.1.14), and the change of syllabic PM $^*\eta$, $^*\tau$ to PW *ni , *ta (§9.1.1.15). The evolution of Proto-Mataguayan consonant clusters is described in §9.1.1.16 (for clusters whose second element is a guttural fricative) and §9.1.1.17 (for all other clusters).

9.1.1.1 PM $^*\phi$

Proto-Mataguayan $^*\phi$ yielded PW $^*x^w$ (in the contemporary varieties of Wichí, the pronunciation of its default reflex varies from [x^w] to [f^w], as detailed in §9.2.1.4) in both onsets and codas. For a representative sample of examples, see §2.1.7.

Two cognate sets show an irregular reflex of PM ϕ in Wichí (*w in 'to fly', *p in 'to suck breast').

9.1 From Proto-Mataguayan to Proto-Wichí

- (1) PM **[ji]ɸä'jå?* ~ **ɸä'jå* ‘to fly’ > Ni *[ji]ɸä'jå* || PCh **[?i]hwé'jå?* || PW **xʷe'jå*
 ~ **w-* ~ **i-*
- (2) PM **ti'ɸ* ‘to suck breast’ > Mk *tu'f/-tu'f* || Ni *ti'ɸ* || PCh **[?i]tíM* || PW **tip*

At least in the latter example, the reflex **p* may turn out to be the regular outcome of the preglottalized coda PM **ɸ* (see §2.3 on the preglottalized codas of Proto-Mataguayan). We have not identified any other example of PM **ɸ* in our comparative corpus. Note that the causative of PW **tip* ‘to suck breast’ is PW **[?i]tíxʷ-qat* ‘to breastfeed’, with a regular reflex of *PM **ɸ*.

9.1.1.2 PM **q*, **k*, and their glottalized counterparts

This subsection describes the evolution of PM **q* and **k* (and their glottalized counterparts) in Wichí. Already in Proto-Mataguayan, the distribution of these segments appears to have been subject to some restrictions: PM **q* is not reconstructed following non-low vowels (that is, the sequences **uq*, **oq*, **eq*, **iq* are not known to have been possible in PM), whereas **k* was apparently banned following PM **a*. Both PM **q* and **k* could occur stem-initially (as in **qati'ts* ‘star’ vs. **-kä's* ‘tail’) and following an **å* (as in **tsähåq* ‘chajá bird’ vs. **níjåk* ‘cord, rope’); data regarding the position after consonants are scarce. Stem-final **k* could also alternate with **h* in plural formation, as in **-må'k*, plural **-mhå'j* ‘powder, flour’ (§5.2.3).

In Proto-Wichí, PM **q* and **q'* remained intact in all positions.

- (3) PM **-åq*, **-qå'-ts* ‘food’ > Mk *-aq*, *-qa-ts* || Ni *-åk*, *-kå-s* || PCh **-åk*, *-qå'-s* || PW **-t-åq*, **-qå'-s>*
- (4) PM **-ɸqató* (**-l*) ‘elbow’ > Ni *-(?V)ɸkato* (*-k*) || PCh **-qató?* (**-l*) || PW **-qáto* (**-l^h*)
- (5) PM **qá-* / **q-* ‘indirect possession’ > Mk *qe-* / *qa-* / *qo-* / *q-* || Ni *ka-* / *k-* || PCh **qá-* / **q-* || PW **qá-* / **q-*
- (6) PM **-qák'a* (**-l*) ‘medicine’ > PCh **-qák'a?* (**-l*) || PW **-qák'a* (**-l^h*)
- (7) PM **[ji]qáku?* ‘to distrust’ > Mk *[je]qeku?* || Ni *[ji]kaku* || PCh **[ji]qáku?* || PW **[ji]qák'ju-APPL*
- (8) PM **-qalå?* (**-j^h*) ‘leg’ > Ni *-kaklå?* (*-j*) || PCh **-qa'lå?* ~ **-qå'lå?* (**-j^h*) || PW **-qålå* (**-j^h*)
- (9) PM **[t]qási(?)t* / *-qasí(?)t* ‘to stand’ > PCh **[t^o]qásit* || PW **[t]qásit*; IMP **qasít*
- (10) PM **qati'ts*, **qatits-él* ‘star’ > Ni *kati's* || PCh **qatés*, **qates-él* || PW **qates*, **qatéts-el^h*

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- (11) PM **qatsíwo*(?) ‘limpkin’ > PCh **qasíwo*<?oh> || PW **qatsíwo*
- (12) PM *-*qáwa*(?)*q* ‘belt, band’ > PCh *-*qáwak* || PW *-*qáwaq*
- (13) PM *-*qá?tu*(?) ‘yellow’ > PCh *-*qá?tu*? || PW **qá?tu*
- (14) PM *[*t*]*qáñhan* ‘to fish with a hook’ > Mk [*ta*]<*qa*>*qanhen* || PCh *[*t*]*qáñnan* || PW *[*t*]*qáñhan*
- (15) PM *-*qéj* (*-its) ‘costume’ > Ni -*kej* (-is) || PCh *-*qéj?* (*-is) || PW *-*qéj* (*-is)
- (16) PM *-*qótso*(?) ‘node’ > PCh *-*qóso-ke?* || PW *-*qótso*
- (17) PM *-*sáq’álh*, *-*sáq’ál-its* ‘soul, spirit’ > Mk (?) -*si’nq’al*(-its) || Ni -*såk’åkl*<*it*> || PCh *-*sáq’álh*, *-*sáq’ál-is*
- (18) PM **sláqha*(?)*j*, **sláqhaj-its* ‘wild cat’ > Ni *sklåkxaj* ~ *sklåkxaj*(-is) || PCh **s’låhqaj?* ~ **s’låhqaj?* (*-is) || PW **silåqhåj*
- (19) PM **stá-?**q* ‘toothpick cactus (*Stetsonia coryne*)’ > PCh **?stá-k* || PW **?istá-q*
- (20) PM **tsåhåq* (*-its) ‘chajá bird’ > Mk *tsahaq* (-its) || PCh **såhåk*, **såhåq-es* ~ **såhåq-is* || PW **tsåhåq*
- (21) PM *-*?a*(?)*q* ‘rope, cord’ > PCh *-*?ák* || PW *-*t-’aq*
- (22) PM **?aqáje’k* ‘wild honey’ > Ni *?akåjetf* || PW **?aqájeq*

By contrast, PM **k* changed in most positions. In onsets, it became palatalized, yielding PW **k^j*. Likewise, PM **k*’ yielded PW **k^j*. This sound change is shared with the contemporary Chorote varieties, though not with Proto-Chorote (see §8.2.2.2 and §8.2.2.5).

- (23) PM *-*kat* ‘collective of plants’ > Mk -*ket* || Ni -*tusat* / -*kat* || PCh *-*kat* || PW *-*k^jat* (*-at after **k^w*, **q*)
- (24) PM *[*ji*]*ka’χ* ? ~ *[*ji*]*kå’χ* ‘to take away’ > Mk [*j*]<*e*>*ka’χ* || Ni [*ji*]*tſa’x* || PW *[*ji*]*k^jåχ*
- (25) PM **ká’lah*, **ká’la-ts* ‘lizard’ > PCh **ká’lah*, **ká’la-s* || PW **k^já’lah*, **k^já’la-s*
- (26) PM *-*kán* (*-its) ‘testicle’ > Ni -*kán-sij* || PCh *-*kán*<*is*> || PW *-*k^ján*<*is*>
- (27) PM *-*kå’s*, *-*kås-él* ‘tail’ > Ni -*kå’s*, -*kås-ek* || PCh *-*kås* || PW *-*k^jås*, *-*k^jås-el^h*
- (28) PM *[*ji*]*kå’?**t* ‘to be red’ > PCh *[*ji*]*kå’t* || PW *[*ji*]*k^jå’t*
- (29) PM *[*ji*]*kå’?**t-APPL* ‘to fall’ > Ni [*ji*]*kå’?**t-APPL* || PW *[*ji*]*k^jå’t-APPL*
- (30) PM *[*ji*]*kå?* ‘to be torn’ > PCh *[*ji*]*kå?* || PW *[*ji*]*k^jå?*

9.1 From Proto-Mataguayan to Proto-Wichí

- (31) PM *-kéjå(?) (f.), *-kéjåts (m.), *-ké(j)tså-ts (pl.) ‘grandchild’ > PCh *-kéjå?, *-kéjås, *-kétsås || PW *-k^jéjå, *-k^jéjås, *-k^jétsås
- (32) PM *k^jék’eh ‘monk parakeet’ > Ni t^jet^je || PCh *kék’eh || PW *k^jék^j’e
- (33) PM *kéłχa-ju^h’k, *kéłχa-jku-j^h ‘red quebracho’ > Mk kełe-jku- || Ni tsełxa-juk, tsełxa-ku-j || PCh *kéhla-juk / *kéhla-jku- || PW *k^jéł-juk^w, *k^jéł-k^ju-j^h
- (34) PM *[ji]kén ‘to send’ > Mk [j]<u>kin || Ni [ji]tsen || PCh *[?i]kén || PW *[?i]k^jén
- (35) PM *-ke?(*-j^h) ‘feminine’ > Mk -ki?(-j) || Ni -tse / -ke (-j) || PCh *-ke?(*-j^h) || PW *-k^je (*-j^h)
- (36) PM *-kilá?(*-wot) ‘elder brother’ > Ni -t^jekla? / t^jikla-(-βot) || PCh *-kilá?(*-wot) || PW *-k^jila
- (37) PM *-kitá?(*-wot) ‘elder sister’ > Ni -t^jsita? (-βot) || PCh *-kitá?(*-wot) || PW *-k^jíta
- (38) PM *kójXa(?)t ‘to be heavy’ > PCh *kóhjat-APPL || PW *k^jójhat
- (39) PM *kó’l ‘locust’ > PCh *kó’l || PW *k^jól^h
- (40) PM *kowä’x / *-kowä’x ‘hole’ > PCh *kowéh / *-kóweh || PW *k^jowex / *-k^jowex
- (41) PM *ktá’nih ‘Chaco tortoise’ > PCh *kitá’nih || PW *k^jtá’nih
- (42) PM *ktéta(?)~*ktáta(?) ‘white algarrobo fruit (*Prosopis elata*)’ > PCh *kitéta? || PW *k^jtéta
- (43) PM *[ji]kú’t ‘to answer’ > Mk [j]<e>ku’t || Ni [ji]ku’t || PCh *[?i]kúhl-APPL || PW *[ni]k^jút
- (44) PM *[t]kú’m-APPL ‘to grab; to work’ > Mk [te]ku’m-APPL || Ni [t’ɑ]ku’m-APPL || PCh *[?i]kúm-APPL || PW *[t]k^jú(?)m-APPL
- (45) PM *-kút-ex ‘to meet’ > Mk [w(e)]kut-ix-u’t || Ni [βa]kut-ef || PCh *[?i]kút-eh || PW *-k^jút-ex
- (46) PM *k(’)utsá(?)X₁₂~*k(’)utsé(?)χ ‘cháguar (*Bromelia hieronymi*)’ > PCh *k’usáh || PW *k^jutsáχ
- (47) PM *kú’X₁₂ ‘sweat’ > Ni -β-ku’x || PW *k^júx^w
- (48) PM *-(j)ku-j^h ‘trees (suffix)’ > Mk -(j)kw-i || Ni -ku-j || PCh *-(j)ku-j^h || PW *-k^ju-j^h
- (49) PM *khá̄t ‘cactus’ > Mk khat-u’k || Ni kxat || PCh *kåhá̄t || PW *k^jåhá̄t
- (50) PM *-kVnt(?)... ‘kidney’ > PCh *-kánt’ijaa? || PW *-k^jóntowaj

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- (51) PM **k’alxó*(*-ts) ‘armadillo (*sp.*)’ > Mk *k’olo*’x || Ni *k’akxo*(-s) || PCh **k’ihló*?(*-s) || PW **k’anhóh*
- (52) PM *-*k’áxe*?(*-l) ‘arrow’ > Mk *-qaxi*?(-l) || Ni *-k’áxe* || PCh *-*k’áhe*?(*-l) || PW *-*k’áhe*(*-l^h)
- (53) PM *-*k’älphah* ‘spouse’ > Ni *-tf’akpha* || PCh *-*k’élhwah* || PW *-*k’éxwah*
- (54) PM *[*ji*] *k’än* ‘to stretch out’ > Ni [*ji*] *tf’an* || PCh *[*ji*] *k’én*-APPL || PW *[*hi*] *k’én*
- (55) PM *[*ji*] *k’ása*’χ ~ * [*ji*] *k’áse*’χ ‘to divide’ > Mk [*j*] <*a*> *k’esa*’χ || PCh *[*ji*] *k’ésah* || PW *[*hi*] *k’ésax*
- (56) PM *-*k’ínix*, *-*k’ínx-i-ts* ‘younger brother’ > Mk *-k’ínix* || Ni *-tf’inif* || PCh *-*k’ínih*, *-*k’ihni-s* || PW *-*k’íniχ*, *-*k’ính-i-s*
- (57) PM *-*k’ínxå*? ~ *-*k’ínxå*?(*-wot) ‘younger sister’ > Mk *-k’inxå*? ~ -*k’inxå*? || Ni *-tf’inxå*(-βot) || PCh *-*k’ihnå*?(*-wot) || PW *-*k’ínhå*
- (58) PM *-*k’o*, *-*k’ó-l* ‘bottom’ > Ni *-k’o*?(-k) || PCh *-*k’ó*? || PW *-*k’o*, *-*k’ó-l^h*
- (59) PM *-*k’u*, *-*k’ú-l* ‘horn, club’ > Mk *-k’u*?(-l) || Ni *-k’u*?(-k) || PCh *-*k’ú*?(*-l) || PW *-*k’j’u*, *-*k’j’ú-l^h*
- (60) PM **k’utX₂₃á*’n, **k’utX₂₃án-its* ‘thorn’ > Ni *k’utxa*’n, *k’utxan-is* || PCh **k’utá*’n, **k’után-is* || PW **k’j’uthá*’n, **k’j’uthán-is*
- (61) PM *(-)*k’útsa*’χ, *(-)*k’útsha-ts* ‘old’ > Mk *k’utsa*’χ, *k’utshe-ts* || Ni *k’utsa*’x, *k’utsxa-s* || PCh *-*k’úsah*, *-*k’úsa-s* || PW *-*k’útsaχ*
- (62) PM *(-)*lká*(?)*t* ‘nasal mucus, cold’ > Mk *-leke*(?)*t* || PCh **ké**t* || PW **k’él-taχ*, **k’él-ta-s*
- (63) PM **nk’á* ‘new’ > Mk *i’nk’á* || Ni *nitf’á* || PCh **nk’á*? || PW **nek’á* ~ **nék’á* ~ **nek’j’e* ~ **nék’j’e*
- (64) PM *-*qáka*(*-l) ‘medicine’ > PCh *-*qáka*?(*-l) || PW *-*qák’á*(*-l^h)
- (65) PM *[*ji*] *qáku*? ‘to distrust’ > Mk [*je*] *qeku*? || Ni [*ji*] *kaku* || PCh *[*ji*] *qáku*? || PW *[*ji*] *qák’u*-APPL
- (66) PM *(-)*skä*’*t* ‘mesh’ > Ni *-stfá*’*t* || PW **sik’et*
- (67) PM **tkéna*(?)*X₁₂* ~ **tkána*(?)*X₁₂*, **tkénX₁₃a-ts* ~ **tkánX₁₃a-ts* ‘precipice; hill, mountain’ > PCh **t’kénah*, **t’kéhna-s* || PW **tk’énax*, **tk’énha-s*
- (68) PM *-*t(á)ko*?(*-l) ‘face’ > Mk *-tko<jek>* || Ni *-tako*?(-k) || PCh *-*tóko*?(*-l) || PW *-*ták’o*(*-l^h)
- (69) PM *-*t(á)ko-se*?(*-j^h) ‘eyebrow’ > Mk *-tko-si*?(*-j) || PCh *-*tóko-se*?(*-j^h) || PW *-*ták’o-se*(*-j^h)

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- (70) PM *wák'a-ju'k, *wák'a-jku-j^h ‘guayacán’ > Mk wek'e-ju'k, wek'e-jkw-i || PCh *wák'a-juk, *wák'a-jku-j^h || PW *wák'a-juk^w, *wák'a-k^ju-j^h
- (71) PM *wkína(’)X₁₂, *wkínaX₁₃a-ts ‘metal’ > PCh *w^əkínah, *w^əkính-a-s || PW *kínaχ, *kính-a-ts
- (72) PM *-xäjk'u(?) (*-l) ‘egg’ > Ni -sajk'u(-k) || PCh 3 *hl-éjk'u? (*-l) || PW *-t-ík^ju (*-l^h)

In intervocalic clusters composed of a *k and a guttural fricative, PM *k failed to palatalize, possibly because it was still syllabified as a coda in that position when the sound change PM *k > PW *k^j took place. The outcome is PW *kh, reflected as k^h in most contemporary varieties of Wichí.

- (73) PM *-qák-xi? ~ *-qak-xí? ~ *-qák-xij^h ~ *-qak-xij^h ‘lap, calf’ > Mk -qek-hi? || PW *qák-hih

In codas, it acquired labialization following back vowels, yielding PW *k^w. (Proto-Wichí also innovated *k^w and *k^w in onsets from PM *kɸ and *kɸ', as in PW *[j]ók^waχ < PM [j]ékɸa'x ‘to bite’; see §9.1.1.17.)

- (74) PM *ɸts-u'k ‘palm (*Copernicia alba*)’ > Mk fits-uk || Ni ɸts-u'k || PCh *hwis<úk> || PW *x^wits<uk^w>
- (75) PM *-t^u'k, *-t^u-j^h ‘yica bag, load’ > Mk -t^u'k, -t^u-j || Ni -t^u'k || PCh *-hlúk, *-hlúj-... || PW *-tuk^w, *-t^u-j<is>
- (76) PM *-má'k, *-mhá-j^h ‘powder, flour’ > Ni -má'k, -mxå-j || PCh *-måk || PW *-mók^w, *-mhó-j^h
- (77) PM *-muk, *-mhu-j^h ‘feces’ > Mk -<i>muk, -<i>mhu-j || Ni (-)<sa>muk, (-)<sa>mxu-j || PCh *-<já>muk || PW *-<já>muk^w, *-<já>mhu-j^h
- (78) PM *néwo(?)k ‘wild manioc’ > Ni noβok || PCh (?) *n^wák || PW *néwok^w
- (79) PM *(-)niják, *(-)níjhá-j^h ‘rope, cord’ > Mk (-)nijak, (-)níjha-j || Ni -niják, -níjxå-j || PCh *níják, *níjhå-j^h || PW *níják^w, *níjhå-j^h
- (80) PM *ηtå(?)k ‘two’ > PCh *ηták || PW *nitåk^w
- (81) PM *-p'o'k ~ *-ɸ'o'k ‘fence’ > Ni -p'o'k || PCh *-p'ók || PW *-p'ok^w
- (82) PM *téwo(?)k ~ *téwå(?)k ‘river’ > Ni toβok ~ toβåk || PCh *téwok ~ *téwåk || PW *téwok^w
- (83) PM *tlú'k ‘blind’ > Ni taklú'k || PCh *t^wlúk || PW *tilúk^w
- (84) PM *-txo'k ~ *-txó'k ‘uncle’ > Mk -txo'k || Ni -txo'k || PCh *-<i>tók || PW *-<wi>thok^w

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- (85) PM *tsänú^w 'duraznillo trees' > Ni *tsanu*^w || PCh *sinúk || PW *tsinúk^w
- (86) PM *tsémlå^w 'silk floss tree' > PCh *sémlåk || PW *tsémlåk^w
- (87) PM *-(j)uk 'tree (suffix)' > Mk -(j)uk || Ni -(j)uk || PCh *-(j)uk || PW *-(j)uk^w
- (88) PM *-wá^w 'bad mood' > Mk -wak || Ni -βá^w || PCh *-wá^w || PW *-wá^w
- (89) PM *X₁₃ó^w 'palo santo (*Bulnesia sarmientoi*)' > Ni xo^w || PCh *hók || PW *hók^w
- (90) PM *-X₁₃u^w, *-X₁₃ú^j 'firewood' > Ni -xu^w, -xu-j || PCh *(ʔitåh)-huk || PW *-huk^w, *-hú-j<is>

Following front vowels, PM *k kept its velar articulation in Wichí: PM *[j]ik 'goes away', *t-xäte^w 'her/his head' > PW *[j]i[k], *t-éte[k].¹ However, synchronically in Proto-Wichí *[k] does not contrast either with */q/ (recall that PM */q/ > PW */q/ does not occur after front vowels) or with */k^w/ (which is also impossible following front vowels). In this book, we follow Claesson's (1994) and Nercesian's (2014) analysis and represent all instances of PW *[k] as *q*.

- (91) PM 1 *h-åk, 2 *t-åk, 3 *[j]ik; CISL *n-äk 'to go away' > Mk 1 *h-ak*, 2 *t-ak*, 3 *ik*; CISL *n-ek* || Ni 1 *x-åk*, 2 *t-åk*, 3 [j]itʃ; CISL *n-atʃ* || PCh 1 ?åk, 2 *hl-ék || PW 2 *t-eq, 3 *[j]iq; CISL *n-eq
- (92) PM *(-)φełek ~ *-éte- ~ *-ełé- 'mortar' > Mk (-)fitlik || Ni -φełetʃ || PCh *(-)hwVhlek || PW *x^wéteq
- (93) PM *-témä^w 'bile' > *-tämä^w || PCh *-témek, *-téhm-aj^w || PW *-témeq, *-témh-aj^w
- (94) PM *wäk 'all' > Mk *we:k* || Ni -βatʃ || PCh *-wek || PW *-weq
- (95) PM *-xäte^w, *-xäthe-j^w 'head' > Ni -sate^w / -satxe-s || PCh *-hétek, *-héhte-j^w || PW *-t-éteq, *-t-éthe-j^w
- (96) PM *-X₁₃úsek ~ *-X₁₃úsäk 'temperance' > PCh *-húsek || PW *-húseq

¹Nercesian (2014: 49) reports that in the Lower Bermejeño subdialect of Southeastern Wichí /q/ surfaces as [k] in the coda position when preceded by a front vowel as well as in the onset position after a coronal consonant: [jik] 'goes away', [t̪ełek] 'her/his head', [t̪et'kal] 'vine'. In the 'Weenhayek variety, too, /q/ surfaces as [k] in the coda position when preceded by a front vowel: [jik] 'goes away', [t̪ełek] 'her/his head', though [q] is found in onsets after coronal consonants: [la t̪e:n'qaç] 'her/his songs' (Claesson 1994: 16–17). Since 'Weenhayek and Lower Bermejeño are on the opposite ends of the Wichí-speaking area (both geographically and linguistically), the allophony pattern whereby /q/ surfaces as [k] in codas following front vowels must be reconstructed for Proto-Wichí. Terraza (2009b: 25) reports only the uvular realization for the Rivadavia subdialect of Southeastern Wichí, even after front vowels ([jik] 'goes away', [t̪ełeq] 'her/his head'), which must be a local innovation.

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- (97) PM **ʔaqáje'k* ‘wild honey’ > Ni *ʔakájetʃ* || PW **ʔaqájeq*
 (98) PM *[*t*']*ä*(‘)k ‘to eat.INTR’ > Mk [*t*']*ek* || PW *[*t*']*eq*

The fact that PM **k* evolved differently in onsets and codas gave rise to synchronically active alternations in Wichí. As we have seen, following front vowels, stem-final PM **k* yielded PW **q* when syllabified as a coda, and PW **k^j* when syllabified as an onset. The resulting alternation is still productive in varieties such as Lower Bermejeño Wichí (99), where /*q*/ [k] alternates with /*tʃ*/ [tʃ], at least if a front vowel precedes it (see also Censabella 2009: 123).²

- (99) Lower Bermejeño Wichí (Nercesian 2014)

- a. -teneq [-te'nēk]
 -song
 ‘song’
- b. ?i-wu-tenetʃ-a [?i, wu'tenətʃa]
 3.I-do-song-INCORP
 ‘s/he prays, praises’
- c. Ø-neq ['nēk]
 3-walk
 ‘s/he walks’
- d. Ø-netʃ-hen [nē'tʃhēn]
 3-walk-PL
 ‘they walk’
- e. j-iq ['jik]
 3.I-go_away
 ‘s/he goes away’
- f. j-itʃ-hila [jɪ, tʃɪ'la]
 3.I-go_away-FUT
 ‘s/he will go away’
- g. j-itʃ-hen [jɪ'tʃhēn]
 3.I-go_away-PL
 ‘they go away’
- h. j-itʃ-hu ['jɪtʃhū]
 3.I-go_away-APPL
 ‘s/he goes away from inside’

²In varieties such as 'Weenhayek, it fails to occur even after front vowels: 'Wk ?i-wo-la-tének-a? 's/he performs her/his song', *j-ik*(^w)-*eh* 's/he goes for it' (Claesson 1994: 17).

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- i. t-?eq [t'ek]
3.T-eat
's/he eats'
- j. ha-ŋ-t-?etʃ-hi [hã,ŋt'e'tʃi]
NEG-1SG-T-eat-NEG
'I don't eat'
- k. ?i-tseq=mathi [n,tsekmat^hi]
3.I-sew=DP
's/he sewed'
- l. n-tsetʃ-eq pujelu [n,tse'tʃek pu,je'lú]
1SG-sew-PTCP skirt
'a skirt sewn by me'

Following front vowels, stem-final PM **k* yielded PW **k^w* when syllabified as a coda, and PW **k^j* when syllabified as an onset. The resulting alternation is still present in varieties such as Lower Bermejeño Wichí (100), where /*k^w*/ [k^w] alternates with /*tʃ*/ [tʃ], and 'Weenhayek (101), where /*k^w*/ [k] alternates with /*k^j*/ [k^j] at least in the suffix for woody plants (PW *-*uk^w*, *-*k^ju-j^h*).

(100) Lower Bermejeño Wichí (Nercesian 2014: 192)

- a. *f^waʔaj-ek^w* (SG), *f^waʔa-tʃe-j* (PL) 'algarrobo tree'
- b. *tʃetʃ-ek^w* (SG), *tʃetʃ-tʃe-j* (PL) 'red quebracho tree'
- c. *watʃaj-ek^w* (SG), *watʃa-tʃe-j* (PL) 'guayacán tree'
- d. *tsuwaj-ek^w* (SG), *tsuwa-tʃe-j* (PL) 'kiscarolo tree'
- e. *hoj-ek^w* (SG), *ho-tʃe-j* (PL) 'mistol tree'

(101) 'Weenhayek (Claesson 2016)

- a. *x^waʔáj-uk* (SG), *x^waʔá-k^ju-ç* (PL) 'algarrobo tree'
- b. *tʃéʔ-uk* (SG), *tʃéʔ-k^ju-ç* (PL) 'red quebracho tree'

9.1.1.3 PM **x*, **χ*, and **h*

This subsection describes the evolution of the Proto-Mataguayan "guttural" fricatives – PM **x*, **χ*, and **h* – in Wichí. In onsets, PM **x* and and **h* fell together and yielded PW **h*, a glottal fricative notable for triggering automatic nasalization in the following vowel in all varieties of Wichí due to a rhinoglottophilia effect (not

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represented in our broad transcriptions; see Claesson 1994: 13, Terraza 2009b: 51–52, Nercesian 2014: 41–42). The examples below show the evolution of PM *x and *h in simplex onsets. (When guttural fricatives occur as parts of complex onsets, they also yield PW *h except after a fricative, where they are deleted; see §9.1.1.16 for examples and details.)

- (102) PM *-á(-j^h)-xi? (*-l) ‘**mouth**’ > Mk -exi?(-l) || Ni -afi (-k) || PCh (?) *-á<aj?> || PW *-t-áj-hi (*-l^h)
- (103) PM *-k’áxe? (*-l) ‘**arrow**’ > Mk -qaxi?(-l) || Ni -k’áxe || PCh *-k’áhe? (*-l) || PW *-k^j’áhe (*-l^h)
- (104) PM *tsáháq (*-its) ‘**chajá bird**’ > Mk tsahaq (-its) || PCh *sáhák, *sáháq-es
~ *sáháq-is || PW *tsáháq
- (105) PM *-xa, *-xá-l ‘**price**’ > Ni -fa?(-k) || PW *-ha, -há-l^h
- (106) PM *xélå-ju’k ‘**tree (sp.)**’ > Ni seklå-juk || PCh *hél-ek || PW *hél-ek^w
- (107) PM *-xá’n(e?) ‘**verbal plural (suffix)**’ > Ni -fa’ne?/-xa’ne? || PCh *-he’n(e?) || PW *-he’n
- (108) PM *xu(’)p ‘**grass**’ > Mk xup<’el> || PCh *húp || PW *hup
- (109) PM *[ji]X₁₃o(?) ~ *[ji]X₁₃ó(?) ‘**to go**’ > Ni [ji]xo? || PCh *[?i]hó? || PW *[ji]ho(?) ~ *[ji]hó(?)
- (110) PM *X₁₃ó’k ‘**palo santo (Bulnesia sarmientoi)**’ > Ni xo’k || PCh *hók || PW *hók^w
- (111) PM *X₁₃on-xá’χ, *X₁₃on-xáh-aj^h ‘**night**’ > Ni <xon>fa’x, <xon>fa’x-aj || PW *<hon>aχ, *<hon>áh-aj^h
- (112) PM *X₁₃ó’t ‘**sandy place**’ > Ni xo’t || PCh *hót || PW *hót
- (113) PM *-X₁₃u’k, *-X₁₃ú-j^h ‘**firewood**’ > Ni -xu’k, -xu-j || PCh *(ʔítåh)-huk || PW *-huk^w, *-hú-j<is>
- (114) PM *-X₁₃úsek ~ *-X₁₃úsák ‘**temperance**’ > PCh *-húsek || PW *-húseq
- (115) PM *[ji]X₁₃út ‘**to push**’ > Ni [ji]xut || PCh *[?i]hút || PW *[ji]hút
- (116) PM *(?a)X₁₃útsa(?)χ, *(?a)X₁₃útsha-ts ‘**crested caracara**’ > Ni xutsax, xutsxa-s || PCh *(?a)húsah, *(?a)húsa-s || PW *ʔahútsaχ, *ʔahútsha-s
- (117) PM *ʔaX₁₃áje(?)χ ‘**mistol fruit**’ > Ni ʔaxájex || PCh *ʔahájah || PW *ʔahájaχ
- (118) PM *ʔaX₁₃áj-u’k, *ʔaX₁₃áj-ku-j^h ‘**mistol tree**’ > Ni ʔaxáj-uk, ʔaxáj-ku-j || PCh *ʔaháj-uk, *ʔaháj-ku-j^h || PW *ʔaháj-uk^w

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In codas, however, PM $*x$ and $*χ$ never change to PW $*h$. Instead, PM $*x$ and $*χ$ typically merge as PW $*χ$ after unrounded vowels.

- (119) PM $*[j]áte(?)χ$ ‘to be fat’ > Ni $[j]átex$ || PCh $*[j]átaḥ$ || PW $*[j]átaχ$
- (120) PM $*[j]ékfa'x$ ‘to bite’ > Mk $[j]ikfe'x$ || PCh $*[j]ókwah$ || PW $*[j]ókʷaχ$
- (121) PM $*[ji]φá'x$ ‘to cut down’ > Mk *fex-inet-kiʔax* || Ni $[ji]φa'ʃ$ || PCh $*[?i]hwáh-APPL$ || PW $*[?i]xʷáχ$
- (122) PM $*φtsána(?)χ$ ‘suncho (*Baccharis sp.*)’ > Ni *φtsána*x || PCh $*sánaḥ$ || PW $*xʷitsánaχ$
- (123) PM $*[ji]ka'χ$ \sim $*[ji]ká'χ$ ‘to take away’ > Mk $[j]<e>ka'χ$ || Ni $[ji]tfa'x$ || PW $*[ji]kʷáχ$
- (124) PM $*kowá'x$ / $*-kówá'x$ ‘hole’ > PCh $*kowéh$ / $*-kóweh$ || PW $*kʷowexχ$ / $*-kʷóweχ$
- (125) PM $*[ji]k'ása'χ$ \sim $*[ji]k'áse'χ$ ‘to divide’ > Mk $[j]<a>k'esa'χ$ || PCh $*[?i]k'ésah$ || PW $*[hi]k'ésaχ$
- (126) PM $*-k'ínix$, $*-k'ínx-i-ts$ ‘younger brother’ > Mk $-k'inix$ || Ni $-tfiniʃ$ || PCh $*-k'ínih$, $*-k'ihi-ni-s$ || PW $*-kʷíniχ$, $*-kʷính-i-s$
- (127) PM $*k'ú(t)sta(?)χ$, $*k'ú(t)sta-ts$ ‘barn owl’ > Ni (?) $k'ustax$, $k'usta-s$ ‘mockingbird’ || PCh $*k'ústah$, $*k'ústa-s$ || PW $*kʷústaχ$
- (128) PM $*(-)k'útsa'χ$, $*(-)k'útsha-ts$ ‘old’ > Mk $k'utsa'χ$, $k'utshe-ts$ || Ni $k'utsa'x$, $k'utsxa-s$ || PCh $*-k'úsah$, $*-k'úsa-s$ || PW $*-kʷútsaχ$
- (129) PM $*[ji]lé'x$ ‘to wash’ > Mk $[ji]lix-uʔ$ ‘to clean’ || Ni $[ji]kle'ʃ$ || PCh $*[?i]léh$ || PW $*[?i]léχ$
- (130) PM $*(-)lútse'x$, $*(-)lútsxe-ts$ ‘bow’ > Ni $klutseʃ$ / $-klutseʃ$, $(-)klutsfe-s$ || PCh $*(-)lúseh$ ($*-es$) || PW $*(-)lútseχ$, $*(-)lútse-s$
- (131) PM $*-nji'x$ ‘smell’ > Mk $-nji'x$ || Ni $-ni'ʃ$ || PCh $*-níh$ || PW $*-niχ$
- (132) PM $*(-)náji'x$, $*(-)nájx-a{j}h$ ‘path’ > Ni $náji'ʃ$, $(-)nájʃ-a{j} / -náji'ʃ$ || PCh $*(-)nájih$, $*(-)náh{j}-a{j}h$ || PW $*(-)nájiχ$, $*(-)nájh-a{j}h$
- (133) PM $*pátséχ$ ‘jabiru’ > Ni *pátsex* || PCh $*pátsáḥ$ || PW $*pátsáχ$
- (134) PM $*pitéχ$, $*pité-ts$ ‘long’ > Ni *pitex*, *pite-s* || PW $*pitáχ$, $*pité-s$
- (135) PM $*sʷwúla'χ$, $*sʷwúla-ts$ ‘anteater’ > Ni $sʷbuklax$, $sβuklá-s$ || PCh $*sʷʔúlah$, $*sʷʔúla-s$ || PW $*súlaχ$
- (136) PM $*-taχ$, $*-ta-ts$ ‘pseudo-’ > Mk $-taχ$, $-te-ts$ || Ni $-tax$, $-ta-s$ || PCh $*-tah$, $*-ta-s$ || PW $*-taχ$, $*-ta-s$

9.1 From Proto-Mataguayan to Proto-Wichí

- (137) PM *-tāwā²x, *-tāwxā-ts ‘(abdominal) cavity’ > Mk -tawē²x, -tawxe-ts || Ni -tāβa²s, -tāβxa-s || PCh *-tóweh || PW *-tóweχ
- (138) PM *tijā²χ ‘to shoot, to throw’ > Mk tija²χ / -tija²χ || Ni tija²x || PCh *[?i]tijāh || PW *tijāχ
- (139) PM *tiłā²x ‘to carry on one’s shoulders’ > Mk tiło²x / -tiło²x || Ni tiłā²x || PCh *[?i]tiłlāh || PW *tiłāχ
- (140) PM *ti²x ‘to dig’ > Mk ti(?)x-APPL / -ti(?)x-APPL || Ni ti²s || PCh *[?i]tih-ij? || PW *tiχ
- (141) PM *(-)tiútse(?)χ ‘smoke’ > PCh *(-)túsah || PW *(-)tútsax
- (142) PM *tséχ-APPL ‘full (river)’ > Ni tsex-APPL || PCh *-sáh || PW *tsáχ-APPL
- (143) PM *tsóφa-taχ ‘fruit of a shrub (*Lycium americanum*)’ > Mk tsófe-taχ || Ni tsóφ-tax
- (144) PM *wáta²(?)χ ‘palo flojo fruit’ > Ni βåtåx || PW *wátox^w
- (145) PM *-wā²x, *-w(ā)x-áj^h ‘burrow; anus’ > Ni -βa²s, -βaf-aj^h || PCh *-wéh || PW *-wéχ, -wh-áj^h
- (146) PM *wósitseχ ‘black algarrobo fruit (*Prosopis nigra*)’ > Mk ositsaχ || Ni βaitsex || PW *wósotsaχ
- (147) PM *²wá(?)x, *²wáx-aj^h ‘stagnant water’ > PCh *hl-2 wáh (*-aj^h) || PW *²wáχ, *²wáh-aj^h
- (148) PM *²wánXåłāχ, *²wánXåłā-ts ‘rhea’ > Mk waałax || Ni βånxåłāx, βånxåłā-s || PCh *²wáhhlāh, *²wáhhlā-s || PW *wá²nłāχ, *wá²nłā-s
- (149) PM *(X₁₃on-)xa²χ, *(X₁₃on-)xáh-aj^h ‘night’ > Mk <na>xa²χ || Ni <xon>fa²x, <xon>fa²x-aj || PCh *2h<n>áh ~ *2h<n>áh || PW *2hon>aχ, *2hon>áh-aj^h
- (150) PM *xunxátaχ ‘tusca fruit’ > Mk xunxetaχ || Ni xunxatax || PCh *?ihnátah || PW *xnhátaχ
- (151) PM *(?a)X₁₃útsa(?)χ, *(?a)X₁₃útsha-ts ‘crested caracara’ > Ni xutsax, xutsxa-s || PCh *(?a)húsah, *(?a)húsa-s || PW *?ahútsaχ, *?ahútsha-s
- (152) PM *?áwu(C)tseχ ‘peccary’ > Ni ?aβuktsex ~ ?aβoktsex || PCh *?áwusah || PW *?áwutsaχ
- (153) PM *?aX₁₃áje(?)χ ‘mistol fruit’ > Ni ?axájex || PCh *?ahájah || PW *?ahájaχ
- (154) PM *?å²lå-taχ, *?å²lå-ta-s ‘Argentine boa’ > Ni ?å²klå-tax, ?å²klå-ta-s || PCh *?å²lå-tah > ~ *?å²lå-tah>, *?å²lå-ta>-s ~ *?å²lå-ta>-s || PW (?) *lá<taχ>
- (155) PM *?á�(V)tse(?)χ, *?á�(V)tse-ts ‘cháguar (*Deinacanthus urbanianum*)’ > Ni ?åktsex, ?åktse-s || PCh *?á�²sah, *?á�²se-s || PW *?áletsaχ

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- (156) PM *ʔānhajeχ ‘wild bean (*Capparis retusa*)’ > Mk *anhejax* || Ni ʔānxajex || PCh *ʔōhnajah || PW *ʔānhjaχ
- (157) PM *-ʔåx (*-its) ‘skin, bark’ > Mk -ʔax (-its) || Ni -ʔåx (-is) || PCh *-ʔåh, *-ʔåh-és || PW *-t-’åχ, *-t-’åh-és
- (158) PM *ʔítå(?)χ, *ʔítå-ts ‘fire’ > Ni ʔítåx, ʔítå-s || PCh *ʔítåh, *ʔítå-s || PW *ʔítåχ, *ʔítå-s
- (159) PM *ʔuwále(?)χ ~ *C’uwále(?)χ ‘puma’ > Ni <xum>p’uβałex || PCh *k’uwáhlah || PW *ʔowáłax ~ *C’owáłax

After PW **u*, PM **x* and *χ merge as PW **x^w* in the coda position.

- (160) PM *φátsu(?)χ, *φátshu-ts ‘centipede’ > Ni φatsux, φatsxu-s || PCh *(*h*)wásuh, *(*h*)wásu-s || PW **x^wátsux^w*
- (161) PM *-φχúx, *-φχú-ts ‘finger’ > Mk -fux || Ni -φxux, -φxu-s ‘toe’ || PCh *-hwu-ké? || PW *-x^wúx^w, *-x^wú-s
- (162) PM *kú^wX₁₂ ‘sweat’ > Ni -β-ku^wx || PW *k^júx^w
- (163) PM *tux ‘to eat.TR’ > Mk tux / -lux || Ni tux || PCh *[?i]túM || PW *tux^w
- (164) PM *wV^wχ, *wV^w-ts ‘large, fat’ > Ni -βå^wx || PCh *wúh, *wú-s || PW *wúx^w, *wú-s

The contrast between PM **x* and *χ is maintained after PW **o*: PM *χ labializes to PW **x^w* in that environment, whereas PM **x* changes to PW *χ.

- (165) PM *n-åχ ‘to end up’ > Mk n-aχ || Ni n-åx || PCh *<n>óhw-APPL || PW *<n>ox^w
- (166) PM *pätóχ ‘to be deep’ > Ni [?a]patox || PCh *-pítohw<ij?> || PW *pitóx^w
- (167) PM *tóχ-APPL, *tó-ts-APPL ‘far’ > Mk -toχ-ij, to-ts-ij || Ni tox-APPL || PCh *tóh(w)-APPL, *tó-ts-APPL || PW *tóx^w-ej^h
- (168) PM *-t’ox ~ *-t’óx ‘aunt’ > Ni -t’ox || PCh *-<i>t’óh || PW *-<wi>t’oχ

As for PM **h* in the coda position, it is usually retained as PW **h* > 'Ween-hayek *h* (except that it is lost if there is a glottalized obstruent in the onset of the same syllable, as discussed in §9.1.1.10).

- (169) PM *-φah, *-φa-ts ‘companion’ > Mk -fe (-ts) || Ni -φa (-s) || PCh *-hwah, *-hwa-s || PW *-x^wah, *-x^wa-s
- (170) PM *ká’lah, *ká’la-ts ‘lizard’ > PCh *ká’lah, *ká’la-s || PW *k^já’lah, *k^já’la-s

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- (171) PM **-k'älfa* ‘spouse’ > Ni *-tf'akfa* || PCh **-k'élhwah* || PW **-k^jéx^wah*
- (172) PM **máh* ‘go!’ > Mk *ma* || Ni *må* || PCh **máh* || PW **máh*
- (173) PM **pájih* ‘frog (*Leptodactylus sp.*)’ > PCh **pájih* || PW **pájih*
- (174) PM **Xmáwoh* ‘fox’ > PCh **máwo-tah* || PW **máwoh*
- (175) PM **X₂₃wé'lah*, **X₂₃wé'la-ts* ‘moon’ > Ni *xiβe'la(-s)* || PCh **wé'lah*, **wé'la-s* || PW **wé'lah*
- (176) PM **?Vlá?ah*, **?Vlá?a-ts* ‘lesser grison’ > Mk *ile* || Ni *?aklá?a(-s)* || PCh **?elá?ah*, **?elá?a-s* ~ **?alá?ah*, **?alá?a-s* || PW **?ilá?ah*

The fact that PM **x/*χ* yielded PW **h* in onsets but not in codas gave rise to synchronically active alternations in Wichí, as shown below (see also [Claesson 1994](#): 21).

- (177) Lower Bermejeño Wichí ([Nercesian 2014](#): 191)
- t-’oχ* (SG), *t-’oh-es* (PL) ‘its skin’
 - nisoχ* (SG), *nisoh-es* (PL) ‘shoe’
- (178) Rivadavia Wichí ([Terraza 2009b](#): 44)
- te-t-’ɔx* (SG), *-te-t-’ɔh-es* (PL) ‘eyelid’
 - nisoχ* (SG), *nisoh-es* (PL) ‘shoe’
- (179) ’Weenhayek ([Claesson 2016](#): 95, 271)
- t-’åx* (SG), *t-’åh-és* (PL) ‘skin’
 - nísåx* (SG), *nísåh-es* (PL) ‘shoe’

Synchronously, PW **χ* can occur in the onset position as a result of evolution of PM **xχ* (possibly also PM **χx*, PM **xx*), as will be shown in §[9.1.1.16](#).

9.1.1.4 Deaffrication of PM **ts* > **s* in codas

As discussed in §[2.1.3](#), the occurrence of *ts* is synchronically limited to the onset position in Wichí ([Claesson 1994](#): 15, [Terraza 2009b](#): 42, [Nercesian 2014](#): 50). This restriction arose as a result of a diachronic deaffrication of PM **ts* > PW **s* in codas (shared with Nivaclé and possibly Chorote).

- (180) PM **(-)φétä'ts* ‘root’ > Mk *fitets* || Ni *-φeta's* || PCh **-hwéetus* || PW **(-)x^wétes*
- (181) PM **jijá'ts* ‘dew’ > Mk *ije'ts* || Ni *jija's* || PCh **?ijés-tah* || PW **?ijás*

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- (182) PM *-lēts 'offspring' > Mk -lits || Ni -kles || PCh *-lés || PW *-lés
- (183) PM *-tä(?)ts, *-täts-él 'trunk, base' > PCh *-tés (*-el) || PW *-tes, *-téts-el^h
- (184) PM *-täts-u'k, *-täts-ku-j^h 'trunk' > Ni -tats-uk, -tas-ku-j || PCh *(-)tés-uk, *-tés-ku-j^h
- (185) PM *-(i)ts 'PL' > Mk -(i)ts || Ni -(i)s || PCh *-(i)s || PW *-(i)s
- (186) PM *qati'ts, *qatits-él 'star' > Ni kati's || PCh *qatés, *qates-él || PW *qates, *qatéts-el^h

In some etyma, the erstwhile presence of an affricate in certain forms is suggested by the synchronically active alternations in *Wichí*. In the plural forms given below, *ts* is syllabified as an onset and thus fails to deaffricate, whereas the respective singular forms show *s* in its place.

- (187) Lower Bermejeño *Wichí* (Nercesian 2014: 191)
- qates* (SG), *qatets-el* (PL) 'star'
 - la-tes* (SG), *la-tets-el* (PL) 'its trunk'
- (188) Rivadavia *Wichí* (Terraza 2009b: 87)
- qates* (SG), *qatets-el* (PL) 'star'
 - tes* (SG), *-tets-el* (PL) 'ancestor, trunk'
- (189) 'Weenhayek (Claesson 2016: 316)
- qates* (SG), *qatéts-el* (PL) 'star'
 - tes* (SG), *-téts-el* (PL) 'fault, origin, cause, ancestor'

9.1.1.5 Deglottalization of preglottalized codas

Most preglottalized codas of Proto-Mataguayan merge with their plain counterparts in *Wichí* by means of deglottalization. This includes the codas *²*p*, *²*t*, *²*ts*, *²*k*, *²*l*, *²*s*, *²*x*, *²*χ*, *²*l*, and *²*j*. The coda *²*l* not only deglottalizes, but also changes to **l^h*, as in (190) and (200), thus merging with **l* (see §9.1.1.13).

- (190) PM *-á'l 'light, brightness' > PCh 3 *hl-á'l || PW *-l-ál^h
- (191) PM *-á't, *-át-its 'drink' > Ni -á't, -át-is || PCh *-át (*-es) || PW *-l-át
- (192) PM *-á's 'son' > Mk -a's || Ni -á's || PCh *-ás || PW *-l-ás
- (193) PM *-á'j, *-áj-is 'yica bag' > Ni -á'j, -aj-is || PCh *-ej? (*-is) || PW *-l-éj (*-is)

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- (194) PM **[ji]ɸá*́*x* ‘to cut down’ > Mk *fex-inet-ki?**ax* || Ni *[ji]ɸa*́*f* || PCh **[?i]hwáh*-APPL || PW **[?i]x^wáχ*
- (195) PM **ɸi*́*s* ‘leech’ > Ni *ɸi*́*s* || PW **x^wis*
- (196) PM **jijá*́*ts* ‘dew’ > Mk *ije*́*ts* || Ni *jija*́*s* || PCh **?ijés-tah* || PW **?ijás*
- (197) PM **ji*́*já*́*X₁₂* ‘jaguar’ > Ni *ji*́*já*́*x* || PCh **?a*́*jáh* || PW **ha*́*jáχ*
- (198) PM **jin*́*t*, **jiná*́*ts* ‘water’ > Ni *jiná*́*t*, *jiná*́*ts* || PCh **?i*́*ná*́t (*-es) || PW **?iná*́t (*-es)
- (199) PM *-*ká*́*s*, *-*kás-él* ‘tail’ > Ni -*ká*́*s*, -*kás-ek* || PCh *-*kás* || PW *-*k^jás*, *-*k^jás-el^h*
- (200) PM **kó*́*l* ‘locust’ > PCh **kó*́*l* || PW **k^jól^h*
- (201) PM **kowá*́*x* / *-*kowá*́*x* ‘hole’ > PCh **kowéh* / *-*kóweh* || PW **k^jowex* / *-*k^jóweχ*
- (202) PM **[ji]kú*́*t* ‘to answer’ > Mk *[j]<e>ku*́*t* || Ni *[ji]ku*́*t* || PCh **[?i]kúhl*-APPL || PW **[ni]k^jút*
- (203) PM **kú*́*X₁₂* ‘sweat’ > Ni -*β-ku*́*x* || PW **k^júx^w*
- (204) PM *(-)*k’útsa*́*χ*, *(-)*k’útsha*-*ts* ‘old’ > Mk *k’utsa*́*χ*, *k’utshe*-*ts* || Ni *k’utsa*́*x*, *k’utsxa*-*s* || PCh *-*k’úsah*, *-*k’úsa*-*s* || PW *-*k^jútsaχ*
- (205) PM **[ji]lå*́*j* ‘to withstand’ > Ni *[ji]klå*́*j* || PCh **[ji]láj-eh* || PW **[ji]låj*
- (206) PM **[ji]lé*́*x* ‘to wash’ > Mk *[ji]lix-u?**to clean*’ || Ni *[ji]klé*́*f* || PCh **[?i]léh* || PW **[?i]lléχ*
- (207) PM **lo*́*p* ~ **ló*́*p*, **lop-íts* ~ **lóp-its* ‘winter’ > Mk *lo*́*p*, *lop-its* || Ni *klo*́*p*, *klop-is* || PCh **lóp* || PW **lop* ~ **lóp*
- (208) PM *-*tu*́*k*, *-*tu*́*j^h* ‘yica bag, load’ > Mk -*tu*́*k*, -*tu*-*j* || Ni -*tu*́*k* || PCh *-*hlúk*, *-*hlúj-...* || PW *-*luk^w*, *-*lú-j<is>*
- (209) PM *-*má*́*k*, *-*mhá*-*j^h* ‘powder, flour’ > Ni -*má*́*k*, -*mxá*́*j* || PCh *-*má*́*k* || PW *-*mók^w*, *-*mhó*-*j^h*
- (210) PM *-*nji*́*x* ‘smell’ > Mk -*nji*́*x* || Ni -*ni*́*f* || PCh *-*níh* || PW *-*niχ*
- (211) PM **[t]pá*́*j* ‘to be bitter’ > Ni *[t’á]pá*́*j* || PCh **páhj-i?* || PW **[t]páj*
- (212) PM *-*pás-e*́*t* ‘lip’ > Ni -*pás*-*e*́*t* || PCh *-*pás*-*at* ~ *-*pás*-*åt* || PW *-*pás*-*et*
- (213) PM *-*p’o*́*k* ~ *-*ɸ’o*́*k* ‘fence’ > Ni -*p’o*́*k* || PCh *-*p’ók* || PW *-*p’ok^w*
- (214) PM *-*p’o*́*t* ‘lid’ > Mk -*p’ot*-*o?* || Ni -*p’o*́*t* || PCh *-*p’ót* || PW *-*p’ot*
- (215) PM **qati*́*ts*, **qatits-él* ‘star’ > Ni *kati*́*s* || PCh **qatés*, **qates-él* || PW **qates*, **qatéts-el^h*

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- (216) PM *-så²t 'vein' > Mk -<?a>sa²t || Ni -så²t || PCh *-såt- || PW *-såt
- (217) PM *(-)skä²t 'mesh' > Ni -stfa²t || PW *sik²et
- (218) PM *tå²t 'to sprout' > Mk ta²t || Ni tå²t || PCh *tåt || PW *tåt
- (219) PM *-tåwä²x, *-tåwxä-ts '(abdominal) cavity' > Mk -tawe²x, -tawxe-ts || Ni -tåβa²s, -tåβxa-s || PCh *-tóweh || PW *-tóweχ
- (220) PM *tija²χ 'to shoot, to throw' > Mk tija²χ / -tija²χ || Ni tija²x || PCh *[?i]tíjåh || PW *tija²χ
- (221) PM *tiłå²x 'to carry on one's shoulders' > Mk tiło²x / -tiło²x || Ni tiłå²x || PCh *[?i]tíhlåh || PW *tiłåχ
- (222) PM *ti²x 'to dig' > Mk ti(?)x-APPL / -ti(?)x-APPL || Ni ti²ʃ || PCh *[?i]tíh-ij? || PW *tiχ
- (223) PM *tlú²k 'blind' > Ni taklu²k || PCh *t²lúk || PW *tilúk^w
- (224) PM *-txo²k ~ *-txó²k, *-txóko-wot 'uncle' > Mk -txo²k || Ni -txo²k, -txoko-βot || PCh *-<i>tók, *-<i>tóko-wot || PW *-<wi>thok^w
- (225) PM *tsänú²k 'duraznillo trees' > Ni tsanu²k || PCh *sinúk || PW *tsinúk^w
- (226) PM *-ú²p, *-úp-its 'nest' > Mk 3 t-up (-its) || Ni -u²p, -up-is || PCh *-úp (*-is) || PW *-t-úp (*-is)
- (227) PM *-wå²k 'bad mood' > Mk -wak || Ni -βå²k || PCh *-wåk || PW *-wåk^w
- (228) PM *-wå²x, *-w(ä)x-áj^h 'burrow; anus' > Ni -βa²s, -βaf-aj^h || PCh *-wéh || PW *-wéχ, -wh-áj^h
- (229) PM *²wäle²k 'to walk' > Mk -<i>welki- met²to limp || Ni βakle²tf || PCh *[?i]²wélek || PW *²weleq
- (230) PM *-wV²t ~ *-wV²t 'to climb' > Mk we²t || Ni βå²t || PCh *[?i]²wút || PW *[t]²wut ~ *[t]²wút
- (231) PM *(X₁₃on-)-xa²χ, *(X₁₃on-)-xáh-aj^h 'night' > Mk <na>xa²χ || Ni <xon>sa²x, <xon>sa²x-aj || PCh *-<a>h<n>áh ~ *-<?a>h<n>áh || PW *-<hon>aχ, *-<hon>áh-aj^h
- (232) PM *-xáte²k, *-xáthe-j^h 'head' > Ni -fate²tf, -satxe-s || PCh *-hétek, *-héhte-j^h || PW *-t-éteq, *-t-éthe-j^h
- (233) PM *X₁₃ó²k 'palo santo (*Bulnesia sarmientoi*)' > Ni xo²k || PCh *hók || PW *hók^w
- (234) PM *X₁₃ó²t 'sandy place' > Ni xo²t || PCh *hót || PW *hót
- (235) PM *-X₁₃u²k, *-X₁₃ú-j^h 'firewood' > Ni -xu²k, -xu-j || PCh *(?ítåh)-huk || PW *-huk^w, *-hú-j<is>

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- (236) PM $^{*...X_{23}a't}(*\text{-its})$ ‘earth’ > Ni $< kots > xa't$, $< kots > xat-is$ || PCh $^{*<?a>h<n>\acute{a}t}$
 $\sim ^{*<?a>h<n>\acute{a}t}(*\text{-es})$ || PW $^{*<hon>hat}$, $^{*<hon>\acute{a}t-es}$

Three preglottalized codas do not merge with their plain counterpart in Wichí: PM *m and *n keep their glottalization, whereas $^{*\phi}$ is apparently reflected as PW p rather than $^{x^w}$, even though only one example is known (242). The Wichí reflex in (241) is irregular in a number of respects and lacks the expected glottalization.

- (237) PM $^{*-\acute{a}'m}$ ‘pronominal formative’ > PCh $^{*-\acute{a}'m}$ || PW $^{*-\acute{a}'m}$
- (238) PM $^{*[t]ku'm-APPL}$ ‘to grab; to work’ > Mk $[te]ku'm-APPL$ || Ni $[t'a]ku'm-APPL$ || PCh $^{*[?i]kum-APPL}$ || PW $^{*[t]k'ú(')m-APPL}$
- (239) PM $^{*k'utX_{23}á'n}$, $^{*k'utX_{23}án-its}$ ‘thorn’ > Ni $k'utxa'n$, $k'utxan-is$ || PCh $^{*k'utá'n}$,
 $^{*k'után-is}$ || PW $^{*k'uthá'n}$, $^{*k'uthán-is}$
- (240) PM $^{*[ji]tá'm}$ ‘to defecate’ > Mk $< i > t'a'm$ || Ni $[ji]tå'm$ || PCh $^{*[?i]hlá'm}$ ||
PW $^{*[t]<a>tá'm}$
- (241) PM $^{*stwú'n}$, $^{*stwún-its}$ ‘king vulture’ > Ni $sta\betau'n$, $sta\betaun-is$ || PCh $^{*?stúu'n}$,
 $^{*?stúun-is}$ || PW $^{*?istíwin}$
- (242) PM $^{*ti'\phi}$ ‘to suck breast’ > Mk $tu'f/-t'u'f$ || Ni $ti'\phi$ || PCh $^{*[?i]tíM}$ || PW *tip
- (243) PM $^{*[ji]wo'm}$ ‘to throw’ > Mk $[i]wu'm$ || PCh $^{*[?i]wóm-APPL}$ || PW $^{*[?i]wo'm}$
- (244) PM $^{*-\acute{e}sxá'n}$, $^{*-\acute{e}sxán-its}$ ‘meat’ > Mk $-\acute{e}se'n$, $-\acute{e}sen-its$ || Ni $-(?a)sxa'n$,
 $-(?a)sxan-is$ || PCh $^{*-\acute{e}isá'n}$, $^{*-\acute{e}isán-is}$ || PW $^{*-t-\acute{e}isa'n}$, $^{*-t-\acute{e}isán-is}$

9.1.1.6 PM $^{*\phi'}$, $^{*t'}$ > PW p , t

Another sound change in Wichí, shared with Chorote and Nivaclé but not with Maká, consists of the fortition of the Proto-Mataguayan glottalized fricatives (phonologically possibly analyzable as tautosyllabic sequences of a fricative and a glottal stop) to glottalized stops: PM $^{*\phi'}$, $^{*t'}$ > PW p , t . (The sequence $^{*k\phi'}$, however, changed to PW $^{*k^w}$.)

- (245) PM $^{*(-)\phi'elxVtséχ}$, $^{*(-)\phi'elxVtsé-ts}$ ‘poor’ > Mk $-f'ilxetsaχ$, $-f'ilxetsi-ts$ ||
PCh $^{*p'ilusáh}$, $^{*p'ihlusé-s}$ || PW $^{*p'elitsaχ}$, $^{*p'elítse-s}$
- (246) PM $^{*t-\acute{a}X_{23}te(?)(-\acute{j}^h)}$ ‘her female breast’ > Ni $t-\acute{a}xte(-j)$ || PCh $^{*t-\acute{a}hate?(-\acute{j}^h)}$
|| PW $^{*t-\acute{a}te}(-\acute{j}^h)$
- (247) PM $^{*t-\acute{a}x}$ ‘skin, bark’ > Mk $t-\acute{a}x$ || Ni $t-\acute{a}x$ || PCh $^{*t-\acute{a}h}$ || PW $^{*t-\acute{a}χ}$

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- (248) PM **t*-äsx^a*n*, **t*-äsxán-*its* ‘meat’ > Mk *t*-’ese’*n*, *t*-’esen-*its* || Ni *t*-’asxa’*n*, *t*-’asxan-*is* || PCh **t*-’isá’*n*, **t*-’isán-*is* || PW **t*-’isa’*n*, **t*-’isán-*is*
- (249) PM **t*-’í (*-l) ‘liquid, juice’ > Mk *t*-’i?(-l) || Ni *t*-’i?(-k) || PCh **t*-’i? (*-l) || PW **t*-’í (*-l^h)
- (250) PM **t*-’út ‘you urinate’ > Mk *t*-’ut || Ni *t*-’ut || PCh *<*h*>*t*-’út || PW *<*t*>*t*-’út
- (251) PM **t*-’úlu(?) ‘her/his urine’ > Ni *t*-’utu || PCh **t*-’úlu? || PW **t*-’útu

As a result of the sound change PM **t*’ > (**t*’), Proto-Wichí now displays a morphophonological rule which converts the underlying sequence */t+/?/ into **t*’ (rather than *t*’, as in Maká). The rule is no longer entirely productive in Wichí, since the sequence /t?/ may occur at the root–suffix boundary, as in ‘Ween-hayek *tåł-’úix*^w=eh ‘comes from the riverside’.

9.1.1.7 PM **ji*-

The sequence PM **ji* is usually reflected as PW **?i* (or PW **hi* before a glottalized consonant due to a general glottal dissimilation rule, §9.1.1.8). It is especially common in the high-frequency 3.A/S_A prefix, but also found in some roots, as in (255)–(257).

- (252) PM *[*ji*]φá’x ‘to cut down’ > Mk *fex-inet-ki?*ax’ || Ni [*ji*]φa’ʃ || PCh *?[*i*]hwáh-APPL || PW *[*?i*]x^wáχ
- (253) PM *[*ji*]φál ‘to tell’ > Mk *n(i)-fel-im* || Ni *n(i)-fak* / *n(i)-fakl* || PCh *?[*i*]hwél || PW *[*?i*]x^wél^h / *[*?i*]x^wél-
- (254) PM *[*ji*]phi’j ~ *[*ji*]phi’j ‘not to be afraid’ > Ni [*ji*]phi’j || PCh *?[*i*]hwíj? || PW *[*?i*]x^wíj-eh
- (255) PM **jijá’ts* ‘dew’ > Mk *ije’ts* || Ni *jija’ṣ* || PCh *?*ijés-tah* || PW *?*ijás*
- (256) PM **jiná’t*, **jinát-its* ‘water’ > Ni *jiná’t*, *jinát-is* || PCh *?*i’náṭ* (*-es) || PW *?*ináṭ* (*-es)
- (257) PM **ji’no*, **ji’nó-l* ‘man’ > PCh *?*i’nó?* (-l) || PW **hi’no*, **hi’nó-l^h*
- (258) PM *[*ji*]ká(‘)t ‘to be red’ > PCh *?[*i*]ká’ || PW *[*?i*]k’áṭ
- (259) PM *[*ji*]ka’χ ? *[*ji*]ká’χ ‘to take away’ > Mk [*j*]<*e*>ka’χ || Ni [*ji*]tʃá’x || PW *[*?i*]k’áχ
- (260) PM *[*ji*]ká? ‘to be torn’ > PCh *?[*i*]ká? || PW *[*?i*]k’á?
- (261) PM *[*ji*]kén ‘to send’ > Mk [*j*]<*u*>kin || Ni [*ji*]tʃen || PCh *?[*i*]kén || PW *[*?i*]k’én

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- (262) PM **[ji]kún-han* ‘to feed’ > Mk *[j]<e>kun-hen* || Ni *[ji]kun-xan* || PCh **[?i]qúhn-an* || PW **[?i]k^jún-han*
- (263) PM **[ji]lǻj* ‘to withstand’ > Ni *[ji]klǻj* || PCh **[ji]lǻj-eh* || PW **[ji]lǻj*
- (264) PM **[ji]lán* ‘to kill’ > Mk *[ji]lan* || Ni *[ji]klán* || PCh **[?i]lán* || PW **[?i]lán*
- (265) PM **[ji]lǻt(?)t* ‘to feel’ > PCh **[?i]lǻt-ej^h* || PW **[?i]lǻt*
- (266) PM **[ji]lǻt* ~ **[ji]lǻt* ~ **[ji]let* ~ **[ji]lét* ‘to flee’ > Mk <*i>lat* ~ <*i>lit* || Ni *[ji]klǻt* || PCh **<[j]í>lt<an>* ~ **[?i]<?jí>lt<an>* || PW **[?i]lét<han>*
- (267) PM **[ji]lé́x* ‘to wash’ > Mk *[ji]lix-uʔ* ‘to clean’ || Ni *[ji]kléf* || PCh **[?i]léh* || PW **[?i]léχ*
- (268) PM **[ji]mǻ* ‘to sleep’ > Mk *[i]ma?* || Ni *[ji]mǻ?* || PCh **[?i]mǻ?* || PW **[?i]mǻ*
- (269) PM *-ná^h ‘to bathe’ > Ni *[βa]naj* || PCh **[?i]náj-APPL* || PW **[?i]ná^h*
- (270) PM **[?i]pén* ~ **[?i]pán* ‘to cook’ > PCh **[?i]pén* || PW **[?i]pén*
- (271) PM **[ji]-tXá(?)t* ‘to throw, to put’ > PCh **[?i]tát-APPL* || PW **[?i]thát*
- (272) PM **[ji]tså(?)j* ‘to spill’ > PCh **[?i]sáj?* || PW **[?i]tsåj*
- (273) PM **[ji]wóm* ‘to throw’ > Mk *[i]wúm* || PCh **[?i]wóm-APPL* || PW **[?i]wóm*
- (274) PM **[ji]wún* ‘to burn (vt.)’ > PCh **[?i]wún* || PW **[?i]wún*

When followed by a glottalized consonant and a low vowel (PM **a* or **å*, but not **ü*), PM **ji* > **ʔi* changed to **ʔa* > PW **ha* word-initially (§9.1.2.4).

- (275) PM **ji’jǻX₁₂* ‘jaguar’ > Ni *ji’jǻx* || PCh **ʔa’jǻh* || PW **ha’jåχ*
- (276) PM **ji’lǻ?*, **ji’lǻ-j^h* ‘tree’ > Ni *ji’klǻ?* (-*j*) || PCh **ʔa’lǻ?(*-j^h)* || PW **ha’lǻ-j^h*
- (277) PM **jit’å?*, **jit’ǻ-l* ‘vulture’ > Ni *jit’å?(-k)* || PCh **ʔat’å?(*-l)* || PW **hat’å?(?)*

However, PM **ji* is retained as PW **ji* when followed by a uvular or glottal consonant, as evident synchronically from alternations in the third-person prefix (Nercesian 2014: 241–242). It is likely that the vowel **i* in such cases had a somewhat lowered allophone (for example, [i]), conditioned by a following uvular/glottal, thus bleeding the sound change PM **ji* > PW **ʔi* (i.e., **jiq* > **j[i]q* > **jiq*).

- (278) PM **[ji]qáku?* ‘to distrust’ > Mk *[je]qeku?* || Ni *[ji]kaku* || PCh **[ji]qáku?* || PW **[ji]qák^ju-APPL*
- (279) PM **[ji]X₁₃án-ex* ‘to know’ > PCh **<[j]a>hán-eh* || PW **[ji]hán-eχ*

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- (280) PM **[ji]X₁₃o(?)* ~ **[ji]X₁₃ó(?)* ‘**to go**’ > Ni *[ji]xo?* || PCh **[?i]hó?* || PW **[ji]ho(?)* ~ **[ji]hó(?)*

- (281) PM **[ji]X₁₃út* ‘**to push**’ > Ni *[ji]xut* || PCh **[?i]hút* || PW **[ji]hút*

In the latter case, ‘Weenhayek consistently reflects PW **ji*- as *ja*-’. In Lower Bermejeño, the sequence /*ji*/ is articulated as [jɪ]. In the Rivadavia variety of Southeastern Wichí, verbs that took **ji*- in Proto-Wichí may now take either *ja*- (if the agent acts with low intensity) or *?i*- (if the agent acts with high intensity), according to [Terraza \(2009b: 135\)](#). For more details, see §9.2.2.5.

9.1.1.8 Glottal dissimilation affecting glottal stops

A dissimilatory process has transformed PM *?*?* (and the instances of *?*?* originating from PM **j* by means of the sound change PM **ji* > **?i* word-initially) into PW **h* if the next syllable contained a glottalized consonant. Although unique to Wichí within Mataguayan, a similar process has been identified as a defining innovation of the Guaranian subbranch of the Tupi–Guaranian branch (Tupian family), where *?*V?* evolved into *hV?* ([Carvalho 2022](#)). Yet another language where *h* was inserted in erstwhile vowel-initial words that contain a glottalized (ejective) consonant is Cuzco Quechua, though in that variety the glottalized trigger need not be located in an adjacent syllable ([Parker 2013: 170](#)).

- (282) PM **ji'já'X₁₂* ‘**jaguar**’ > Ni *ji'já'x* || PCh **?a'jáh* || PW **ha'jáh*
- (283) PM **jit'á?*, **jit'á-l* ‘**vulture**’ > Ni *jit'á?*(-*k*) || PCh **?at'á?*(*-*l*) || PW **hat'á?*(*?*)
- (284) PM **ji'lá?*, **ji'lá-j^h* ‘**tree**’ > Ni *ji'klá?*(-*j*) || PCh **?a'lá?*(*-*j^h*) || PW **ha'lá*, **ha'lá-j^h*
- (285) PM **[ji]k'än* ‘**to stretch out**’ > Ni *[ji]t'an* || PCh **[?i]k'én-APPL* || PW **[hi]k'én*
- (286) PM **[ji]k'ásaχ* ~ **[ji]k'áseχ* ‘**to divide**’ > Mk *[j]< a>k'esaχ* || PCh **[?i]k'ésah* || PW **[hi]k'ésaχ*
- (287) PM **[ji]p'o(?)* ~ **[ji]φ'o(?)* ~ **[ji]p'ó(?)* ~ **[ji]φ'ó(?)* ‘**to cover**’ > Ni *[ji]p'o* || PCh **[?i]p'ó-APPL* || PW **[hi]p'ó-APPL*
- (288) PM **[ji](t)s'u(?)* ‘**to suck**’ > PCh **[?i]ts'ú-APPL* || PW **[hi]ts'u(?)*
- (289) PM **[ji]wān* ‘**to see**’ > Mk *[ji]wen* || Ni *[ji]βan* || PCh **[?i]wén* || PW **[hi]wén*
- (290) PM **?at'e(?)*(*t*)s ~ **?at'ä(?)*(*t*)s ‘**aloja drink**’ > PCh **?at'és* || PW **hat'és*
- (291) PM **ji'no*, **ji'nó-l* ‘**man**’ > PCh **?i'nó?*(*-*l*) || PW **hi'no*, **hi'nó-l^h*

9.1 From Proto-Mataguayan to Proto-Wichí

The glottal dissimilation rule has resulted into synchronically active alternations in Wichí. For example, in the Lower Bermejeño dialect the second-person possessive index usually surfaces as *?a-* before consonants, but if the stem starts with a glottalized consonant, the allomorph *ha-* shows up instead (292).

- (292) Lower Bermejeño Wichí (Nercesian 2014: 163–164)

- a. *ha-’nojix* ‘your path’
- b. *ha-t’alax* ‘your pillow’
- c. *ha-t’ate* ‘your breast’
- d. *ha-tʃ’efʷa* ‘your spouse’
- e. *ha-tʃ’ute* ‘your ear’
- f. *ha-’wet* ‘your place’
- g. *ha-’wu* ‘your neck’
- compare:
- h. *?a-fʷtſa* ‘your father’
- i. *?a-ŋes* ‘your nose’
- j. *?a-pʰi* ‘your pocket’
- k. *?a-tset* ‘your walking stick’

Similarly, the prefix found in transitive verbs with a third-person subject take the prefix *?i-* before consonants in Lower Bermejeño (*ji-* before uvulars and glottals), but if the stem starts with a glottalized consonant, the allomorph *hi-* shows up instead (293).

- (293) Lower Bermejeño Wichí (Nercesian 2014: 241–242)

- a. *hi-p’altsen* ‘s/he forgives’
- b. *hi-p’aq* ‘s/he dyes’
- c. *hi-p’ethat* ‘s/he forgets’
- d. *hi-p’u* ‘s/he burns’
- e. *hi-ts’efʷi-hu* ‘s/he twists’
- f. *hi-ts’ifʷin* ‘s/he pinches’
- g. *hi-tʃ’esax* ‘s/he divides’
- h. *hi-’wen* ‘s/he sees’
- compare:
- i. *?i-jo-jeχ* ‘s/he drinks’
- j. *?i-lex* ‘s/he washes’

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- k. *ʔi-lon* ‘s/he kills’
- l. *ʔi-t^hat-^hu* ‘s/he puts inside’
- m. *ʔi-tsef^wen* ‘s/he teaches’
- n. *ʔi-tʃoχ* ‘s/he takes away’
- o. *ji-haneχ* ‘s/he knows’
- p. *ji-hemin* ‘s/he likes’
- q. *ji-hon* ‘s/he follows’
- r. *ji-qontʃi* ‘s/he destroys’
- s. *ji-qun* ‘s/he plays’

9.1.1.9 Glottal dissimilation affecting glottalized consonants

When two consecutive syllables have glottalized consonants as their onsets in PM, *Wichí* deglottalizes the onset of the first syllable in a development shared with *Chorote* (§8.1.1.8). Example (295) shows further irregularities regarding the place of articulation of the dissimilating consonants.

- (294) PM **k'ék'eh* ‘monk parakeet’ > Ni *tʃ'etʃ'e* || PCh **kék'eh* || PW **k'ék^je*
- (295) PM **ts'áts'ih*, **ts'áts'i-l* ‘rufous hornero’ > Mk *ts'its'i (-l)* || Ni *ts'ats'i (-k)* || PCh **sát'ih* || PW **táts'i*
- (296) PM **t-á(j)k'i-l* ‘its saliva (PL)’ > Ni *t-’atʃ'i-k* || PCh **t-áj^ki<l><is>* || PW **t-ák'i-l^h*
- (297) PM **[j]óp'ale(?)* ‘to hiccup’ > Ni *[j]op'aklé* / -*op'aklé* ‘to choke’ || PCh **[j]óp'ale?* || PW **[j]óp'le*

9.1.1.10 **h*-loss after glottalized stops and affricates

In *Wichí*, word-final PM **h* is lost word-finally if the onset of the syllable in question is a glottalized stop or affricate (as well as in one unclear exception shown in (301), where the loss of **h* may have something to do with the sequence *-*m?*-).

- (298) PM **k'ék'eh* ‘monk parakeet’ > Ni *tʃ'etʃ'e* || PCh **kék'eh* || PW **k'ék^je*
- (299) PM **ts'áts'ih*, **ts'áts'i-l* ‘rufous hornero’ > Mk *ts'its'i (-l)* || Ni *ts'ats'i (-k)* || PCh **sát'ih* || PW **táts'i*
- (300) PM **wóp'ih* ~ **wóφ'ih* ~ **móp'ih* ~ **móφ'ih* ‘white egret’ > PCh **wóp'ih* || PW **móp'i*

9.1 From Proto-Mataguayan to Proto-Wichí

- (301) PM *?*ám?åh*, *?*ám?å-ts* ‘rat’ > Ni *ám?å (-s)* || PCh *?*ám?ah* ~ *?*ám?åh*, *?*ám?a-s* ~ *?*ám?å-s* || PW *?*áma*

The same kind of sound change must underlie PW **xník’u* ‘black-legged seriema (*Chunga burmeisteri*)’, whose Chorote counterparts (Ijw *nók’u* /núk’uh/, Mj *hón(i)?i* ~ *hóni?u* /hún(i)k’uh/) point to a word-final **h*. However, the Chorote and Wichí forms show no regular correspondences and are probably related by horizontal transmission rather than by cognition.

9.1.1.11 **h*-insertion after word-final accented vowels

In Proto-Wichí, polysyllabic words cannot end in a long vowel. We account for this restriction by positing a process whereby a PW **h* was inserted word-finally whenever the Proto-Mataguayan etymon ended in an accented vowel (> PW long vowel; see §9.1.3.1 on vowel length in Wichí).

- (302) PM **k’alxó*(*-ts) ‘armadillo (sp.)’ > Mk *k’olo’x* || Ni *k’akxo (-s)* || PCh **k’ihló?*(*-s) || PW **k’anhóh*
- (303) PM **mijó*(*-l) ‘savannah hawk’ > Mk *mijo (-l)* || Ni *mijo (-k)* || PCh **mijó?*(*-l) || PW **mijóh*

This sound change does not apply to monosyllabic stems.

- (304) PM **t’ó*(*-l) ‘his penis’ > Ni *t’o?(-k)* || PCh **hl’ó?*(*-l) || PW **t’ó*(*-l^h)
- (305) PM **t’-w(t)s’é*(*-l) ‘his/her belly’ > Ni *t’-βts’e (-k)* || PCh **h’-ts’é?*(*-l) || PW **t’-ts’é*(*-l^h)
- (306) PM **t’-í*(*-l) ‘liquid, juice’ > Mk *t’-i?(-l)* || Ni *t’-i?(-k)* || PCh **t’-í?*(*-l) || PW **t’-í*(*-l^h)

9.1.1.12 PM *-nV > PW *-nVh

The word-final sequence *-nV changes to *-nVh in Wichí.

- (307) PM **látsei*(?) ‘chañar fruit’ > PCh **létseni?* || PW **létse’nih*
- (308) PM **sténi*(?) ‘white quebracho’ > Mk *sitin-u’k* || PCh *?*sténi?* || PW *?*isté’nih*
- (309) PM **tsóna*(?) ‘red brocket’ > PCh **tsóna?* || PW **tsó’nah*
- (310) PM **wóna*(?) ‘bala wasp honey; hat’ > PCh **wóna?* || PW **wó’nah*

As a result of this sound change, words ending in *-nV are practically non-existent in the lexicon of Wichí. One exception is PW **qáno*(*-l^h) ‘needle’, but this is a likely borrowing from Guaicuruan: compare Toba-Qom (Cerriteño dialect) *qana* ‘needle’ (Messineo 2009: 263).

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Word-finally, PM **l* and **'l* yield PW **l^h* (this can be analyzed as a consonant cluster or a marginal phoneme of Proto-Wichí, alongside PW **j^h*).

- (311) PM **-á'l* 'light, brightness' > PCh 3 **hl-á'l* || PW **-t-ál^h*
- (312) PM **-?á(?)l*, 3 **'[j]i(?)l* 'to die' > PCh **'[j]á(?)l* || PW **'[j]il^h*
- (313) PM **-ápil* 'to return thither' > Mk *[w]apil* || Ni *β]apek* || PCh **[j]ápil* || PW **[j]ápil^h*
- (314) PM **[ji]φá'l* 'to tell' > Mk *n(i)-fel-im* || Ni *n(i)-fak/n(i)-φakl-* || PCh **[?i]hwél* || PW **[?i]xʷél^h* / **[?i]xʷél-*
- (315) PM **kó'l* 'locust' > PCh **kó'l* || PW **kójol^h*
- (316) PM **-(é)l* 'PL' > Mk *-l* || Ni *-(é)k* || PCh **-(é)l* || PW **-(é)l^h*
- (317) PM **[t]píl* 'to return hither' > Mk *[t(e)]pil* || Ni *[t(a)]pik* ~ *[t(a)]pek* || PW **[t]píl^h*
- (318) PM **(-)X₂₃pél* 'shadow' > Ni *xpek* || PCh **-pél* || PW **hpél^h* / **-hpel^h*

9.1.1.14 Loss of posttonic PM **?* word-finally

PM **?* is lost word-finally in Wichí after short vowels if a long vowel (§9.1.3.1) occurs somewhere to the left in the same word.³

- (319) PM **t-á(-j^h)-xi?* (*-l) 'her/his mouth' > Mk *t-exi?(-l)* || Ni *t-afí(-k)* || PCh (?) **hl-á<aj?>* || PW *t-áj-hi* (*-l^h)
- (320) PM **t-áse?* 'her/his daughter' > Mk *t-asi?* || Ni *t-áse* || PCh **hl-áse?* || PW **t-áse*
- (321) PM **-φájXo?* (*-l) 'coal' > Ni *-φajxo?(-k)* || PW **-xʷíjho* (*-l^h)
- (322) PM **-k'áxe?* (*-l) 'arrow' > Mk *-qaxi?(-l)* || Ni *-k'áxe* || PCh **-k'áhe?* (*-l) || PW **-k^jáhe* (*-l^h)

³Note that the only source that systematically reflects the contrast between *?*-final and vowel-final words is [Nercesian \(2014\)](#) in her description of Lower Bermejeno Wichí. [Braunstein \(2009\)](#) does not systematically document the distinction in the same variety. In all other varieties of Wichí, the contrast is lost word-finally: in 'Weenhayek ([Claesson 1994](#): 25) and in the Riva-davia subdialect of Southeastern Wichí ([Terraza 2009b](#): 31–34), [?] is automatically inserted in the clause-final position after stressed vowels (in 'Weenhayek also after *j* and unstressed vowels), whereas in Vejoz ? is not reported in the word-final position at all ([Viñas Urquiza 1974](#), [Gutiérrez & Osornio 2015](#)).

9.1 From Proto-Mataguayan to Proto-Wichí

- (323) PM ${}^*k'ínxå?$ $\overset{?}{\sim}$ ${}^*k'ínxå?$ (*wot) ‘younger sister’ > Mk $-k'inxa?$ $\overset{?}{\sim}$ $-k'inxa?$
 || Ni $-tfinxå$ (- β ot) || PCh ${}^*k'ihnå?$ (*wot) || PW ${}^*k'ínhå$
 (324) PM ${}^*njánxte?$ ‘tapeti rabbit, cavy’ > Mk $nijaxti?$ || Ni $nånxate$ || PCh ${}^*nåhåte?$
 || PW *nåte

The word-final deglottalization in Wichí is similar to an analogous process known from Nivaclé, but must have occurred independently. Note that it was fed by accent retraction in words with postpeninitial PM accent, a process unique to Wichí and Iyojwa’aja’; in this case deglottalization occurs in Wichí, but not in Nivaclé, leading to different outcomes. Note that the Nivaclé cognates in (325)–(327) have stress in the final syllable, which is why deglottalization fails to occur in them (Analía Gutiérrez, 2023, personal communication).

- (325) PM ${}^*kilá?$ (*wot) ‘elder brother’ > Ni $-tsekla?/tifikla-$ (- β ot) || PCh ${}^*kilá?$ (*wot)
 || PW ${}^*k'ila$
 (326) PM ${}^*kitá?$ (*wot) ‘elder sister’ > Ni $-tftita?$ (- β ot) || PCh ${}^*kitá?$ (*wot) ||
 PW ${}^*k'íta$
 (327) PM ${}^*qalå?$ (${}^*j^h$) ‘leg’ > Ni $-kaklå?$ (- j) || PCh ${}^*qa'lå?$ \sim ${}^*qå'lå?$ (${}^*j^h$) ||
 PW *qålå (${}^*j^h$)

9.1.1.15 Syllabic consonants

The Proto-Mataguayan consonants ${}^*\eta$ and ${}^*\ell$ are reflected in Wichí as PW *ni , *ta . This is seen in the allomorphy pattern of the 3.NEG.IRR prefix (PW *ni - before supraglottal consonants, PW *n - before vowels or ${}^*?$), of the T-class verbal prefix (PW *ta - word-initially before supraglottal consonants, PW *t - elsewhere), and of the homophonous third-person prefix found in a closed set of terms for body parts.

- (328) ‘Weenhayek (Claesson 2016: 62, 76, 82, 99, 349, 375–376)
- $ní-t-ahuj-a?$ ‘lest s/he speak’
 - $ní-’nom-a?$ ‘lest s/he wake up’
 - $\emptyset-ta-qásit$ ‘s/he stands up’
 - $\emptyset-ta-qátip$ ‘s/he dances’
 - $ta-kej?$ ‘her/his hand’
 - $ta-qålå?$ ‘her/his leg’
 - $ta-te?$ ‘her/his eye’

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- (329) Lower Bermejeño *Wichí* (Nercesian 2014: 239, 289, 320–321)⁴

- a. *ni-tamtfoj-a* ‘lest it dry’
- b. *ni-^wwats^han-a* ‘lest it be green’
- c. *ni-f^wit-a* ‘lest s/he reach’
- d. *Ø-ta-qásit* ‘s/he stands up’
- e. *Ø-ta-qatin* ‘s/he jumps’

9.1.1.16 Consonant + guttural fricative

Proto-Mataguayan clusters of the shape */Cx/, */Cχ/, */Ch/ largely yield aspirated consonants or voiceless nasals (phonologically */Ch/) except if the consonant is a fricative, in which case the subsequent guttural fricative is lost.

The examples below show the evolution of PM clusters of the shape */Cx/, */Cχ/, */Ch/ whose first element is not a fricative or the lateral approximant */l/. This includes the word-final cluster */jh/ (represented as **j^h* in this book), which is generally preserved in Proto-Wichí except that after the vowel **i* it is simplified to **h* (355). (333) and (341) show vowel epenthesis, presumably due to the fact that the consonant cluster occurs word-initially. In (353) and (361), vowel syncope (§9.1.2) probably had originally resulted in triconsonantal clusters of the shape */ChC, which were subsequently simplified to */CC. The reflex in (345) is entirely irregular due to contamination with that of PM **pás(-e^t)* ‘lip’.

- (330) PM **-(á)j^h* ‘**PL**’ > Mk *-(e)j* || Ni *-(a)j* || PCh **-(á)j^h* || PW **-(á)j^h*
- (331) PM **-ej^h* ‘**APPL:DISTAL**’ > Mk *-ij* || Ni *-ej* || PCh **-ej^h* || PW **-ej^h*
- (332) PM **φajXo?*, **φajXó-l* / **-φájXo?* (*-l) ‘**coal**’ > Ni *(-)φajxo?(-k)* || PCh **hwa(h)jo-* || PW **x^wijho?*, **x^wijhó-l^h* / **-x^wíjho* (*-l^h)
- (333) PM **khá̄t* ‘**cactus**’ > Mk *khat-u^k* || Ni *kxat* || PCh **káhá̄t* || PW **k^jáhá̄t*
- (334) PM **kójXa(?)t* ‘**to be heavy**’ > PCh **kóhjat-APPL* || PW **k^jójhat*
- (335) PM **-k'ínxå?* ~ **-k'ínxå?* (*-wot) ‘**younger sister**’ > Mk *-k'inxa?* ~ *-k'inxå?* || Ni *-tʃ'inxå* (-βot) || PCh **-k'ihnå?* (*-wot) || PW **-k'iñhå*

⁴In Lower Bermejeño, the Proto-Wichí third-person prefix found in a closed set of terms for body parts has been reanalyzed as a part of the stem, and is now always preceded by an overt person index. Since it never occurs word-initially, it does not have a moraic allomorph: *n-t-k^wej* ‘my hand’, *?a-t-k^wej* ‘your hand’, *la-t-k^wej* ‘her/his hand’, *ta-t-k^wej* ‘our hand’, *to-t-k^wej* ‘one’s hand’ (Nercesian 2014: 147). This is obviously an innovation when compared to the situation in ‘Weenayek, where the prefix in question shows up only in the third person: *?ó-kej?* ‘my hand’, *?a-kej?* ‘your hand’, *ta-kej?* ‘her/his hand’, *?nó-kej?* ‘one’s hand’.

9.1 From Proto-Mataguayan to Proto-Wichí

- (336) PM **k'utX₂₃á*~*n*, **k'utX₂₃án-its* ‘thorn’ > Ni *k'utxa*~*n*, *k'utxan-is* || PCh **k'utá*~*n*, **k'után-is* || PW **k'uthá*~*n*, **k'uthán-is*
- (337) PM **tútsX₂₃a*(?) (*-*kek*) ‘girl’ > Ni *tutsxa* (-*jetf*) || PCh **hlúsa?* (*-*kek*) || PW **tútsha*
- (338) PM *-*mhá-j^h* ‘powders, flours’ > Ni *mxå-j* || PW *-*mhó-j^h*
- (339) PM *(-)*níjhå-j^h* ‘ropes, cords’ > Mk (-)*nijha-j* || Ni -*nijxå-j* || PCh **níhjå-j^h* || PW **nijhå-j^h*
- (340) PM *-*nxa-* ~ *-*nxá-* ‘nose’ > Mk -*nxe-* || Ni -*nfa-* || PCh *-*hná<tvwoh>* || PW *-*nh<us>*
- (341) PM **n-xáte?*(*-*l*) ~ **n-xáti?* ‘dream, sleepiness’ > Mk -*nixati?*(*-*l*) || Ni *nxåte*(*-*k*) || PCh **ñihnáti?* || PW **naháti*
- (342) PM *(-)*nájx-aj^h* ‘paths’ > Ni (-)*nåjf-aj* || PCh *(-)*nåhj-aj^h* || PW *(-)*nåjh-aj^h*
- (343) PM **kpéñX₁₃a-ts* ~ **kpánX₁₃a-ts* ‘orphans’ > PCh **kpéhna-s* || PW **k^jpénha-s*
- (344) PM **phå'm* ‘up’ > Mk -*pha'm* || PCh **p^hå'm* || PW *-*phå* / **phåm-*
- (345) PM *-*pxúse?*(*-*j^h*) ‘beard’ > Mk -*<a>pxusi?*(*-*j*) || Ni -*påse*(*-*j*) || PCh *-*púse?*(*-*j^h*) || PW *-*påse*(*-*j^h*)
- (346) PM *[*t*]*qáñhan* ‘to fish with a hook’ > Mk [*ta*]<*qa*>*qanhen* || PCh *[*t^o*]*qáhnan* || PW *[*t*]*qáñhan*
- (347) PM **sláqha*(?)*j*, **sláqhaj-its* ‘wild cat’ > Ni *sklåkkxaj* ~ *sklåkkxaj*(*-*is*) || PCh **s^olåhqaj?* ~ **s^olåhqåj?*(*-*is*) || PW **silåqhåj*
- (348) PM *-*témh-aj^h* ~ *-*tämh-aj^h* ‘bile.PL’ > PCh *-*téhm-aj^h* || PW *-*témh-aj^h*
- (349) PM *-*txo'k* ~ *-*txó'k*, *-*txóko-wot* ‘uncle’ > Mk -*txo'k* || Ni -*txo'k*, -*txoko-βot* || PCh *-*i>tók*, *-*<i>tóko-wot* || PW *-*<wi>thok^w*
- (350) PM *[*ji*]-*tXá*(?)*t* ‘to throw, to put’ > PCh *[*ji*]*tát-APPL* || PW *[*ji*]*thát*
- (351) PM *[*t*]*wha'já-j* ‘to marry’ > Mk [*te*]*whe'je-j* || Ni [*t*]*xa'ja-j* || PCh *[*t^o*]*hwa'jé<j>* || PW *[*t*]*wháje<j>*
- (352) PM **wátshan* ~ **wátsχan* ‘to be healthy, alive’ > Ni *βatsxan* || PCh **wása*~*n* || PW **wátshan*
- (353) PM **wánXåłåχ*, **wánXåłå-ts* ‘rhea’ > Mk *waałax* || Ni *βånxåłåx*, *βånxåłå-s* || PCh **wáñhlåh*, **wáñhlå-s* || PW **wá'ntłåχ*, **wá'ntłå-s*
- (354) PM *-*xäthe-j^h* ‘heads’ > Ni -*satxe-s* || PCh *-*héhte-j^h* || PW *-*t-éthe-j^h*
- (355) PM *-*xíj^h* ‘recipient’ > Mk -*xij* || Ni -*sij* / -*xij* || PW *-*hih*

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- (356) PM **xunxátaχ* ‘*tusca fruit*’ > Mk *xunxetaχ* || Ni *xunfatax* || PCh **?ihnátaḥ* || PW **nhátaχ*
- (357) PM **xunxáta-(ju)’k* ‘*tusca tree*’ > Mk *xunxete-’k* || Ni *xunfata-juk* || PCh **?ihnáta-k* || PW **nháte-q*
- (358) PM *(*?a*)*X₁₃útsha-ts* ‘*crested caracaras*’ > Ni *xutsxa-s* || PCh *(*?a*)*húsa-s* || PW **yahútsha-s*
- (359) PM **?atsXa(?)*, **?atsXá-l* ‘*dorado*’ > PCh **?asá?(*-l)* || PW **?atsha(?)*, **?atshá-l^h*
- (360) PM **?ánhajeχ* ‘*wild bean (Capparis retusa)*’ > Mk *anhejaχ* || Ni *?ánxajex* || PCh **?ohnajah* || PW **?ánhjaχ*
- (361) PM *-*?ó’thale(?)* ~ *-*?ó’thåle(?)* ‘*heart*’ > PCh *-*?óhtale?* ~ *-*?óhtåle?* || PW *-*t-’ótle*

Interestingly, the clusters involving PM **l* as the first element did not yield PW ***lh*, as one could expect, but rather **nh*, possibly as a rhinoglottophilia effect (see §9.2.1.3 on rhinoglottophilia in *Wichí*).

- (362) PM *-*phólXa’n* ‘*ankle*’ > PCh *-*hwóhla’n* || PW *-*x^wónha’n*
- (363) PM **k’alxó*(*-*ts*) ‘*armadillo (sp.)*’ > Mk *k’olo’x* || Ni *k’akxo(-s)* || PCh **k’ihló?*(*-*s*) || PW **k^janhóh*
- (364) PM *[*ji*]*lXón* ‘*to roast*’ > Ni [*ji*]*kxon* || PCh *[*?i*]*hlón* || PW *[*t*]*nhón*

The latter sound change has resulted in a synchronically active alternation in *Wichí*, where the underlying cluster /lh/ (in some analyses, /lh̩/) surfaces as [ŋ].⁵

- (365) ‘Weenhayek (Claesson 2016: 337–338, 454, 516)
- ni-tá’x^wel-ex* ‘s/he is known’ → *?i-táx^w’n-at-ex* ‘s/he makes aware’
 - t^halák* ‘s/he is old’ → *?iná-t^hanå-ç* ‘we are old’
 - ?o-j-ápit* ‘I return there’ → *?i-j-ápn-e’n* ‘we return there’
- (366) Southeastern *Wichí* (Ingeniero Juárez) (Cayré Baito & Carpio 2009: 102–103)
- j-el-ñen* [je’ñen]
3.i-be_tired-PL
'they are tired'

⁵At least in some dialects, this rule is no longer entirely productive. For example, in the Rivadavia subdialect of Southeastern *Wichí* forms such as *?itsel-hat* ‘to sharpen’, *qalel-hit’e* ‘not to know’, *totajal-hu* ‘next year’ are attested (Terraza 2009b: 47).

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- b. j-opil-ħit'e [jɔp'ħiðε] 3.1-return_thither-NEG
's/he does not come back'
- c. to-ʔoxʷel-ħen [tɔfʷεħen] GNR-be_ashamed-PL
'we are ashamed'

The following examples show the evolution of PM clusters of the shape */Cx/ or */Cχ/ where the first element is a fricative (*Ch/ was not a licit sequence in PM, as discussed in §5.2.4). Such clusters simply lose the second element in Wichí.

- (367) PM *[ji]ɸχän- ~ *[ji]ɸχäñ- 'to kill a bird' > Ni [ji]ɸxan-APPL || PCh *<?a>hwén-(n)ah'bird' || PW *<?a>xʷén-kʷe'bird'
- (368) PM *-ɸχúx, *-ɸχú-ts 'finger' > Mk -fux || Ni -ɸxux, -ɸxu-s 'toe' || PCh *-hwu-ké? || PW *-xʷúxʷ, *-xʷú-s
- (369) PM *kéłχa-ju-k, *kéłχa-jku-jʰ 'red quebracho' > Mk kełe-jku- || Ni tsełxa-juk, tsełxa-ku-j || PCh *kéhla-juk / *kéhla-jku- || PW *k'él-jukʷ, *k'él-k'ü-jʰ
- (370) PM *táxχan 'to thunder' > Mk texen || Ni tafxen || PW *t'áχan
- (371) PM *t-xäjk'u (*-l) 'egg' > Ni t-sajk'u (-k) || PCh *hl-éjk'u? (*-l) || PW *t-ík'j'u (*-lʰ)
- (372) PM *t-xäte-k 'head' > Ni t-satetf || PCh *hl-étek || PW *t-éteq
- (373) PM *-ʔäsxä-n, *-ʔäsxán-its 'meat' > Mk -ʔese-n, -ʔesen-its || Ni -(ʔa)sxa-n, -(ʔa)sxan-is || PCh *-ʔisá-n, *-ʔisán-is || PW *-t-’isa-n, *-t-’isán-is

This sound change accounts for the fact that /h/ is synchronically banned after fricatives in all Wichí varieties, including 'Weenhayek (Claesson 1994: 28),⁶ and Southeastern Wichí. Whenever an *h*-initial morpheme is preceded by a fricative, the glottal fricative is deleted.

- (374) 'Weenhayek (Claesson 1994: 28, fn. 34)
 - a. ʔis-he-n [ʔi'sen?] good-PL
'they are well'
 - b. ʔi-k'áx-he-n [ʔik'áxen?] 3.1-buy-PL
's/he buys them'

⁶The only exception is the root -xhān 'to bury', whose Chorote cognate *-qhān has a stop.

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- (375) Southeastern Wichí (Rivadavia) (Terraza 2009b: 43–44)

- a. pite-s-hit'e [pitesi't'e]
long-PL-NEG
'they are short'
- b. i-k^jes-hen [ik^je'sen]
3.I-heal-PL
'they are in good health'
- c. n^j-k^jox-hu [n^jk^joxu]
1-buy-APPL:for
'I buy for'
- d. la-sax-hi [lasa'xi]
2.ACT-cut-APPL:in
'you work'

- (376) Southeastern Wichí (Lower Bermejeño) (Nercesian 2014: 108–109)

- a. ha-n^j-tef^w-hi [h^ja,n^jte'f^wi]
NEG-1-eat-NEG
'I don't eat it'
- b. n^j-k^wes-hen [n^jk^we'sen]
1-cut_oneself-PL
'we cut ourselves'
- c. ?i-tfes-hat [?i,tfe'sat]
3.I-heal-CAUS
's/he heals her/him/it'
- d. Ø-toł-hu ['tołu]
3-come_from-APPL:for
's/he comes from'
- e. j-uk^waχ-hi [ju,k^wa'χi]
3.I-bite-APPL:in
's/he chews something'
- f. n^j-tijoχ-hila [n^jtijoχi'la]
1-throw-FUT
'I will throw it'
- g. j-?aχ-hu [?"jaχu]
3.I-hit-APPL:for
's/he breaks it'

9.1 From Proto-Mataguayan to Proto-Wichí

9.1.1.17 Other consonant clusters

Though some consonant clusters of Proto-Mataguayan have been preserved in Wichí, many underwent considerable change.

The following examples instantiate retentions; note that although the tauto-syllabic clusters $*k^j t$ and $*t k^j$ have subsequently changed in all Wichí dialects (§9.2.1.8), they are clearly reconstructible to Proto-Wichí.

- (377) PM $*ktá'nih$ ‘Chaco tortoise’ > PCh $*kitá'nih$ || PW $*k^j tá'nih$
- (378) PM $*ktéta(?)$ ~ $*ktáta(?)$ ‘white algarrobo fruit (*Prosopis elata*)’ > PCh $*kitéta?$ || PW $*k^j téta$
- (379) PM $*spú(?)p$ ‘dove’ > PCh $*s^3 púp$ || PW $*spúp$
- (380) PM $*tkéna(?)X_{12}$ ~ $*tkána(?)X_{12}$, $*tkénX_{13}a-ts$ ~ $*tkánX_{13}a-ts$ ‘precipice; hill, mountain’ > PCh $*t^3 kénah$, $*t^3 kéhna-s$ || PW $*tk^j énaχ$, $*tk^j énha-s$

The Proto-Mataguayan sequences $*k\phi$ and $*k\phi'$ yield Proto-Wichí $*k^w$, $*k^w'$. The preceding vowel (if there is one) apparently becomes rounded, though it is unknown whether this is regular, since only one example has been found.

- (381) PM $*[j]ékφa^x$ ‘to bite’ > Mk $[j]ikfe^x$ || PCh $*[j]ókwah$ || PW $*[j]ók^w aχ$
- (382) PM $*-kφe(?)$ ($^*j^h$) ‘ear’ > Mk $-kfi?$ ($-j$) || Ni $-kφe?$ ($-j$) || PW $^*-(t-)k^w e<j>$ / $^*-(t-)k^w e$ ‘arm, hand’
- (383) PM $*[ji]kφ'äs$ ~ $[ji]kφ'äs$ ‘to be torn open’ > Ni $[ji]k'as$ -APPL || PCh $*[i]k'(w)ós$ || PW $*[hi]k^w'és$ -APPL
- (384) PM $*[j]ókφe(?)$ (t)s ~ $*[j]ókφä(?)$ (t)s ~ $*[j]ékφe(?)$ (t)s ~ $*[j]ékφä(?)$ (t)s ‘to frighten’ > PCh $*[j]ókwes$ || PW $*[j]ók'wes$

Several clusters, such as PM $*φts$, $*sk$, $*sl$, and $*tl$, are resolved by $*i$ -epenthesis, at least word-initially.

- (385) PM $*φtsána(?)χ$ ‘suncho (*Baccharis sp.*)’ > Ni $φtsánax$ || PCh $*sánah$ || PW $*x^witsánaχ$
- (386) PM $*φts-u^k$ ‘palm (*Copernicia alba*)’ > Mk $fits-uk$ || Ni $φts-u^k$ || PCh $*hwis<úk>$ || PW $*x^wits<uk^w>$
- (387) PM $*(-)ská^t$ ‘mesh’ > Ni $-stʃa^t$ || PW $*sik'et$
- (388) PM $*sláqha(?)j$, $*sláqha-j-its$ ‘wild cat’ > Ni $sklåkxaj$ ~ $sklåkxaj(-is)$ || PCh $*s^3låhqaj?$ ~ $*s^3låhqåj?$ ($^*-is$) || PW $*silåqhåj$
- (389) PM $*tlú^k$ ‘blind’ > Ni $taklú^k$ || PCh $*t^3lúk$ || PW $*tilúk^w$

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The cluster PM **st* undergoes **i*-prothesis in the word-initial position.

- (390) PM **sténi*(?) ‘white quebracho’ > Mk *sitin-u'k* || PCh **?sténi?* || PW **?isté'nih*
 (391) PM **stwú'n*, **stwún-its* ‘king vulture’ > Ni *staβu'n*, *staβun-is* || PCh **?stíu'n*,
**?stíun-is* || PW **?istíwin*
 (392) PM **stá-'q* ‘toothpick cactus (*Stetsonia coryne*)’ > PCh **?stá-k* || PW **?istá-q*
 (393) PM **stáɸe*(?) ‘Chaco chachalaca’ > PCh **?stáhwe?* || PW **?istáxʷe*

In clusters whose first member is any of **l*, **w*, or **ʷw*, only the last member survives in *Wichí*, but a deleted PM **w* can trigger rounding of a preceding vowel (PM **e* > PM **o*). Other clusters where only the last member survives include **ɸq*, **nxt*, and **X₂₃t*.

- (394) PM **-ɸqató*(**-l*) ‘elbow’ > Ni *-(?V)ɸkato*(*-k*) || PCh **-qató?*(**-l*) || PW **-qáto*(**-l^h*)
 (395) PM **-k'álfah* ‘spouse’ > Ni *-t'f'akɸa* || PCh **-k'élhwah* || PW **-k^jéxʷah*
 (396) PM **(-)lkä(?)t* ‘nasal mucus, cold’ > Mk *-leke(?)t* || PCh **kéłt* || PW **k^jéłt-tax*,
**k^jéłt-ta-s*
 (397) PM **níltsa*(*?)X₁₂*, **níltsX₁₃a-ts* ‘white-lipped peccary’ > PCh **<?ih>nílsah*,
**<?ih>nílsa-s* || PW **nítsaχ*, **nítsha-s*
 (398) PM **"njánxte?* ‘tapeti rabbit, cavy’ > Mk *nijaxti?* || Ni *nánxate* || PCh **"náhåte?*
 || PW **xánte*
 (399) PM **-tséwte*(?) (**-j^h*) ‘tooth’ > Ni *-tseβte* (*-j*) || PW **-tsóte* (**-j^h*)
 (400) PM **-w(t)s'é*(**-l*) ‘belly’ > Ni *-βts'e* (*-k*) || PCh **-ts'é?*(**-l*) || PW **-ts'é*(**-l^h*)
 (401) PM **wkína*(*?)X₁₂*, **wkínX₁₃a-ts* ‘metal’ > PCh **w^jkínah*, **w^jkínya-s* || PW **k^jínaχ*,
**k^jínya-ha-ts*
 (402) PM **-?áX₂₃te*(?) (**-j^h*) ‘female breast’ > Ni *-?axte* (*-j*) || PCh **-?áhate?*(**-j^h*)
 || PW **-t-áte* (**-j^h*)

In the clusters that involve an approximant as their final element – such as **sw*, **nj*, and **ʷnj* –, the approximant is lost in *Wichí*; PM **nj* is reflected as PW **x* at least word-initially. The *Wichí* reflex in (405) is in any case irregular.

- (403) PM **-nji'x* ‘smell’ > Mk *-nji'x* || Ni *-niʃ* || PCh **-níh* || PW **-niχ*
 (404) PM **"njánxte?* ‘tapeti rabbit, cavy’ > Mk *nijaxti?* || Ni *nánxate* || PCh **"náhåte?*
 || PW **xánte*
 (405) PM **stwú'n*, **stwún-its* ‘king vulture’ > Ni *staβu'n*, *staβun-is* || PCh **?stíu'n*,
**?stíun-is* || PW **?istíwin*

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- (406) PM *s²wúla²χ, *s²wúla-ts ‘anteater’ > Ni s²βuklax, s²βuklā-s || PCh *s²?úlah, *s²?úla-s || PW *súlaχ

PM *tsn yielded PW tn.

- (407) PM *tátsna(?)X₁₂ ~ *tátsne(?)χ ‘toad’ > PCh *tásVnah || PW *tátnaχ

Stem-initial clusters of a guttural fricative and a sonorant yield PW *x²C, whereas in the only example of a stem-initial cluster of a guttural fricative and an obstruent one finds PW *hp as the reflex.

- (408) PM *xnáwá²p ‘spring’ > Mk xinawa²p || Ni snaβåp ~ snaβåp || PCh *náwop || PW *x²náwop
- (409) PM *Xmáwoh ‘fox’ > PCh *máwo-tah || PW *x²máwoh
- (410) PM *(-)X₂₃pél ‘shadow’ > Ni xpek || PCh *-pél || PW *hpél^h / *-hpel^h
- (411) PM *X₂₃wé²lah, *X₂₃wé²la-ts ‘moon’ > Ni xiβe²la(-s) || PCh *wé²lah, *wé²la-s || PW *x²wé²lah

9.1.2 Vowels

Wichí shows more or less the same reflexes of PM vowels as Chorote: most vowels are preserved intact except for PM *ä, which merges with *e (or with *i, if an accented syllable follows; §9.1.2.1). Three minor innovations shared with Chorote are the lowering of *e to *a before a *χ in the coda position (§9.1.2.2; also shared with Maká), the lowering of *i to *e in the environment *At/x...ts (§9.1.2.3) and to *a in the environment *#...C'Á (§9.1.2.4), and the rounding of *e before clusters with a labial (§9.1.2.5). Other minor innovations, not shared with Chorote, are the fronting of *å before *m (§9.1.2.6) and the word-medial syncope in words with initial accent (§9.1.2.7).

9.1.2.1 Reflexes of PM *ä

PM *ä is most commonly reflected as PW *e. The reflex PW *i in (441) is apparently the regular continuation of PM *äj. In (418), only 'Weenhayek shows the expected reflex e, whereas other varieties have an irregular reflex i.

- (412) PM *[j]áp'ä(?)t ~ *[j]áφ'ä(?)t ‘to burn’ > Ni [j]ap'a²t || PCh *[j]áp'e²t || PW *[j]áp'e²t
- (413) PM *-äφ, *-φä-ts ‘wing’ > Mk 3 t-ef, t-e-f-e-ts || Ni -aφ, -<a>φa-s || PCh *-hw<é>s || PW *-t-ex^w

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- (414) PM *-ä[?]j, *-äj-is 'yica bag' > Ni -a[?]j, -aj-is || PCh *-éj?(*-is) || PW *-t-éj(*-is)
- (415) PM *t-äk 'you go away' > PCh *hl-ék || PW *t-eq
- (416) PM *n-äk 'to come' > Mk n-ek || Ni n-atf || PW *n-eq
- (417) PM *[j]än 'to put' > Mk [j]en-APPL || Ni [j]an || PCh *[j]én || PW *[j]én
- (418) PM *[ji]φä[?]jå ~ *φä[?]jå 'to fly' > Ni [ji]φä[?]jå || PCh *[?i]hwé[?]jå? || PW *x^we[?]jå ~ *w- ~ *-i-
- (419) PM *[ji]φäl 'to tell' > Mk n(i)-fel-im || Ni n(i)-φak / n(i)-φakl- || PCh *[?i]hwél || PW *[?i]x^wél^h / *[?i]x^wél-
- (420) PM *(-)φéta[?]ts 'root' > Mk fitets || Ni -φeta's || PCh *-hwétus || PW *(-)x^wétes
- (421) PM *phi[?]ját 'cold weather, south wind' > Ni phi[?]jat || PCh *hwi[?]jét || PW *x^wi[?]jét
- (422) PM *-φítä[?]k 'dream' > PCh *-hwíhlek || PW *-x^wíteq
- (423) PM *[ji]φχän- ~ *[ji]φχän- 'to kill a bird' > Ni [ji]φxan-APPL || PCh *<?a>hwén-(n)ah 'bird' || PW *<?a>x^wén-k[?]e 'bird'
- (424) PM *kowä[?]x / *-kówä[?]x 'hole' > PCh *kowéh / *-kóweh || PW *k^jowex / *-k^jóweχ
- (425) PM *-k'älφah 'spouse' > Ni -tf'akφa || PCh *-k'élhwah || PW *-k^jéx^wah
- (426) PM *[ji]k'än 'to stretch out' > Ni [ji]tʃ'an || PCh *[?i]k'én-APPL || PW *[hi]k^jén
- (427) PM *[ji]k'äsa[?]χ ~ *[ji]k'äse[?]χ 'to divide' > Mk [j]<a>k'esa[?]χ || PCh *[?i]k'ésah || PW *[hi]k^jésaχ
- (428) PM *látseni(?) 'chañar fruit' > PCh *létseni? || PW *létse[?]nih
- (429) PM *látsen-u[?]k 'chañar plant' > Mk <xu>letsin-u[?]k || PCh *léseni-k || PW *létsen-uk^w
- (430) PM *(-)lkä[?]t 'nasal mucus, cold' > Mk -leke[?]t || PCh *ké[?]t || PW *k^jé[?]-taχ, *k^jé[?]-ta-s
- (431) PM *(-)skä[?]t 'mesh' > Ni -stʃa[?]t || PW *sik^jet
- (432) PM *[ni]-tåφä[?]l-APPL 'to know, to be acquainted' > Ni [ni]tåφakl-APPL || PCh *[?i]tåhwel-APPL || PW *-tåx^wel-APPL / *-tåx^wnh-APPL
- (433) PM *-tåwä[?]x, *-tåwxä-ts '(abdominal) cavity' > Mk -tawe[?]x, -tawxe-ts || Ni -tåβa[?]s, -tåβxa-s || PCh *-tóweh || PW *-tóweχ
- (434) PM *-tä[?]ts, *-täts-él 'trunk, base' > PCh *-tés(*-el) || PW *-tes, *-téts-el^h
- (435) PM *-témä[?]k ~ *-tämä[?]k, *-témh-aj^h ~ *-tämh-aj^h 'bile' > PCh *-témek, *-téhm-aj^h || PW *-témeq, *-témh-aj^h

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- (436) PM *wäk 'all' > Mk we:k || Ni -βatf || PCh *-wek || PW *-weq
- (437) PM *-wä'x, *-w(ä)x-áj^h 'burrow; anus' > Ni -βa'ʃ, -βaf-aj^h || PCh *-wéh || PW *-wéχ, -wh-áj^h
- (438) PM *wälē'k 'to walk' > Mk -<i>'welki-'met 'to limp' || Ni βaklē'tf || PCh *[ʔi]ʷwélek || PW *'weleq
- (439) PM *[ji]ʷwän 'to see' > Mk [ji]ʷwen || Ni [ji]ʷβan || PCh *[ʔi]ʷwén || PW *[hi]ʷwén
- (440) PM *-wät 'place' > Mk -'wet || Ni -'bat || PCh *-'wét || PW *-'wet
- (441) PM *-xäjk'u(?) (*-l) 'egg' > Ni -sajk'u(-k) || PCh 3 *hl-éjk'u? (*-l) || PW *-t-ík^ju (*-l^h)
- (442) PM *-xä'n(e?) 'verbal plural (suffix)' > Ni -sa'ne?/-xa'ne? || PCh *-he'n(e?) || PW *-he'n
- (443) PM *-xäte'k, *-xäthe-j^h 'head' > Ni -fate'tf, -satxe-s || PCh *-hétek, *-héhte-j^h || PW *-t-éteq, *-t-éthe-j^h
- (444) PM *[t]ä(')k 'to eatINTR' > Mk [t]'ek || PW *[t]'eq

In syllables that precede the accented one, however, the regular reflex of PM *ä seems to be PW *i rather than *e, though the conditioning environment is not entirely clear at present.

- (445) PM *pätóχ 'to be deep' > Ni [ʔa]patox || PCh *-pítohw<ij?> || PW *pitóx^w
- (446) PM *tsänú'k 'duraznillo trees' > Ni tsanu'k || PCh *sinúk || PW *tsinúk^w
- (447) PM *-ʔäsxä'n, *-ʔäsxán-its 'meat' > Mk -ʔese'n, -ʔesen-its || Ni -(ʔa)sxa'n, -(ʔa)sxan-is || PCh *-ʔisá'n, *-ʔisán-is || PW *-t-'isa'n, *-t-'isán-is

9.1.2.2 Lowering of *e before *χ

Before the uvular fricative PM *χ, the vowel *e has a special lowered reflex, PW *a. This is shared with Maká (§6.2.1.4) and Chorote (§8.1.2.2).

- (448) PM *[j]áte(')χ 'to be fat' > Ni [j]åtex || PCh *[j]átaħ || PW *[j]åtaχ
- (449) PM *påttséχ 'jabiru' > Ni pátsex || PCh *påtsáh || PW *påtsáχ
- (450) PM *pitéχ, *pité-ts 'long' > Ni pitex, pite-s || PW *pitáχ, *pité-s
- (451) PM *(-)tútse(')χ 'smoke' > PCh *(-)túsah || PW *(-)tútsax
- (452) PM *tséχ-APPL 'full (river)' > Ni tsex-APPL || PCh *-sáh || PW *tsáχ-APPL
- (453) PM *wósitsex 'black algarrobo fruit (*Prosopis nigra*)' > Mk ositsaχ || Ni βaitsex || PW *wósotsaχ

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- (454) PM *?*áwu*(*C*)*tsex* ‘peccary’ > Ni *?áβuktsex* ~ *?áβoktsex* || PCh *?*áwusah* || PW *?*áwutsax*
- (455) PM *?*á'jteχ*, *?*á'jte-ts* ‘to hurt’ > Mk *a?taχ*, *a?ti-ts* || Ni *?á'jtex* ~ *?á'βtex* || PCh *?*áj?tah-APPL*, *?*áj?te-s-APPL* || PW *?*ájtaχ*, *?*ájte-s*
- (456) PM *?*ál(V)tse(?)χ*, *?*ál(V)tse-ts* ‘cháguar (*Deinacanthus urbanianum*)’ > Ni *?áktsex*, *?áktse-s* || PCh *?*ál°sah*, *?*ál°se-s* || PW *?*áletsax*
- (457) PM *?*ánhajex* ‘wild bean (*Capparis retusa*)’ > Mk *anhejax* || Ni *?ánxajex* || PCh *?*óhnajah* || PW *?*ánhjax*
- (458) PM *?*aX₁₃áje(?)χ* ‘mistol fruit’ > Ni *?axájex* || PCh *?*ahájah* || PW *?*ahájaχ*
- (459) PM *?*uwáte(?)χ* ~ *?*C'uwáte(?)χ* ‘puma’ > Ni <xum>*p'uβałex* || PCh *?*k'uwáhlah* || PW *?*owáłax* ~ *?*C'owáłax*

The lowering induced by the uvular fricative left behind a synchronically active alternation in *Wichí*. In forms that go back to PM etyma with a *χ, the lowering applies, and one finds PW *a. By contrast, the reflexes of PM forms derived from the vocalic stems of the same etyma (see §5.2.2) show no lowering, because PM *χ was absent in the respective protoforms. Consequently, one finds PW *e.

- (460) 'Weenhayek (Claesson 2016: 8, 92, 293, 297, 426)
- pitáx* ‘long.SG’ → *pité-s* ‘long.PL’
 - p'alítsax* ‘poor.SG’ → *p'alítse-s* ‘poor.PL’
 - (-) *tútsax* ‘smoke’ → *tútse-tax* ‘mist’
 - ?ájtax* ‘it hurts’ → *?ájte-s* ‘they hurt’
- (461) Southeastern *Wichí* (Lower Bermejeño) (Nercesian 2014: 210–211)
- tsax* ‘NMLZ.SG’ → *-tse-s* ‘NMLZ.PL’

9.1.2.3 Lowering of *i in the environment *At/x...ts

In *Wichí*, PM *i lowers to *e before *ts, provided that there is a low vowel (*a or *å) in the preceding syllable. This most regularly happens when the syllable has *t as the onset, but one example with PM *x > PW *h has also been identified. As a consequence, the nominal plural suffix *-is shows the allomorph *-es in Proto-*Wichí*, an alternation best described as an instance of progressive height harmony. This innovation is shared with *Chorote* (§8.1.2.3); in addition, a similar process operates dialectally in *Nivaclé* (§7.2.6).

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- (462) PM **jinát-its* ‘water.PL’ > Ni *jinát-is* || PCh **?i'nát-es* || PW **?inát-es*
- (463) PM **qati'ts*, **qatits-él* ‘star’ > Ni *kati's* || PCh **qatés*, **qates-él* || PW **qates*, **qatéts-el^h*
- (464) PM *...*X₂₃a't-its* ‘earth.PL’ > Ni <*kots>xat-is* || PCh *<*a>h<ñ>át-es* ~ *<*?å>h<ñ>át-es* || PW *<*hon>hat-es*
- (465) PM *-*?åx-íts* ‘skins, barks’ > Mk -*?ax-its* || Ni -*?åx-is* || PCh *-*?åh-és* || PW *-*t-åh-és*

9.1.2.4 Lowering of *i before glottalized consonants followed by a low vowel

We have already seen that the sequence PM **ji* changed to **?i* word-initially in Proto-Wichí (§9.1.1.7). However, when followed by a glottalized consonant and a low vowel (PM **a* or **å*, but not **ä*), it underwent further change: the vowel was lowered, yielding **?a*, and then glottal dissimilation applied, with PW **ha* as the outcome (§9.1.1.8). The development PM **ji* > **?i* > **?a* in this environment is shared with Chorote (§8.1.2.4), but the change **?a* > **ha* is exclusive to Wichí.

- (466) PM **ji'jå'X₁₂* ‘jaguar’ > Ni *ji'jå'x* || PCh **?a'jå'h* || PW **ha'jåχ*
- (467) PM **ji'lå?*, **ji'lå-j^h* ‘tree’ > Ni *ji'kłå?(-j)* || PCh **?a'lå?(*-j^h)* || PW **ha'lå*, **ha'lå-j^h*
- (468) PM **jit'å?*, **jit'å-l* ‘vulture’ > Ni *jit'å?(-k)* || PCh **?at'å?(*-l)* || PW **hat'å?(?)*

9.1.2.5 Rounding of *e before clusters with a labial

In two examples, PM **e* appears to have acquired rounding in Wichí before a cluster with a labial consonant, yielding Proto-Wichí **o*.

- (469) PM **[j]ékfa'x* ‘to bite’ > Mk *[j]ikfe'x* || PCh **[j]ókwah* || PW **[j]ókʷax*
- (470) PM *-*tséwte*(?) (*-*j^h*) ‘tooth’ > Ni -*tseβte* (-*j*) || PW *-*tsóte* (*-*j^h*)

9.1.2.6 Fronting of *å before *'m

PM **å* is fronted to PW **a* before the coda *'m, as the following two examples show.

- (471) PM *-*å'm* ‘pronominal formative’ > PCh *-*å'm* || PW *-*å'm*
- (472) PM **[ji]łå'm* ‘to defecate’ > Mk <*i>łå'm* || Ni *[ji]łå'm* || PCh **[?i]hlå'm* || PW **[t]łå'm*

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9.1.2.7 Syncope

In polysyllabic words, a vowel is sometimes syncopated in a medial open syllable if there is an accented syllable to the left.

- (473) PM *kéłχa-ju'k, *kéłχa-jku-j^h ‘red quebracho’ > Mk *kełxa-jku-* || Ni *tsełxa-juk*, *tsełxa-ku-j* || PCh *kéhla-juk / *kéhla-jku- || PW *k'éł-juk^w, *k'éł-k'u-j^h
- (474) PM *-qátsile(?) (*-j^h) ‘guts’ > PCh *-qásile-j^h || PW *-qásle-j^h
- (475) PM *wánXåłåχ, *wánXåłå-ts ‘rhea’ > Mk *waałax* || Ni *βånxåłåx*, *βånxåłå-s* || PCh *wánhlah, *wánhlah-s || PW *wá'nłåχ, *wá'nłå-s
- (476) PM *?áñhajex ‘wild bean (*Capparis retusa*)’ > Mk *anhejax* || Ni *?ånxajex* || PCh *?óhnajah || PW *?áñhjax
- (477) PM *[j]óp'ale(?) ‘to hiccup’ > Ni [j]op'aklé / -?op'aklé ‘to choke’ || PCh *[j]óp'ale? || PW *[j]óp'le
- (478) PM *t-ó'thale(?) ~ *t-ó'thåle(?) ‘heart’ > PCh *t-óhtale? ~ *t-óhtåle? || PW *t-ótłe

However, there are many words with the same prosodic structure where the syncope fails to occur, such as PW *tsóx^wa-t-uk^w ‘shrub (*Lycium americanum*)’, *wósak^jVt ‘red-crested cardinal’, *wák^ja-juk^w ‘guayacán’. The exact conditions for syncope in Wichí require further study.

The syncope left behind a number of alternations in Wichí, as exemplified below.

- (479) Southeastern Wichí (Rivadavia) (Terraza 2009b: 27–29, 40, 53)
 - a. *j-i'set* ‘s/he cuts’ → *ji-s't-ex* ‘s/he cuts with’, *ji-st-^hi't'e* ‘s/he does not cut’
 - b. *η-lesa'jen* ‘I write’ → *ja-lesajη-en* ‘we write’
 - c. *hus'an* ‘ax’ → *hus'n-is* ‘axes’

9.1.3 Word-level prosody

Two phenomena should be distinguished in Wichí at the suprasegmental level: vowel length (symbolized here with the acute accent) and stress (marked with the sign '). The distribution of the vowel length (§9.1.3.1) follows a complex left-aligned pattern, with different morphemes (including lexical roots) having different underlying specifications; in Chapter 4 we argued that this pattern is the

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direct continuation of the Proto-Mataguayan accent. 'Weenhayek is the only variety known to systematically preserve the vowel length distinctions of Proto-Wichí. By contrast, the stress (§9.1.3.2) is right-aligned in Wichí, its function is to signal the right edge of the word, and the only complication is that a few suffixes are specified as extrametrical. Although the right-aligned stress in Wichí is superficially similar to the right-aligned stress in Maká and Nivaçle, the pattern is so trivial that it could very well result from independent innovations, and we do not reconstruct it to Proto-Mataguayan.

9.1.3.1 Vowel length

The long vowels of Proto-Wichí are reconstructed based on evidence from only one variety, 'Weenhayek, where vowel length is contrastive to this day: consider the pairs *ʔōjik* 'I go' and *ʔōjík* 'my scar', *ɬa?* 'louse' and *ɬá?* 'its fruit', *lapaq* 'her/his voice' and *lapáq* 'you paint', *ɬet* 'another' and *ɬéł* 'her/his relative' (Claesson no date: 24); recall that the acute accent in our notation denotes vowel length and not stress. As for the varieties of Wichí spoken in Argentina, the erstwhile vowel length opposition appears to have been lost, at least according to our reference sources, and in what follows we rely exclusively on 'Weenhayek in our discussion of the Proto-Wichí vowel length.

In 'Weenhayek (and Proto-Wichí), there may be at most one long vowel per word, and which vowel surfaces as long depends on the morphological composition of the word and on the lexical specifications of individual morphemes (Claesson no date: 24–30). An inspection of the 'Weenhayek data in Claesson (2016) shows that the language distinguishes between three kinds of morphemes with regard to vowel length:

1. some morphemes contain an underlying long vowel;
2. some morphemes lack underlying long vowels;
3. one prefix (*la-* / *lat-* / *t-* '2.ACT') is exceptional in that it triggers vowel length in the initial syllable of the stem.

Typically, only the leftmost underlying long vowel surfaces as long, whereas all subsequent underlying long vowels are shortened (Claesson no date: 25–26). The syllable that contains a long vowel receives secondary stress, unless when primary stress (§9.1.3.2) happens to fall on that syllable.

(480) 'Weenhayek (Claesson no date: 25–26)

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- a. /tájhi-ł-éle/ [ta:pjihle'lə?] forest-3.POSS-inhabitant 'forest dweller'
- b. /'nó-hih-wúk/ ['nõ:hih'wuk] GNR-boat-owner 'boat owner'
- c. /nijáte-(á)jh-lés-(?a)tsính(a)-ájh/[nõ:ja:telestsi'ñãç] chief-PL-children-woman-PL 'kings' daughters'

Exceptionally, in incorporation constructions, where a verbal stem and a nominal stem are combined in one phonological word, it is always the long vowel in the nominal stem that makes it to the surface, and any long vowels in the verbal stem are shortened (even though they are located to the left), as in the example 'Wk *ni-k'åt-p'ante-?úx^w=eh* 's/he came to the other side of the river a long time ago (without my witnessing it)', where the verb *ni-k'åt=eh* 's/he came to' loses its long vowel before an incorporated noun *?úx^w* 'side of the river, shore' (Claesson 1994: 9).

An additional rule applies to trisyllabic (or longer) words that lack an underlying long vowel within the disyllabic windows at their left edge: in this case the vowel of the peninitial syllable (underlyingly short) surfaces as long, and any subsequent underlying long vowels are shortened (Claesson no date: 27–29). In forms that arose thanks to Watkins' law (§9.1.4), the domain for the application of this rule excludes any material that precedes the erstwhile third-person prefix (Claesson 1994: 11); this includes all forms inflected for the first person singular (481f), and all other forms where an erstwhile third-person prefix intervenes between a prefix and a vowel-initial or a ?-initial stem (481g). In the following examples, which instantiate the lengthening rule, the location of the disyllabic window is shown by means of parentheses.

(481) 'Weenhayek (Claesson 2016: 65, 95, 109, 140, 173, 405)

- a. /(la-kⁱo)wex/ [(la,kⁱo)'^wwex] 3.POSS-hole 'its hole'
- b. /(la-x^wi)jho/ [(la,x^wi:)'j̥jö?] 3.POSS-charcoal 'its charcoal'

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- c. /('welek)-lih/ [(?we,le:k)'lih]
3.glean-HAB
's/he routinely gleans'
- d. /(ha'lå)-t-áwo?/ [(hå,?la:)tå'wo?]
tree-3.POSS-flower
'tree flower'
- e. /(ha'lå)-towh-ájh/ [(hå,?la:)to'ñwāç]
tree-hole-PL
'tree holes'
- f. /?õ-(tiłåx)-lih/ [?õ(ti,łax)'lih]
1SG-3.carry_on_shoulders-HAB
'I routinely carry it on my shoulders'
- g. /'nó-(t-?åx^w-k^ja)-tax/ [?nõ(t'ax^w,k^ja:)tax]
GNR-3.POSS-skin-illness_spirit-pseudo
'one's chickenpox'

We suggest that in most cases the long vowels of 'Weenayek (and Proto-Wichí) straightforwardly continue the accented vowels of Proto-Mataguayan, and that the underlying accentual properties of specific morphemes were also inherited from PM (though we currently have no explanation for the behavior of the prefix *la-* / *lat*'- / *t-* '2'.ACT). As discussed in Chapter 4, already in Proto-Mataguayan only the leftmost underlying accent in any given word made it to the surface, whereas all subsequent underlying accents were eliminated; this rule (mutatis mutandis) is still active in Proto-Wichí and 'Weenayek. In addition, as shown in §4.3.2, Proto-Mataguayan had a rule whereby a default peninitial accent is inserted in words without an underlying accent within the trisyllabic window at the left edge: $\sim\sim(\dots) \rightarrow \sim\sim\sim(\dots)$. This rule is also preserved in Proto-Wichí and 'Weenayek, but with an important change regarding the rule conditioning: in Wichí, the peninitial lengthening now occurs not only in the unaccented left-aligned trisyllabic window, but also in the unaccented left-aligned *disyllabic* window (provided that the word is trisyllabic or longer): $\sim\sim\dots \rightarrow \sim\sim\dots$. In particular, the sequence $\sim\sim$, reconstructible for Proto-Mataguayan, is no longer licit in Wichí, where it yields $\sim\sim$, a change that can be seen in the following examples.

- (482) PM *-*ɸapá*(?) 'shoulder' > PCh *-*hwopó?* || PW *-*x^wápo*
- (483) PM *-*ɸqató*(*-*l*) 'elbow' > Ni -(?V)*ɸkato*(-*k*) || PCh *-*qató?*(*-*l*) || PW *-*qáto*(*-*l^h*)
- (484) PM *-*kilá?*(*-*wot*) 'elder brother' > Ni -*tsékla?* / *tsíkla*-(*-βot*) || PCh *-*kilá?*(*-*wot*) || PW *-*kjíla*

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- (485) PM *-kitá? (*-wot) ‘elder sister’ > Ni -*tſita?* (-bot) || PCh *-kitá? (*-wot) || PW *-k'ita
- (486) PM *-k'alo(?) (*-ts) ‘cheek’ > PCh *-k'alo? (*-s) || PW *-k^jalo (*-s)
- (487) PM *-p'ot-és [?] ~ *-p'ot-ós ‘lids’ > Ni -*p'ot-os* || PCh *-p'ot-és || PW *-p'ót-es
- (488) PM *-qalá? (*-j^h) ‘leg’ > Ni -*kaklå?* (-j) || PCh *-qa'lå? ~ *-qå'lå? (*-j^h) || PW *-qå'lå? (*-j^h)
- (489) PM *qatits-él ‘stars’ > PCh *qates-él || PW *qatéts-el^h
- (490) PM *-täts-él ‘trunks, bases’ > PCh *-tes-él || PW *-téts-el^h

Table 9.2 summarizes the evolution of the Proto-Mataguayan accent patterns in *Wichí*.

Table 9.2: PM accent patterns

PM (underlying)	PM (surface)	PW and 'Wk (surface)
~	~	~
-	-	-
~~	~~	~~
~-	~-	~-
~~ / --	~~	~~
~~-	~~-	~~-
~~~ / ~~~ / ~--	~~~	~~~
-~~ / --~ / --- / ---	-~~	-~~

### 9.1.3.2 Stress

If the complex rules that determine the distribution of long vowels in Proto-*Wichí* are inherited from Proto-Mataguayan, the same cannot be said of the distribution of **stress** in Proto-*Wichí*. The stress in *Wichí* has a low contrastive load, and is typically assigned to the rightmost syllable in a word, unless it belongs to a verbal suffix lexically specified as extrametrical. There appears to be some dialectal variation regarding whether a given suffix is specified as extrametrical or not, as Table 9.3 shows. The data are from [Nercesian \(2014: 134–136\)](#), [Terraza \(2009b: 54–56\)](#), [Claesson \(no date: 22–23\)](#), and [Claesson \(2016\)](#).

In the examples below, extrametrical suffixes are segmented using the equal sign.

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Table 9.3: Extrametrical and metrical suffixes in Wichí lects

PWi	gloss	Lower Bermejeño	Rivadavia	'Weenhayek
*-k ^j e	'along; distributive; plural object'	extrametrical	extrametrical	usually extrametrical
*-k ^j å?	'downwards'	metrical	metrical	metrical
*-pe?	'above'	metrical	metrical	metrical
*-h(i)lå?	'to the front'	?	metrical	metrical
*-ho	'towards'	extrametrical	metrical	usually extrametrical
*-ej	'far'	extrametrical	lexical variation	metrical
*-ex	'by means of'	extrametrical	lexical variation	extrametrical
*-ah	'towards, near'	extrametrical	lexical variation	usually extrametrical
*-hi	'in'	metrical	lexical variation	usually extrametrical
*-phå	'upwards'	metrical	lexical variation	usually extrametrical

(491) Southeastern Wichí (Lower Bermejeño) (Nercesian 2014: 396–397)

- a. la-nuwaj [la,nū'waj]  
2.ACT-be_afraid  
'you are afraid'
- b. la-nuwaj=a [la,nū'waja]  
2.ACT-be_afraid-APPL:near  
'you are afraid of'
- c. n-t-qatin [nt,qa'tin]  
1SG-T-jump  
'I jump'
- d. n-t-qatin-hi [nt,qati'ñi]  
1SG-T-jump-APPL:in  
'I jump in'

(492) 'Weenhayek (Claesson 2016: 22–23, 33)

- a. /Ø-í-phå/ [?i:p^hå?]  
3-be-APPL:up  
'it is up'
- b. /Ø-í=hi/ ['i:hi?]  
3-be-APPL:in  
'it exists'
- c. /Ø-í=hi=k^je/ ['i:hik^je?]  
3-be-APPL:in-PL  
'they exist'

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- d. /Ø-ipélax/ [ipe:lax]  
3-be_white  
'it is white'
- e. /Ø-ipélax-pe/ [ipe:lax'pe?]  
3-be_white-APPL:above  
'it dawns'
- f. /Ø-ipélax=k^je/ [ipe:laxk^je?]  
3-be_white-APPL:along  
'it is white along'

It is beyond the scope of this book to provide a coherent account for suffixes with a variable behavior in the Rivadavia subdialect of Southeastern Wichí and in 'Weenhayek. In the latter variety, for example, it is possible that at least some of these are actually pairs of homophonous suffixes with different underlying stress properties: compare 'Wk [j]ik-'^phå? 's/he goes away upriver' and [j]ik-^phå? 's/he goes away upwards (in the air)', ^tå^t-^phå? 's/he comes from upriver' and ^tå^t-^phå? 's/he comes from above (in the air)' (Claesson no date: 18).

There are some further exceptions from the general rule regarding the stress assignment in the Wichí varieties, none of which has known parallels elsewhere in Mataguayan. For example, the roots *ʔi-* 'to be' and *hu-* 'to go' are reported to exceptionally attract stress in the Rivadavia subdialect of Southeastern Wichí, even when they are followed by metrical material (Terraza 2009b: 56). Exceptional non-final stress is found in the reflexes of PW *^x'^xwála 'sun, day', reflected as 'Weenhayek [ʔi'x"ála?] in free variation with [?ix"ála?] (Claesson 2016: 25), Rivadavia [i'x"ala] (Terraza 2009b: 36), Misión El Carmen ['x"ala], Colonia Muñiz ['f"ala] (Censabella 2009: 138), among others. Other nouns with an exceptional stress pattern include 'Wk ʔa'x"úmaq 'corpse' and the Spanish loan 'móso? 'young man' (Claesson no date: 19, fn. 16). In 'Weenhayek, syllables with a long vowel receive secondary stress when the primary stress falls elsewhere (Claesson no date: 20, 25).

Since the Wichí stress pattern lacks known counterparts in other Mataguayan languages, we consider it an innovation.

### 9.1.4 Watkins' Law as a regular morphological change in Wichí

Watkins' Law is the name given to a process whereby the form inflected for the third person singular is diachronically reanalyzed as a "base" form of a stem. This kind of morphological change has been originally identified in a number of Indo-European languages by Watkins (1962: 90–96).

## 9.1 From Proto-Mataguayan to Proto-Wichí

In Wichí, the operation of Watkins' Law is most clearly seen in vowel-initial and *ʔ-initial obligatorily possessed nouns. In such nouns, the erstwhile third-person prefix *t- (before vowels, as in PM *t-á's 'her/his son') or *t-... (in *ʔ-initial stems, as in PM *t-áte 'her breast') is now found not only in the form inflected for the third person, but also in the uninflected form (PW *NP t-ás 'NP's son', *NP t-áte 'NP's breast'), in the form inflected for the first person singular (PW *n-t-ás 'my son', *n-t-áte 'my breast'), for the first person inclusive (PW *lá-t-ás 'our son', *lá-t-áte 'our breast'), and in the form with a generic possessor (PW *no-t-ás 'one's son', *no-t-áte 'one's breast').⁷ This includes all forms that are not inherited from Proto-Mataguayan but rather result from recent grammaticalization restricted to Wichí. The elements *t- and *t-... do not show up in the forms inherited from Proto-Wichí, such as the second-person form (PW *∅-t-ás 'your son', *∅-t-áte 'your breast'⁸) or the vocative form, a relic of the Proto-Mataguayan first-person form, preserved only in 'Weenhayek (PW *j-ás 'son!').

- (493) PM *-á(-j^h)-xi?(*-l) 'mouth' > Mk -exi?(-l) || Ni -afi (-k) || PCh (?) *-á<aj?> || PW *-t-áj-hi (*-l^h)
- (494) PM *-á'l 'light, brightness' > PCh 3 *hl-á'l || PW *-t-ál^h
- (495) PM *-áwå?() 'flower' > Ni -aβå || PCh 3 *hl-áwo? || PW *-t-áwo
- (496) PM *-á?(*-j^h) 'fruit' > Mk 3 t-e? (-j) || Ni -a? (-j) || PCh 3 *hl-á? (*-j^h) || PW *-t-á? (*-j^h)
- (497) PM *-åq, *-qá-ts 'food' > Mk -aq, -qa-ts || Ni -åk, -kå-s || PCh *-åk, -qá-s || PW *-t-åq, *-qá<s>
- (498) PM *-á's 'son' > Mk -a's || Ni -å's || PCh *-ás || PW *-t-ás
- (499) PM *-áse? 'daughter' > Mk -asi? || Ni -áse || PCh *-áse? || PW *-t-áse
- (500) PM *-á't, *-á-its 'drink' > Ni -á't, -á-its || PCh *-á́t (*-es) || PW *-t-á́t
- (501) PM *-äɸ, *-ɸá-ts 'wing' > Mk 3 t-ef, t-e-fe-ts || Ni -aɸ, -<a>ɸa-s || PCh *-hw<és> || PW *-t-ex^w

⁷The generic possessor prefix is reconstructed as PW *nó- based on its reflexes in 'Weenhayek, Vejoz, and Guisnay. In Southeastern Wichí, the prefix *to-* of unknown origin is found instead (Nercesian 2014: 163); this prefix also requires the occurrence of *t-* (as in *to-t-os* 'one's son') or *t-...* (as in *to-t-ate* 'one's breast') in stems that were historically subject to the operation of Watkins' Law.

⁸In Southeastern Wichí, erstwhile *ʔ-initial nouns no longer preserve the archaic second-person forms with a zero allomorph of the person prefix, but rather attach the second-person prefix *ha-* (allomorph of *ʔa-* before glottalized consonants) to the stem augmented by Watkins' Law, as in LB *ha-t-ate* 'your breast' (Nercesian 2014: 164).

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- (502) PM *-áj[?]j, *-áj-is 'yica bag' > Ni -a[?]j, -aj-is || PCh *-éj?( *-is) || PW *-t-éj( *-is)
- (503) PM *-e, *-é-l 'thorn' > Mk 3 t-i? || Ni -e?(-k) || PCh 3 *hl-é? (*-l) || PW *-t-é
- (504) PM *-éj( *-its) 'name' > Mk -ij(-its) || Ni -ej(-is) || PCh *-éj?( *-is) || PW *-t-éj( *-is)
- (505) PM *-éle(?) ~ *-äle(?) (*-j^h) 'inhabitant, inner' > PCh *-éle?( *-j^h) 'inhabitant, intestine' || PW *-t-éle (*-j^h)
- (506) PM *-í(t)s'i(?) (*-l) 'resin, sap' > Ni -its'i (-k) || PCh 3 *hl-íts'i? (*-l) || PW *-t-íts'i
- (507) PM *-ó (*-l) 'penis' > Ni -o?(-k) || PCh *-ó? (*-l) || PW *-t-ó (*-l^h)
- (508) PM *-ó? (*-j^h) 'seed' > Mk 3 t-o? (-j) || PCh *-ó? || PW *-t-ó? (*-j^h)
- (509) PM *-ú[?]p, *-úp-its 'nest' > Mk 3 t-up(-its) || Ni -u[?]p, -up-is || PCh *-úp (*-is) || PW *-t-úp (*-is)
- (510) PM *-?a(?)q 'rope, cord' > PCh *-?ák || PW *-t-'aq
- (511) PM *-?áX₂₃te(?) (*-j^h) 'female breast' > Ni -?axte (-j) || PCh *-?áhate? (*-j^h) || PW *-t-'áte (*-j^h)
- (512) PM *-?åx (*-its) 'skin, bark' > Mk -?ax (-its) || Ni -?åx (-is) || PCh *-?åh, *-?åh-és || PW *-t-'åχ, *-t-'åh-és
- (513) PM *-?äsx[?]a'n, *-?äsxán-its 'meat' > Mk -?ese'n, -?esen-its || Ni -(?a)sxa'n, -(?a)sxan-is || PCh *-?isá'n, *-?isán-is || PW *-t-'isa'n, *-t-'isán-is
- (514) PM *-?í (*-l) 'liquid, juice' > Mk 3 t-'i? (-l) || Ni -?i? (-k) || PCh *-?í? (*-l) || PW *-t-'í (*-l^h)
- (515) PM *-?úłu(?) 'urine' > Ni -?ułu || PCh *-?úhlu? || PW *-t-'úłu

Watkins' Law also operates in disyllabic stems whose Proto-Mataguayan etyma begin with *x, possibly due to the fact that the sequence *tx evolved into *th > *t in the history of *Wichí* (§9.1.1.16), leading to the emergence of third-person forms starting with PW *t-V.... The respective stems were subsequently reanalyzed as vowel-initial, as in (517) and (518). In the only example involving a monosyllabic stem, Watkins' Law failed to apply (516).

- (516) PM *-xa, *-xá-l 'price' > Ni -fa?(-k) || PW *-ha, -há-l^h
- (517) PM *-xäjk'u(?) (*-l) 'egg' > Ni -sajk'u(-k) || PCh 3 *hl-éjk'u? (*-l) || PW *-t-ík'u (*-l^h)
- (518) PM *-xáte'k, *-xáthe-j^h 'head' > Ni -sate'tʃ, -satxe-s || PCh *-hétek, *-héhte-j^h || PW *-t-éteq, *-t-éthe-j^h

## 9.1 From Proto-Mataguayan to Proto-Wichí

In addition to nouns, Watkins' Law altered the distribution of two extremely frequent verbal prefixes, reconstructed as third-person prefixes in Proto-Mataguayan: PM **ji-* / **j-* '3.A/S_I' and **t-* / **t-* '3.S_T'. Their Wichí reflexes, PW **?i-* / **ji-* / **hi-* / **j-* and **ta-* / **t-*, are no longer entirely restricted to the third-person form; their distribution is described below.

In I-class verbs, the prefix in question surfaces as PW **?i-* before most consonants, as **ji-* before uvulars and **h*, as **hi-* before glottalized consonants, and as **j-* before vowels or *? (in the latter case the sequence **j-?...* fuses as **?j...*)*. The allomorphs **?i-* and **hi-* are conservative in that they are still restricted to the third person in Proto-Wichí, though in the Southeastern dialect they appear as *i-* after the dialectal 1INCL or impersonal prefix *to-*, yielding *t-i-*, as in LB *t-i-potsin* 'we build, one builds', *t-i-?wen* 'we see, one sees' (Nercesian 2014: 241). At least in the Southeastern dialect, the reflex of the allomorph **ji-* has a reduced variant *j-*, which appears in the first-person form and in the dialectal 1INCL/impersonal form: LB *η-j-qon* 'I like', *to-j-qon* 'we like, one likes' (Nercesian 2014: 241), though no trace of *j-* is seen in the 'Weenhayek verbs of the same class, as in *?ō-qáx* 'I crush' (Claesson 2016: 302). Finally, the allomorph **j-*, found in vowel-initial and *?-initial stems, has clearly been extended to the first-person form already in Proto-Wichí: PW **η-j-én* 'I set a trap', **η-?j-áχ* 'I beat' > 'Wk *?ō-j-éη*, *?ō-?j-áχ* (Claesson 2016: 116, 532); LB *η-j-en* 'I fish', *η-?j-aχ* 'I beat' (Nercesian 2014: 241). In the Southeastern dialect, the allomorph *j-* has been further extended to the dialectal 1INCL/impersonal form (LB *to-j-en* 'we fish, one fishes', *to-?j-aχ* 'we beat, one beats') and, in the case of *?-initial verbal stems but not of vowel-initial ones, to the second-person form, as in LB *la-?j-aχ* 'you beat' (Nercesian 2014: 241).**

As for T-class verbs, the erstwhile third-person prefix has the shape **ta-* / **t-* in Proto-Wichí, and it is now used in all persons in that language except in imperatives, as documented by Alvarsson & Claesson (2014: 448) for 'Weenhayek, by Terraza (2009b: 237) for the Rivadavia subdialect of Southeastern Wichí, by Nercesian (2014: 120, 239–240) for the Lower Bermejeño subdialect of Southeastern Wichí.

Watkins' Law continued to operate after the diversification of Proto-Wichí. For example, the prefix **ta-* / **t-* that encoded a third-person possessor in a handful of nouns in Proto-Wichí retains its original distribution in 'Weenhayek, as in *?ō-kej?* 'my hand/arm', *?a-kej?* 'your hand/arm', *ta-kej?* 'her/his hand/arm' (Claesson 2016: 62, 294, 331). In the Rivadavia subdialect of Southeastern Wichí, its occurrence was extended to the first-person singular form but not to any other form: *η-t-kʷej* 'my hand/arm', *a-kʷej* 'your hand/arm', *ta-kʷej* 'her/his hand/arm', *la-kʷej* 'our hand/arm', *to-kʷej* 'one's hand/arm' (Terraza 2009b: 69). In the Lower Bermejeño subdialect of Southeastern Wichí, the prefix in question

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is found in all inflected forms: *ŋ-t-kʷej* ‘my hand/arm’, *ʔa-t-kʷej* ‘your hand/arm’, *la-t-kʷej* ‘her/his hand/arm’, *ta-t-kʷej* ‘our hand/arm’, *to-t-kʷej* ‘one’s hand/arm’ (Nercesian 2014: 147), and is thus no longer identifiable as a person prefix in that specific subdialect. Another instance of a sporadic morphological change involving Watkins’ Law is the emergence of forms such as ‘Wk *ʔo-lates* ‘my origin’, *ʔá-lates* ‘your origin’ (Claesson 2016: 221), where *la-* is a fossilized third-person prefix attached to the stem *-tes* ‘origin, fault, trunk, founding father’ (Claesson 2016: 93). The lack of vowel lengthening in the peninitial syllable in *ʔo-lates* betrays the recent formation of the aforementioned forms in ‘Weenhayek (see §9.1.3.1 for more details).

## 9.2 From Proto-Wichí to the contemporary Wichí varieties

The dialectal division of Wichí presents considerable complexity and remains insufficiently studied. Early works include Tovar (1961: 36), who identifies three major dialects (Vejoz, Guisnay, and Noctén), and Najlis (1968), who adds two dialects to that list (Forest and Mataco proper). Nercesian (2014: 27), based on the speakers’ own assessment of mutual intelligibility, identifies a basic distinction between the Pilcomayeño and the Bermejeño dialect groups, spoken on the Pilcomayo and Bermejo Rivers, respectively; in turn, each of these dialect groups is divided in a binary fashion into an Upper and a Lower dialect. Further evidence supporting Nercesian’s (2014) classification can be found in Nercesian (2020), Nercesian & Amarilla (2021). Our own examination of the published data has revealed the existence of a clear primary split of Wichí into two dialect clusters, as suggested by the distribution of certain phonological innovations.

(1) Northwestern Wichí (Nercesian’s Pilcomayeño⁹) is a diverse group of dialects which are characterized by the simplification of word-initial consonant clusters (as in PW **tk'énax* ‘mountain’, **k'tá'nih* ‘Chaco tortoise’ > **k'énax*, **tá'nih*) and by the merger of Proto-Wichí **i* and **ɪ* (as in PW **t-ik'ú* ‘its egg’, **hílu* ‘yica bag’ > **t-ik'ú*, **hílu*). The most well-described dialects are ‘Weenhayek and Vejoz. ‘Weenhayek (= Tovar’s and Najlis’ Noctén, Nercesian’s Upper Pilcomayeño), spoken in the Bolivian department of Tarija, is characterized by the devoicing of all non-glottalized sonorants before a pause (Claesson 1994: 33–35), among other innovations; it is also the only Wichí variety known to retain

⁹We do not adopt Nercesian’s label in this book in order to avoid potential confusion: note that the Vejoz variety (classified as Pilcomayeño by Nercesian) is actually spoken on the Bermejo River.

## 9.2 From Proto-Wichí to the contemporary Wichí varieties

the Proto-Wichí vowel length. The phonology and lexicon of 'Weenhayek are known fairly well thanks to the contributions of Claesson (1994, 2016). Vejoz (= a fraction of Nercesian's Lower Pilcomayeño), spoken in the Argentine province of Salta, is represented in our study by the subdialects of Misión Chaqueña (Viñas Urquiza 1974, Gutiérrez & Osornio 2015) and Paraje La Paz (Fernández Garay 2006–2007). A salient innovation exclusive to Vejoz is the semantic shift which transformed PW **wáχ* 'stagnant water' into the basic term for 'water', thus replacing PW **ʔinát*.¹⁰ As for the dialectal zone referred to as Guisnay (by Tovar 1961 and Najlis 1968) or Lower Pilcomayeño (Nercesian 2014), we have as of yet been unable to verify its validity by means of identifying its precise limits and defining innovations. In part, this is due to the scarcity of the available data. We dispose only of a basic phonological description of the variety spoken in Misión La Paz (Avram 2008). For other lects, which could be suspected on geographical grounds to belong to the purported Guisnay/Lower Pilcomayeño dialect zone, only some isolated words have been documented (Spinelli 2007 and Fernández Garay & Spinelli 2009 for Misión Santa María; Fernández Garay & Spinelli 2009 for Santa Victoria Este, Las Vertientes, Lapacho Mocho; Censabella 2009 for Misión El Carmen; Viñas Urquiza 1974 and Cayré Baito 2015 for Tartagal). In fact, at least the Lapacho Mocho lect shows some features typical of Vejoz (such as the third-person prefix *le-*, as opposed to *ha-* in Tartagal and *la-* in Misión La Paz). The Tartagal lect shares with Vejoz the irregular reflex *e* (< PW **a*) in [tce'no] 'armadillo'. As for the other lects, we provisionally do not include them into any dialect group; throughout this section, we always specify the community where a given phenomenon was reported when referring to the data of such varieties.

(2) Southeastern Wichí (Nercesian's Bermejeño, roughly corresponding to Najlis' Mataco proper; not mentioned by Tovar) encompasses the variety spoken in Rivadavia, Salta (classified by Nercesian 2014 as Upper Bermejeño) as well as Nercesian's Lower Bermejeño, spoken in the Argentine provinces of Formosa and Chaco to the south from the town of Ingeniero Suárez. Its most notable phonological feature is the Southeastern Wichí vowel shift (§9.2.2.2). There are small differences between the varieties spoken in Rivadavia (Terraza 2009b), Ingeniero Suárez (Cayré Baito & Carpio 2009, Cayré Baito 2015), and the commu-

¹⁰ Nercesian & Amarilla (2021: 280–282) suggest that Vejoz *wáχ* 'water' could be a retention, whereas other Wichí varieties would have replaced it with reflexes of PW **ʔinát*, claimed to be an innovation by Nercesian and Amarilla. This seems quite unlikely to us, since Nivaclé and Chorote use cognates of PW **ʔinát* – and not of PW **wáχ* – for 'water'. In any case, the Vejoz innovation must be quite old, because the earliest known record of that variety (a 1795 manuscript by Esteban Primo de Ayala) has *guag* (likely *wáh*) 'water' (Combès & Montani 2020: 507).

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nities located to the east of El Sauzalito (Lower Bermejeño *stricto sensu*), including Misión Nueva Pompeya, Laguna Yema, Pozo del Mortero, Juan G. Bazán, Las Lomitas, and Pozo del Tigre (see [Nercesian 2014](#) for a comprehensive description, [Braunstein 2009](#) for a vocabulary based on data from Bazán, and [Censabella 2009](#) for some fragmentary data from specific communities).

In most cases, the Lower Bermejeño (as documented by [Nercesian 2014](#)) and 'Weenhayek (as documented by [Claesson 2016](#)) reflexes suffice to reconstruct a Proto-Wichí form. These varieties, spoken in the extreme southeast and in the extreme north of the Wichí territory, respectively, differ phonologically in all possible dimensions: there are almost no innovations shared by Lower Bermejeño with 'Weenhayek to the exclusion of some other Wichí variety (one exception is  $*t\text{-} > la\text{-}$ ; see §9.2.1.13). The etymological dictionary in Chapter 10 systematically lists reflexes in these two varieties as well as in Vejoz (Misión Chaqueña subdialect).

In what follows, we examine the reflexes of PW segments and suprasegmental units in the contemporary dialects. As a detailed phonological analysis is available only for a handful of Wichí lects, we make no attempt at differentiating between sound changes with resp. without phonological significance.

## 9.2 From Proto-Wichí to the contemporary Wichí varieties



Figure 9.1: Map of the Wichí-speaking area

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The lects examined in this section and the sources of linguistic data on each of them are shown in Table 9.4.

Table 9.4: Sources on Wichí lects

community	sources	Wichí group according to Braunstein (2009)
'Weenhayek	Claesson (1994, 2016)	Villa Montes
Misión Santa María	Spinelli (2007), Fernández Garay & Spinelli (2009)	Villa Montes
Santa Victoria Este	Fernández Garay & Spinelli (2009)	La Paz
Misión La Paz ^A	Avram (2008)	La Paz
Las Vertientes	Fernández Garay & Spinelli (2009)	Santa Teresa
Misión El Carmen	Censabella (2009)	Pozo de Maza
Juárez (Barrio Viejo)	Cayré Baito & Carpio (2009), Cayré Baito (2015), Nercesian (2014) ^B	Ingeniero Juárez
El Sauzalito	Censabella (2009), Nercesian (2014) ^B	El Sauzalito
Bazán	Braunstein (2009), Censabella (2009), Nercesian (2014) ^B	Bazán
Colonia Muñiz	Censabella (2009), Nercesian (2014) ^B	Pozo del Tigre
Teniente Fraga	Censabella (2009)	Ruta 81
Rivadavia	Terraza (2009b)	Rivadavia
Paraje La Paz	Fernández Garay (2006–2007), Fernández Garay & Spinelli (2009)	(?) Ruta 81
Misión Chaqueña	Gutiérrez & Osornio (2015)	Embarcación
Embarcación	Viñas Urquiza (1974)	Embarcación
Lapacho Mocho	Fernández Garay & Spinelli (2009)	Mosconi
Tartagal	Viñas Urquiza (1974), Cayré Baito (2015)	Mosconi

^A Of Avram's (2008) consultants, one is from Las Vertientes – a community identified with the Santa Teresa group in Braunstein (2009: 3) –, another one is born to a father from Las Vertientes and a non-Wichí mother, and the third one is reported to have moved to Misión La Paz from the province of Formosa. That way, the variety described by Avram (2008) may be in fact representative of a region located to the southeast from Misión La Paz. ^B Nercesian's (2014) grammar is based on data collected in multiple communities located within the triangle delimited by Pozo del Tigre, Misión Nueva Pompeya, and Ingeniero Juárez. She does not indicate the exact provenance of the data she cites and does not report any diatopic variation.

## 9.2 From Proto-Wichí to the contemporary Wichí varieties

### 9.2.1 Consonants

This section describes the evolution of the Proto-Wichí consonants in the contemporary varieties of Wichí.

#### 9.2.1.1 PW *k^j

The Proto-Wichí reflex of PM *k in onsets is reconstructed as a palatalized velar stop (IPA *[k^j]). Its original articulation is faithfully retained both in the Rivadavia subdialect of Southeastern Wichí, as in [k^je'jɔ?] 'granddaughter', [k^ja'la?] 'lizard', [k^jul] 'locust' < PW *-k^jéjá, *k^já'lah, *k^jólh (Terraza 2009b: 36), and in some speakers in El Sauzalito, as in [i'k^jot] 'red', [k^jɛ'lek^w] 'quebracho tree' < PW *-k^jéjá, *k^jéjuk^w (Censabella 2009: 132), as well as in the Misión La Paz subdialect of Guisnay, as in [otk^jumhí] 'I work', [k^jajohí] 'hot' < PW *-n-t-k^júm-tih, *k^já'jo-hi (Avram 2008: 44–45). This is also the predominant realization in 'Ween-hayek and in Misión El Carmen, but in these varieties an affricate realization ([tʃ] or [tç]) is increasingly frequent in younger speakers' speech (Claesson 1994: 14). The following examples from Censabella (2009: 131–132, 138) represent the Misión El Carmen variety: [k^ja'la?] 'lizard', [ni'k^jim] 'I am thirsty', [k^jw'kwík] 'butterfly', [k^je'jɔ'e] (older speaker) ~ [tce'e?] (younger speaker) 'parakeet sp.', [ntʃem'li] 'I work' < PW *k^já'lah, *n-k^jim, *k^jók^wok^w, *k^jéj^we, *n-t-k^júm-tih.

In some varieties, the occurrence of [k^j] is positionally restricted. In Santa Victoria Este and in the Vejoz community of Paraje La Paz, [k^j] may occur only before front vowels in younger speakers' speech, and even then it is reported to freely vary with [tʃ] ~ [tç]: [k^jili'tçuk] ~ [tʃili'tçuk] 'owl', [k^ji'nax] ~ [tʃi'nax] 'metal, iron', [o'letʃe'his] ~ [o'letk^je'his] 'my trousers' (Fernández Garay & Spinelli 2009: 160). Before non-front vowels, [k^j] is not documented; at least in Paraje La Paz, [tç] is the most common realization, but [tʃ] and [t^j] are also possible (Fernández Garay 2006–2007). In Southeastern Wichí as spoken in Teniente Fraga, [tç] is predominant, as in [tco'hët] 'arrow', [tce'tc'e?] ~ [tse'tse?] 'parakeet sp.', [tce'lek^w] 'quebracho tree', but one also finds [k^j], as in [k^ju'te] 'ear' (Censabella 2009: 130–132).

Elsewhere, the affrication of PW *k^j has progressed to a point where the palatalized velar realization is no longer available, giving rise to [tʃ] ~ [tç]. For example, in Tartagal, [tç] ~ [tʃ] have been documented as exclusive realizations of the phoneme in question, as in [hi'tçu] 'its egg', [tce'no] 'armadillo', [tj'i'nax] 'iron', [tʃe'nax] 'mountain' < PW *-t-ik'u, *k^janhóh, *k^jinaχ, *tk^jénaχ (Cayré Baito 2015: 359–360, 366). In Lapacho Mocho and Misión Santa María, [tʃ] and [tç] occur in free variation with other, but also with [t^j] before [e] and [o]: [sít'et] ~

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[sít̪et̪] ~ [sít̪et̪] ‘large bag’ (< PW *sik̪et̪), [le̪t̪o] ~ [le̪t̪o] ‘short’ (Fernández Garay & Spinelli 2009: 160). Regarding Lower Bermejeño, Nercesian (2014: 51) characterizes the sound in question as a “palatal affricate” (likely [t̪ç]), though she also reports that two of her consultants – both young women – produced [t̪f] instead. Based on data recorded in Bazán, Censabella (2009: 130–132, 134, 138, 140) transcribes mostly [t̪f], as in [t̪se̪t̪]’e(?)’ ‘parakeet sp.’, [t̪se̪t̪ek̪ʷ] ‘quebracho’, [nit̪ott̪se̪?] ‘similar’, [t̪sef̪ʷ] ‘sweat’, [laxo̪t̪sa] (older) ~ [lawx̪t̪sa] (younger) (~ PW *k̪iék̪j̪e, *k̪ié̪t̪juk̪ʷ, *ni-̪k̪á̪t̪-k̪e, *k̪í̪ux̪ʷ, *t̪-x̪ʷk̪a); in one instance its glottalized equivalent is transcribed as alveopalatal: [t̪ç’o̪h̪ét̪] ‘arrow’ (cf. also Braunstein 2009, who characterizes the affricate in question as “palatal” in the Bazán subdialect). Similarly, [t̪f] is usually found in Colonia Muñiz (a community located between Las Lomitas and Pozo del Tigre): [i̪t̪sot̪] ‘red’, [t̪f’u̪te] ‘ear’, [n̪t̪sim̪] ‘I am thirsty’, [t̪su̪kuk̪] ‘butterfly’, [nt̪sem̪xli] ‘I work’ (< PW *ʔik̪á̪t̪, *-k̪ó̪te, *n̪-k̪í̪m̪, *k̪ó̪k̪ʷok̪ʷ, *n̪-t̪-k̪ú̪m̪-t̪ih); this segment is transcribed as alveopalatal in one example, [t̪ca̪la?] ‘lizard’ < PW *k̪á̪lah (Censabella 2009: 130, 132, 138). Only [t̪f] is documented in Ingeniero Juárez (Barrio Viejo), as in [t̪e̪t̪f̪] ‘its egg’, [t̪sa̪n̪ɔ̪] ‘armadillo’ < PW *t̪-ík̪j̪u, *k̪anhóh (Cayré Baito 2015: 360, 366). Finally, only an affricate realization is reported in Vejoz as spoken in Misión Chaqueña and in the variety of Las Vertientes (Viñas Urquiza 1974, Gutiérrez & Osornio 2015, Fernández Garay & Spinelli 2009: 160), but the data we dispose of are not accompanied by narrow transcriptions.

## 9.2.1.2 PW *q and *kʷ

In §9.1.1.2 and §9.1.1.17, we saw that PW *kʷ(’) goes back either to PM *kɸ(’) (when it occurs in onsets) or to PM *k (when it occurs in codas following a back vowel). By contrast, as discussed in §9.1.1.2, PW *q(’) goes back to PM *q(’) in onsets or codas (note that PM *q is not known to have occurred following non-low vowels in codas). PW *q can also continue PM *k when it occurs in the coda position following a front vowel; in this case, it actually still surfaces as [k] in most contemporary Wichí varieties. In fact, one could simply say that PW */q/ and */kʷ/ are neutralized as [k] in the coda position following front vowels, as in PW *ji[k] ‘s/he goes away’, *-whájene[k] ‘son-in-law’, *xʷéte[k] ‘mortar’, *-téme[k] ‘bile’. We follow Nercesian (2014: 49–50) in analyzing PW *[k] as an positional allophone of /q/, which occurs in the coda position after a front vowel.

As a result, the synchronic distribution of the consonants *q and *kʷ was asymmetrical in the coda position in Proto-Wichí: only *q could occur following the vowels *a, *e, and *i (note the allophony: */aq/ *[aq], */eq/ *[ek], */iq/ *[ik]), and only *kʷ was found following the vowels *o and *u. PW *q and *kʷ contrasted

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following the vowel *å (compare **t*-åq ‘her/his food’, *tsåhåq ‘chajá bird’, but *nijåk^w ‘rope, cord’, *nitåk^w ‘two’) and in the onset position (**t*-qéj ‘her/his costume’ vs. *ta-k^wej ‘her/his hand’).

As anticipated above, the Wichí sounds [q] and [k] are most commonly analyzed as allophones of the same phoneme, represented as /q/ by [Nercesian \(2014: 49–50\)](#) and as /k/ by [Avram \(2008: 43\)](#) and [Censabella \(2009: 136\)](#). The original distribution of the allophones (uvular in onsets and in codas following the low vowels *a* and å; velar in codas following the front vowels *e* and *i*) is preserved in varieties such as 'Weenhayek and the Lower Bermejeño subdialect of South-eastern Wichí. Other varieties, however, may display innovations. For example, in the Rivadavia subdialect of Southeastern Wichí only the allophone [q] is reported, even after front vowels, as in *jiq* ‘s/he goes away’ ([Terraza 2009a: 48](#)). By contrast, in the variety of Paraje La Paz, /q/ and /k/ are synchronically analyzed as phonemes ([Fernández Garay 2006–2007](#)): while in many cases the distribution of these consonants matches fairly well the allophony pattern reconstructed for Proto-Wichí, as in (519a)–(519g), in several words one finds [k] or [k'] in onsets, as in (519h)–(519l), or in codas following non-front vowels, as in (519m); note that in the latter case the PW etymon *máje[k] did contain a front vowel.

(519) Paraje La Paz Wichí ([Fernández Garay 2006–2007](#))

- a. [qa'laq] ‘gray heron’
- b. [o'qoj] ‘I dress’
- c. [la'qe] ‘to shine’
- d. ['qej] ‘custom’
- e. [o'paq] ‘I paint’
- f. [x^we'lek] ‘mortar’
- g. [te'mek] ‘bile’
- h. [iɬo'kex] ‘all’
- i. [kala'tu] ‘hail’
- j. [o'koj] ‘I play’
- k. [is'kat] ‘s/he hides’
- l. [k'a'tas] ‘flies’
- m. ['mak] ‘thing’

[Censabella \(2009\)](#) documents the velar allophone in onsets in the varieties spoken in Misión El Carmen (520), with **q* > ? in (520c)–(520d); Teniente Fraga (521); and (variably) El Sauzalito (522). The uvular allophone is attested in Colonia

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Muñiz (523) and Bazán (524). The examples below are reflexes of PW *-qáno ‘needle’, *-qhájhih ‘pocket’, *-q’áχ ‘mouth’, *ʔi-sqat ‘s/he steals’.

(520) Misión El Carmen Wichí (Censabella 2009: 130, 137)

- a. [ka'nu] ‘needle’
- b. [ŋka^hni] ‘my pocket’
- c. [lə'ʔax] ‘her/his mouth’
- d. [to'ʔax] ‘one’s mouth’
- e. [is'kat] ‘steals’

(521) Teniente Fraga Wichí (Censabella 2009: 137)

- a. [la'k'ax] ‘her/his mouth’

(522) El Sauzalito Wichí (Censabella 2009: 137)

- a. [ŋka^hni] ‘my pocket’
- b. [la'k'ax] ‘her/his mouth’
- c. [is'qat] ‘steals’

(523) Colonia Muñiz Wichí (Censabella 2009: 137)

- a. [qa'nu] ‘needle’
- b. [to'q'ax] ‘one’s mouth’
- c. [is'qat] ‘steals’

(524) Bazan Wichí (Censabella 2009: 137)

- a. [nqoh'ni] ‘my pocket’

In her description of the Guisnay dialect as spoken in Misión La Paz, Avram (2008: 43–44) posits a phoneme /k/ (a reflex of PW */q/) and states that “[t]here are no minimal pairs to justify the existence of both /k/ and /q/ as phonemes. It is difficult to determine the exact environment for the allophones, so it appears they occur in free variation”. An inspection of the examples given in the cited work, however, shows that the distribution of [k] and [q] in Misión La Paz is similar to the one reconstructed for Proto-Wichí: [q] occurs in onsets as well as in codas following low vowels, and [k] occurs in codas following front vowels.¹¹ The glottalized counterpart of the consonant in question, which occurs only in onsets, is always uvular in Misión La Paz (Avram 2008: 44).

¹¹ Avram (2008: 43, 82) gives some possible counterexamples to this distribution: *katetsek* ‘star’, *owuke?* ‘my house’, *kamionwo?* ‘truck driver’. The former word is highly anomalous, and

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- (525) Misión La Paz Guisnay (Avram 2008: 43–44, 50–51, 54–55, 64–65, 69, 87–88, 95, 99–100)
- a. [qqlqal̥tax] ‘turkey’
  - b. [h̥apqit’al̥] ‘it is not’
  - c. [jaqa?tu?] ‘yellow’
  - d. [laqas] ‘horsefly’
  - e. [qates] ‘star’
  - f. [qatetsel] ‘stars’
  - g. [hʷitsuqat] ‘group of palm trees’
  - h. [atsuqat] ‘group of bola verde trees’
  - i. ['ts'ilaq] ‘only’
  - j. [tso?nataq] ‘deer’
  - k. [oṇaq] ‘sachasandía’
  - l. [ołetek] ‘my head’
  - m. [notsek] ‘to sew’
  - n. [nosek] ‘to sweep’
  - o. [hʷełek] ‘mortar’
  - p. [nowałek] ‘wasp’
  - q. [nekk̥ja?] ‘year’
  - r. [nekk̥je?] ‘s/he comes with her/him’
  - s. [tsiliklik] ‘kind of eagle’
  - t. [q'axtax] ‘person with a big mouth’
  - u. [laq'as] ‘their mouths’
  - v. [ihʷaq'an] ‘blue’
  - w. [saq'i] ‘Argentine boa’
  - x. [woq'o] ‘owl’

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contains what looks like a Nivaclé plural suffix attached to a Wichí root (compare PW **qates* ‘star’, **qatéts-el^h* ‘stars’); note that all of Avram’s (2008) consultants understand Nivaclé to some extent, and one of them was born to a Nivaclé mother. The Proto-Wichí etymon of *owuke?* ‘my house’ is PW **ŋ-wúkʷ-e*, and thus instantiates loss of labialization in **kʷ* and not the alleged change *[q] > *[k]. Finally, *kamionwo?* ‘truck driver’ is derived from the Spanish loan *kamion* (< *camión* ‘truck’).

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Spinelli (2007) reports that [q] occurs as a free variant of /k/ in the variety of Misión Santa María: [qa'taq] ~ [ka'tak] 'fly', [oqa'la] ~ [oka'la] 'my thigh'.

The data above show that the original distribution of the allophones [k] and [q] is preserved to a great extent at least in the northern ('Weenhayek, Misión La Paz) and southeastern (Lower Bermejeño) extremes of the Wichí territory. Deviations are found in the central part of the Wichí territory: in Paraje La Paz, Teniente Fraga, Misión El Carmen, and El Sauzalito at least some instances of [q] have changed to [k]; in Misión Santa María [q] and [k] occur in free variation; whereas in Rivadavia, by contrast, the allophone [k] no longer exists, and /q/ now surfaces as [q] even in codas following front vowels.

We now turn to the evolution of Proto-Wichí **k^w*. While it is regularly preserved in varieties such as Lower Bermejeño Wichí, it may delabialize to [k] in some other dialects.¹² In his description of the phonology of 'Weenhayek, Claesson (1994: 19) states that "in the current phonetic development, the loss of labialization is an increasing phenomenon and has reached a level where the phoneme is affected in all positions, except those adjacent to rounded vowels within the syllable" (that is, forms such as *k^wútsax* 'caraguatá (*Bromelia serra*)', *tok^w* 'not', and *x^witsuk^w* 'palm' are unaffected by the delabialization). Claesson (1994: 19) also observes that forms such as *yi[k]eh* 'she/goes for it', *?ówu[k]e?* 'my house', and *?ó[k]ej?* 'my hand' are nowadays "more popular" than the more conservative variants *yi[k^w]eh*, *?ówu[k^w]e?*, *?ó[k^w]ej?*. Delabialization can also be seen to various extent in some other varieties. For example, Fernández Garay (2006–2007) documents the Paraje La Paz reflex of PW **k^wók^wok^w* 'butterfly' as [tso'kok]. According to Censabella (2009: 139), /*k^w*/ may optionally lose labialization in the coda position, especially in the speech of younger speakers at least in the Bazán and Teniente Fraga varieties, as in Bazán /*tewuk^w*/ [te'wuk^w ~ te'wuk] 'river', Teniente Fraga /*atsek^w*/ [a'tsek^w ~ a'tsek] 'bola verde tree' (< PW **téwok^w*, **?átsuk^w*). At least in Lower Bermejeño Wichí as spoken in Bazán (younger speakers), /*k^w*/ may surface as prelabialized rather than postlabialized: Bazán /*tselek^w*/ [tse'le^wk] 'entangled' (Censabella 2009: 140). Yet another process involving the delabialization of /*k^w*/ is proposed in the literature: Terraza (2009a: 63) states that /*k^w*/ delabializes to [k] before a high rounded vowel /u/ in the Rivadavia subdialect of Southeastern Wichí, as in /*nk^wux^wa*/ [nku'x^wa] 'I feel cold', /*juk^wus*/ [jukus] (no gloss provided). Note, however, that at least the former datum goes back to PW **η-qóx^wa* 'I feel cold', and thus does not involve a reflex of PW **k^w* at all.

¹²A significantly less common development is the change of PW **k^w* to [q^w]. This allophone is reported in the word-final position in the Misión La Paz subdialect of Guisnay, as in *h^witsuq^w* 'palm' (Avram 2008: 44). It also occurs in free variation with [k^w] following back vowels in Lower Bermejeño Wichí (Nercesian 2014: 49).

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Further dialectological research is needed to clarify the patterns of */kʷ/ delabialization throughout the Wichí-speaking territory.

### 9.2.1.3 PW *χ and h

As we saw in §9.1.1.3, the Proto-Mataguayan system of three guttural fricatives (PM *x, *χ, and *h) was reduced to a system composed of only two consonants, represented in this book as PW *χ and *h. PW *χ (< PM *x or *χ) is found almost exclusively in the coda position; its occurrences in onsets are rare and always result from late (post-PM) resyllabification (*Vχ.CV > *VχV). PW *h is very common in simplex or complex onsets, where it goes back to PM *x, *χ, or *h, but it is also sometimes found in the coda position (word-finally only), where it can continue PM *h or zero (§9.1.1.11).

The only known variety that preserves the original (Proto-Wichí) distribution of PW *χ and *h is 'Weenhayek (Claesson 1994: 19–25), where its reflexes are represented as x and h in this book. Note, however, that /x/ appears to surface as uvular ([χ]) at least after an å, as can be inferred from the following statement by Claesson (1994: 19–20, fn. 23): “the reader should be aware that there is a clear phonetic difference between the fricative sound of, for example, instance, ?åj [our ?åx – A.N., J.C.] ‘your skin’ and the corresponding one in tij [our tix – A.N., J.C.] ‘(s)he digs it’. In the groups of sounds represented in this paper by [x] and [xw], the nonlabialized fricative produced after [a] seems to come nearest to the uvular position”.

Most other varieties of Wichí retain the PW opposition between two guttural fricatives in the onset position only (the reflex of PW *χ is variably represented as x or χ; the reflex of PW *h is variably represented as h or h), but not in codas: all dialects except 'Weenhayek share the loss of word-final PW *h.

(526) Loss of word-final PW *h in the Wichí dialects (Terraza 2009a,b, Censabella 2009, Nercesian 2014, Claesson 2016)

- a. PW *k'á'lah ‘lizard’ > 'Wk k'á'lah, but Rivadavia [k'á'la], LB *tʃa'la*
- b. PW *k'anhóh ‘armadillo’ > 'Wk k'añóh, but Rivadavia [k'áñu], LB *tʃ'anyu*
- c. PW *-qoh ‘mother’ > 'Wk -qoh, but Rivadavia [-'qu], LB -qu
- d. PW *-qhájhih ‘pocket’ > 'Wk -qʰáçih, but Bazán [nqoh'ni], El Sauzalito [nkaʰni], Misión El Carmen [nkaʰni], LB -qʰoçí
- e. PW *tsó'nah ‘brocket’ > 'Wk tsó'nah, but Rivadavia [tsu'na], LB *tsu'na*

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Some authors report only one guttural fricative for certain Wichí varieties, suggesting a merger of PW  $^*\chi$  and  *h  (except where PW  *h  was lost word-finally). A case in point is the Misión Chaqueña subdialect of Vejoz, where [Viñas Urquiza \(1974\)](#) symbolizes the reflexes of both fricatives as  $h$ , and the symbols  $x$  and  $\chi$  are not even employed. For the Paraje La Paz subdialect of Vejoz, [Fernández Garay \(2006–2007\)](#) reports only one guttural fricative, which is claimed to surface as [h] preceding vowels ([hu'pel] ‘shadow’, [aha'juk] ‘mistol tree’), as [h] ~ [x] preceding a consonant ([opah'tit] ~ [opax'tit] ‘I squeeze’), and as [x] ~ [χ] before a pause ([asi'nax] ~ [asi'naχ] ‘dog’). In the variety of Misión Santa María, [Spinelli \(2007\)](#) reports that [h] and [x] freely vary between vowels ([otsa'huje] ~ [otsa'xuje] ‘I listen’) and before a consonant ([tsoh'nat] ~ [tsox'nat] ‘knife’); word-finally, [x] is reported to freely vary with [χ] ([la'kox] ~ [la'kox] ‘foam’); word-initially, only [h] is attested ([ho'san] ‘ax’, [hoki'nax] ‘dove’). In her description of the Guisnay dialect as spoken in Misión La Paz, [Avram \(2008\)](#) posits a phoneme /h/ with two allophones, [h] (word-initially and word-medially, as in [ahāt] ‘devil’) and [x] (word-finally and – rarely – word-medially, as in [isaxije] ‘handsome’), though she gives no explanation for the fact that both allophones occur between vowels. We are not convinced that PW  $^*\chi$  and  *h  actually merged in Guisnay and Vejoz: recall that PW  $^*\chi$  in onsets was a low-frequency segment in the protolanguage, and it is thus possible that [Viñas Urquiza \(1974\)](#) and [Fernández Garay \(2006–2007\)](#) simply missed the opposition in question, whose functional load is in any case expected to be very low. This is confirmed by an inspection of another source on Vejoz, [Gutiérrez & Osornio \(2015\)](#), which systematically employs the grapheme <h> where we reconstruct  *h  (except, of course, when  *h  is lost word-finally), and the grapheme <j> where we reconstruct  $^*\chi$ , including the onset position, as in <lew'ijiyej> ‘to be startled’ ([Gutiérrez & Osornio 2015: 37](#)), from PW  $^* -wí'χij-eχ$ . It remains to be established whether any Wichí dialect has effectively merged PW  $^*\chi$  and  *h .

In Lower Bermejeño Wichí, there is a further process involving morpheme-final instances of /χ/ preceded by front vowels. In such cases, /χ/ surfaces as [x] when it occurs in the coda position, as we have seen above. However, when it resyllabifies as an onset before a vowel- or a /h/-initial morpheme, /χ/ palatalizes to [ʃ] in Lower Bermejeño ([Nercesian 2014: 109–111](#)), as the following examples show.

(527) Southeastern Wichí (Lower Bermejeño) ([Nercesian 2014: 110–111](#))

- a. ?i-lex-ex [?i'leʃeχ]  
3.I-wash-APPL  
's/he washes it with'

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- b.  $\eta\text{-}\chi\text{-}hen$  [ŋ̥leχen]  
1-wash-HEN  
'I wash them'
- c.  $?i\text{-}\chi\text{-}hu$  [ʔileχu]  
3.I-wash-APPL  
's/he washes it from inside'
- d.  $?i\text{-that-}\chi\text{-}hu$  [ʔit̥a'χeʃu]  
3.I-throw-APPL-APPL  
's/he washes it from inside'
- e.  $\eta\text{-tʃox-}\chi\text{-}e$  [ŋ̥tʃoxeʃe]  
1-bring-APPL-LOC  
's/he barters it'
- f.  $^{\text{nojix}}\text{=na}$  [^nojixa]  
path=this  
'this path'
- g.  $ha\text{-?a-qa-tuweχ-hi}$  [hã, ?aqa, tuweʃi]  
NEG-2.POSS-ALZ-jug-NEG  
'it is not your jug'

We suggest that the positionally conditioned palatalization of /χ/ arose in Lower Bermejeño due to an overgeneralization of an inherited process, whereby /q/ in codas alternates with /tʃ/ in onsets, as in (99) above. Censabella (2009: 138–139) also documents the palatalization of /χ/ (/x/ in her notation) in the varieties spoken in Colonia Muñiz (*tise'lis* 'scissors') and Bazán (*tise'lis* 'scissors', *i tu'wesa* 's/he makes a hole'), as well as – less consistently and with a different outcome – in Teniente Fraga (*i tu'wea* 's/he makes a hole', but *tixe'lis* 'scissors') and Misión El Carmen (*i tu'wex'a* 's/he makes a hole', but *tixe'lis* 'scissors').

## 9.2.1.4 PW *xʷ

Proto-Wichí *xʷ typically yields [xʷ] or [fʷ] in the Wichí dialects (Najlis 1971: 128). Censabella (2009: 138) states that “although the use of both variants is observed in all varieties [i.e. Teniente Fraga, Misión El Carmen, Colonia Muñiz, Bazán, and El Sauzalito – A.N., J.C.] and in all age ranges, it is more common to hear the labiodental realization in the Eastern varieties than in the Western ones [translation ours – A.N., J.C.]”: compare Misión El Carmen [xʷala] and Colonia Muñiz [fʷala] ‘day’ (< PW *xʷala), El Sauzalito [tʃexʷ] and Bazán [tʃefʷ] ‘sweat’

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(< PW **k^júx^w*). Free variation between [x^w] and [f^w] is also documented in Misión Santa María: [f^wih'njo^ɬ] ~ [x^wih'njo^ɬ] 'charcoal', [af^wen'tse] ~ [ax^wen'tse] 'bird' (Spinelli 2007). A third common reflex of PW *x^w is [h^w], as attested in the Misión Chaqueña subdialect of Vejoz (Viñas Urquiza 1974) and in the Misión La Paz subdialect of Vejoz (Avram 2008: 44). All three allophones have been attested in the subdialect(s) of Guisnay described in Fernández Garay & Spinelli (2009: 154), where the phoneme in question is realized as [x^w] ~ [f^w] word-initially (x^wo^ɬjax ~ f^wo^ɬjax 'duck'), as [x^w] ~ [f^w] ~ [h^w] intervocally (ox^wi'lax ~ of^wi'lax 'I scratch myself', ox^we'wet ~ oh^we'wet 'chair'), and as [x^w] word-finally ('tux^w 's/he eats').

Censabella's (2009) claim regarding the geographical distribution of the allophones [x^w] and [f^w] is confirmed by other sources on Wichí. In 'Weenhayek, Claesson (1994) documents only [x^w]. Fernández Garay (2006–2007) reports that [x^w] is predominant in the Paraje La Paz subdialect of Vejoz, where [f^w] has been attested in only one lexeme (and even then it is reported to be in free variation with [x^w]: [qaf^wa'jax] ~ [qax^wa'jax] 'magic'). Moving in the southeast direction, in Rivadavia only [x^w] (alongside its metathesized variant [ʷx]) is attested (Terraza 2009b: 45–46). By contrast, in the southeastern extreme of the Wichí-speaking zone [f^w] is reported as the main allophone of the phoneme in question (Nercessian 2014: 51), where [x^w] is only occasionally found in free variation with [f^w] (laf^wut ~ la[x^w]ut 'her/his musical instrument').

In the varieties of Bazán (younger speakers) and Rivadavia, /x^w/ may surface as prelabialized rather than postlabialized in the coda position:

## (528) Bazán Wichí

- a. /lax^wtʃa/ [laxə'tʃa] (older) ~ [lawx'tʃa] (younger) 'her/his father' (Censabella 2009: 140)
- b. /t̪ex^w/ ['xlexuʂ] (older) ~ ['xlewx] (younger) 'its wing' (Censabella 2009: 140)
- c. /ax^wtsinax/ [awhtsi'nah] 'fork' (Braunstein 2009: 6)
- d. /x^wex^w/ ['hwewh] 'finger' (Braunstein 2009: 6)

Yet in other varieties, /x^w/ may optionally lose labialization in the coda position. The following examples are from Paraje La Paz, but the delabialization in the word for 'father' (529b) is also seen in other dialects, such as 'Weenhayek (Claesson 2016: 60).

## (529) Paraje La Paz Wichí (Fernández Garay 2006–2007)

- a. /t̪ex^w/ ['t̪ex^w] ~ ['t̪ex] 'its wing' (< PW *t-ex^w)

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- b. /ox^wtʃa/ [ox^wtʃa] ~ [ox^wtca] ‘my father’ (< PW *n-x^wk^jah)

In the Rivadavia subdialect of Southeastern Wichí, /x^w/ is delabialized to [x] before a high rounded vowel. For example, Rivadavia [nuxu] ‘all’ (Terraza 2009a: 63) clearly goes back to PW *nox^w-o, as suggested by its cognates in other dialects: LB *nuf^wu*, ’Wk *nox^wo* (Censabella 2009, Nercesian 2014, Claesson 2016).

### 9.2.1.5 PW *t̪

PW *t̪ is articulated as [t̪] in most Wichí varieties. Censabella (2009: 137–138) reports, however, that it is typically realized as [xl] in Lower Bermejeño Wichí as spoken in Colonia Muñiz: *n'xlam* ‘s/he’, *n'xlos* ‘my son’, *xle'tek* ‘her/his head’, *ntsem'xli* ‘I work’, *a'xlu* ‘iguana’. Fernández Garay & Spinelli (2009: 162) document [x̪l] as a free variant of [t̪] in the speech of a consultant from San Luis, a community located not far from Santa Victoria Este, as in *ta'mis* ~ *x̪la'mis* ‘necklace’. Avram (2008: 50–51) explicitly claims that in the Misión La Paz subdialect of the Guisnay dialect of Wichí the sound in question is articulated as a voiceless approximant [l̪] and not as a fricative [t̪], as in [l̪up] ‘its nest’, [oni'pil̪] ‘my stomach’, [qdlqql'tax] ‘turkey’. In ’Weenayek, Claesson (1994: 31) describes the sound in question as [l̪] and analyzes it as an underlying cluster /lh/ (see §9.2.1.7 on other clusters of this type); in this book we represent it as *t̪*.

### 9.2.1.6 Glottalized consonants

In Proto-Wichí, the following glottalized consonants are reconstructed: *p', *t', *ts', *k^j', *q', *k^w' (exceedingly rare), *^ww, *^wl, *^wj, *^wm, and *^wn.

We start by discussing the realization of the glottalized stops and affricates in the dialects of Wichí. These are described as ejective consonants by authors such as Censabella (2009: 128–131) and Nercesian (2014: 49–51, 79–82) for Lower Bermejeño Wichí, Viñas Urquiza (1974) for the Misión Chaqueña subdialect of Vejoz, or Avram (2008) for the Misión La Paz subdialect of Guisnay, and we reconstruct this state of affairs for Proto-Wichí. Some dialects, however, appear to have innovated in transforming ejectives into implosives, at least at some points of articulation.

This process is most advanced in the ’Weenayek dialect, with its four implosive phonemes. Claesson (1994: 29) reports that the ’Weenayek pronounce what he analyzes as “/p?/, /t?/, /k?/, and /q?/ as glottalic ingresses (implosives), whereas the sounds with fricative release, /ky?/ and /ts?/ [our *k^j* and *ts* – A.N., J.C.], are glottalic egressives (ejectives)”. In her study of the variety spoken in Paraje La Paz, Fernández Garay (2006–2007) documents the glottalized labial

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stop as varying between [ɸ] and [β], the glottalized alveolar stop as varying between [ç] and [d], and the glottalized velar stop as varying between [χ̥] and [g̥], as in [ɸo] 'to roast, to burn'; [si'ɸa] 'soldier'; [tso'ɸa] ~ [tso'βa] 'heel bone'; [χ̥un] 'hard'; [o'çek] 'I eat'; [çi'kʷa] ~ [çi'kʷa] 'swollen'; [du'χu] ~ [du'χu] 'her/his urine'; [χ̥o'nek] 'sweet'; [xʷa'χ̥an] 'blue'; [χ̥u'se] ~ [χ̥u'se] 'jaw'. The reflex of PW *k̥, on the other hand, is apparently articulated as the plain affricate [tʃ], as in [otʃo'te] 'my ear'. Deglottalization may affect other consonants as well, as in [la'qe] 'it shines' (< PW *laq'ẽ(?)).

In some dialects, the implosive realization is restricted to the reflexes of *p̥ and *t̥, but not to those of the glottalized consonants articulated further back. For example, [Terraza \(2009b: 34–35\)](#) explicitly claims that in the Rivadavia sub-dialect of Southeastern *Wichí* the labial and dental glottalized stops [b̥], [d̥] are articulated as implosives rather than ejectives, whereas PW *ts̥, *k̥j̥, and *q̥ are deglottalized to ts̥, k̥j̥, q̥ in that variety (as in *tatsi* 'rufous hornero', *ha-k̥jute* 'your ear', *la-qax* 'her/his mouth'). Similarly, [Censabella \(2009: 128–131\)](#) documents implosive reflexes of *p̥ and *t̥ in the varieties of El Sauzalito ([mu'bi] 'white heron', [di'san] 'its flesh, meat') and Teniente Fraga ([mu'bi] 'white heron', [di'san] 'its flesh, meat'); unlike in Rivadavia, these varieties do not show systematic deglottalization of the remaining glottalized stops (El Sauzalito *ts̥*, *k̥j̥*, *k̥*; Teniente Fraga *ts̥*, *k̥j̥* ~ *ts* ~ *?tc*, *k̥*). In their description of the variety spoken by a consultant from Ingeniero Juárez, [Cayré Baito & Carpio \(2009\)](#) systematically transcribe the reflex of PW *t̥ as [d̥] (no data on other points of articulation are available in the cited work).

The variety spoken in Misión El Carmen is unusual in that it debuccalizes PW *t̥, *k̥j̥, and *q̥ to [?], [?] ~ [j̥], and [?], respectively ([Censabella 2009](#)). PW *ts̥ is preserved as an ejective affricate [ts̥] in Misión El Carmen, whereas the reflex PW *p̥ is quite unexpectedly attested as [d̥] (*sic*) in the only available example, [mu'di] 'white heron'. The debuccalization has also been attested in [Fernández Garay \(2006–2007\)](#) as an optional phenomenon in the variety of Paraje La Paz, as in [?u'se] 'jaw' (< PW *-q̥'use) alongside [χ̥u'se] ~ [χ̥u'se]; [?i'kʷa] 'swollen' (< PW *t'ukʷa ~ *t'ikʷa) alongside [di'kʷa] ~ [di'kʷa]. [Fernández Garay & Spinelli \(2009: 167–168\)](#) report several examples of debuccalization in the variety of Lapacho Mochó, as in *o?ahlitſu* 'my tongue'.

Finally, [Censabella \(2009: 125\)](#) also reports that in some cases glottalized stops may be optionally articulated as aspirated: Colonia Muñiz [la'p̥i] ~ [la'pʰi] 'tayra', El Sauzalito [t̥i] ~ [tʰi] 'its liquid', Misión El Carmen [k̥a] ~ [kʰa] ~ [q̥a] 'no'.

The fate of the glottalized sonorants *ʷw, *ʷl, *ʷj, *ʷm, and *ʷn in the dialects of *Wichí* is less clear. These consonants are preserved in 'Weenhayek as described

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by Claesson (1994, 2016), in the Misión Chaqueña subdialect of Vejoz as described by Gutiérrez & Osornio (2015), in Lower Bermejeño Wichí as described by Nercesian (2014), and in the Misión La Paz subdialect of Guisnay as described by Avram (2008). Other sources that deal with the same varieties, such as Viñas Urquiza (1974) and Braunstein (2009), may at times fail to document the glottalization contrast in sonorants, possibly due to mistranscription on part of non-Wichí researchers. The phonological descriptions of other Wichí dialects do not mention the existence of glottalized sonorants and usually transcribe the consonants in question as plain sonorants. Examples include Paraje La Paz [wo'na] 'kind of bee (*bala*)', ['wet] 'place', ['wen] 'to find', [tsa'la] 'lizard' (Fernández Garay 2006–2007); Rivadavia -*nojix* 'road', *halo* 'tree', *wahat* 'fish', *ja-wen* 'we see' (Terraza 2009b: 68, 146, 157, 220). In Misión Santa María, Proto-Wichí glottalized sonorants are usually reflected as plain sonorants, as in [ha'la?] 'tree', [wo'ji:s] 'blood', but occasionally the clusters of the shape [?C] are attested, as in [hi?no] 'man' (Spinelli 2007).

In the word-final position, glottalized sonorants merge with their plain counterparts in most varieties of Wichí, or at least most sources do not transcribe the distinction in a consistent way. Claesson (2016) is the most reliable source in this regard. Note that the plain sonorants of Proto-Wichí are devoiced before a pause in 'Weenhayek, whereas the glottalized sonorants are realized as sequences of the type [C?] in that position: PW **hósa*'n 'ax' > 'Wk *hósa*'n (phonetically [hõ:san?]), PW **k^juthá*'n 'thistle' > 'Wk *k^jut^há*'n [*k^ju't^hā:n?*], but PW **η-jáhin* 'I watch' > 'Wk *ʔo-jáhiŋ* [ʔoja:hĩn] (Claesson 2016). Sequences of the type [C?] before a pause have also been attested in the Misión La Paz subdialect of Guisnay, as in [hõ:san?] 'ax' and [*k^ju'tan?*] 'thistle', but since they also show up in words that originally ended in a plain sonorant ([*oja:hĩn?*] 'I watch'), it is not clear to us that Guisnay retains the original opposition. Other dialects, such as Lower Bermejeño, have entirely lost the contrast in question in codas: LB *husan* 'ax', *tf'it^han* 'thistle', *η-jahin* 'I watch' (Nercesian 2014).

### 9.2.1.7 Consonants plus PW **h*

In Wichí, underlying sequences of plain supraglottal consonants (stops or nasals) and /h/ (in some analyses, /ħ/) in the onset position are typically articulated as single sounds (aspirated stops or devoiced nasals). Some authors, such as Nercesian (2014), map the resulting sounds to independent phonemes, whereas others, such as Claesson (1994), analyze them as underlying consonant clusters. The following vowel is phonetically nasalized at least in some dialects thanks to rhinoglottophilia (§9.2.2.6). No sequences involving a fricative followed by */h/ existed in

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Proto-Wichí thanks to a diachronic sound change whereby */h/ was deleted after fricatives (§9.1.1.16).

In 'Weenhayek, Claesson (1994: 29, 31) analyzes the sounds in question as underlying clusters with /h/ as a second element. Of these, /ph/, /th/, /tsh/, /kh/, /k^hh/, and /qh/ are phonetically realized as aspirated consonants. The clusters involving a sonorant and /h/ are realized with a devoiced nasal phase: /mh/ [m̩m], /nh/ [n̩n], /wh/ [n̩w], /jh/ [n̩j], /lh/ [l̩l]. In this book, these sounds are represented as *p^h*, *t^h*, *ts^h*, *k^h*, *k^{jh}*, *q^h*, *m̩*, *n̩*, *l̩*, *ç*, and *ɺ*.

In Lower Bermejeño Wichí, Nercesian (2014: 49–53) ascribes phonemic status to the following consonants: /p^h/, /t^h/, /ts^h/, /q^h/, /n̩/ (optionally articulated as breathy voiced [n̩]), /j̩/, /w̩/. The sounds [m̩] (also pronounced as breathy voiced [m̩]) and [tʃ^h] are claimed by Nercesian (2014) to be allophonic realizations of /mh/ and /tʃh/, respectively, as in *nomen* ‘they come’ (underlying /nom+hen/) and *totʃ^hajax* ‘s/he worships a god’ (no underlying representation given). In this book, /j̩/, /w̩/ are represented as *ç* and *ɺ*.

In the Rivadavia subdialect of Southeastern Wichí, Terraza (2009b: 27–30) identifies the aspirated stops /p^h/, /t^h/, /q^h/ as phonemes. PW *tsh is reflected as *ts* in Rivadavia, as in *tsot-oj* ‘animals’, *watsan* ‘green’. The reflex of PW *k^h in Rivadavia is unknown. As for the sequences of a nasal and /h/, Terraza (2009b: 38–41) analyzes the instances of [m̩] and [n̩] as /mh/ and /nh/ (or /m̩h/ and /n̩h/ in Terraza 2009a) when there is morphological evidence that clearly shows that there is a morpheme ending in a nasal and another one starting with /h/ (/h̩/). In her discussion of the tautomorphemic occurrences of [m̩] and [n̩] (as in *neñe* ‘not anymore’, *nete* ‘injure’, *ponon* ‘pepper’, *atsiña* ‘woman’), Terraza (2009b: 41) states that the low number of examples makes it implausible to posit /m̩/ and /n̩/ as phonemes and concludes that these segments are “residues of a phonological opposition that no longer exists”. The Rivadavia reflex of PW *jh is articulated as a voiceless nasalized approximant [j̩] ~ [h̩j̩], considered by Terraza (2009b: 48) and Terraza (2009a: 79) to be a realization of /jh/, and is attested in roots such as *h̩w̩isju* ‘ember’, *ijox* ‘some’, *-ejk'o* ‘to sink’, *ijot* ‘clay’, among others.¹³ Finally, the reflex of PW *wh in Rivadavia is documented as [w̩] and analyzed as /hw/ or /wh/, as in *taw̩ajej* ‘s/he gets married’, *taw̩ijej* ‘s/he talks’.

In other dialects, the reflexes of the clusters of the shape *Ch are not so thoroughly documented. For example, the variety of Paraje La Paz is reported to

¹³In the closely related variety of Southeastern Wichí spoken by Cayré Baito & Carpio's (2009) consultant from Ingeniero Juárez, the reflex of PW *jh is documented as a voiced nasalized approximant [j̩]: [l̩j̩en] ‘they are alive’, [t̩k̩et̩j̩en] ‘we cook’, [t̩et̩j̩id̩e] ‘they do not lose’, [j̩e̩j̩id̩e] ‘they are not sharpened’, [te̩j̩l̩] ‘forest’, [f̩e̩j̩o] ‘charcoal’, [ni̩j̩ɔ̩] ‘ropes’, [n̩ɔ̩j̩ɔ̩] ‘footprints’ (Cayré Baito & Carpio 2009: 102–103).

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lack aspirated stops (Fernández Garay 2006–2007); concrete examples of deaspirated stops involve PW **tsh* > *ts*, as in [wa'tsan] 'green', [na'tsas] 'children', and PW **ph* > *ɸ* in [otaj'ɸa] 'I sit'. As for Proto-Wichí clusters of the shape "sonorant + **h*", all available examples involve PW **nh* (variably reflected as *n* or *hn*) or PW **jh* (reflected as *hnj*): [na'tek] 'tusca bush', [an'jax] 'wild bean', [tsoh'nat] 'knife', [hoh'nat] 'earth', [ahnala'tax] 'capybara', [oh'nus] 'my nose', [useh'na] 'anco squash', [ih'njat] 'clay'. In the variety of Misión Santa María, at least PW **tsh* and **qh* are deaspirated, as in [lu'tsa] 'girl', [wa'tsan] 'green', [tsa'wet] 'animal', [sila'ka] 'wild cat'; PW **nh* and PW **jh* are reflected as preaspirated nasals in that variety: [hoh'nat] 'earth', [tsoh'nat] ~ [tsox'nat] ~ [tsoh'nat] 'knife', [oh'nus] ~ [õh'nus] 'nose', [tah'ní] 'mountain', [f'ih'njoɬ] ~ [x'ih'njoɬ] 'embers' (Spinelli 2007). In the Misión La Paz subdialect of Guisnay, aspirated stops have not been attested in the onset position (Avram 2008), suggesting that Proto-Wichí clusters of the shape "stop + **h*" may have undergone deaspiration, as in [?na'tses] 'boys'. At least the clusters **mh*, **nh*, **jh*, however, are retained as voiceless nasals *m*, *n*, *n̪* in Misión La Paz: [lawo'maj] 'gorges', [k'u'mas] 'workers', [pā'nan] 'red pepper', [tso'nat] 'knife', [hō'nat] 'earth', [o'ñaq] 'sachasandía fruit', [h'w'iñ'ol] 'charcoal', [ta'ñ'i] 'forest'; Avram (2008: 98) also notes that voiceless nasals may be optionally realized as voiced. The reflex of PW **wh* in Misión La Paz is documented as *h^w*: [to'h'waj] 'pots', [k'o'h'waj] 'holes'. Note, however, that PW **wh* > *h^w* does not completely merge with PW **x^w* > *h^w*: the following vowel is nasalized in the former situation but not in the latter.

Proto-Wichí also allowed clusters of the shape **/Ch/* in the word-final position, the options being PW **j^h* (underlying **/jh/*) and **l^h* (underlying */lh/*). PW **j^h* is consistently reflected as voiceless *ç* in 'Weenhayek, where it contrasts with PW **j* > 'Wk *j?*: compare 'Wk *ʔináç* 's/he bathes' and *tapáj?* 'it is bitter'. In all other varieties of Wichí, PW **j^h* and **j* merge as *j*.

As for PW **l^h*, both *l* and *ɬ* are found throughout the Wichí-speaking zone. These reflexes are distributed as follows. In 'Weenhayek and in the variety of Misión Santa María, only *ɬ* is found: 'Wk *qatétsəɬ*, Santa María [kate'tseɬ] 'stars'; 'Wk *x'wíçóɬ*, Santa María [f'ih'njoɬ] ~ [x'ih'njoɬ] 'embers'; 'Wk *ʔo'jiɬ*, Santa María [o'jiɬ] 'I die'; 'Wk *ʔámet* (rare), Santa María [a'meɬ] 'you guys' (Spinelli 2007, Claesson 2016). In the varieties of Paraje La Paz (Vejoz) and Misión La Paz (Guisnay), by contrast, only the voiced reflex is attested: Paraje La Paz [kate'tsel] 'star', [hu'pel] 'shadow', [a'mel] 'you guys', [há'mel] 'they', [jil] 'dead' (Fernández Garay 2006–2007); Misión La Paz [qate'tsel] 'stars', [há?late'tsel] 'tree trunks', [h'w'iñ'ol] 'charcoal', [?noł'a'mel] 'we (exclusive)' (Avram 2008). Some dialects show both *l* and *ɬ* as possible reflexes. A case in point is the Lower Bermejeño dialect, where Nercesian (2014: 52) states that *ɬ* varies with *l*, especially in fast speech, as in

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[h̪i'ñuł] ~ [h̪i'ñuł] 'men', [ʔa'mił] ~ [ʔa'mił] 'you guys'. This seems to also be the case in the closely-related Rivadavia subdialect of Southeastern Wichí as documented by [Terraza \(2009b\)](#): compare *hepel* / *-qa-mpel* 'shadow', but *jił* 's/he dies', *hinu-ł* 'men', *-xʷut* 'flute'. Variation is also attested in the Misión Chaqueña subdialect of Vejoz, where [Viñas Urquiza \(1974\)](#) mostly documents the voiced reflex *l*, as in *hupel* 'shadow', *-hʷol* 'flute', *-pil* 'to return hither', *japil* 'to return thither', *jił* 's/he dies', *o-ł-am-el* 'we (exclusive)', *n-am-el* 'we (inclusive)', *∅-am-el* 'you guys', *ł-am-el* 'they'; the voiceless reflex is documented in *tſot* 'locust'. In [Gutiérrez & Osornio's \(2015\)](#) dictionary of the same variety, the voiced reflex is found in *o-ł-am-el* 'we (exclusive)', *n-am-el* 'we (inclusive)', *∅-am-el* 'you guys', *ł-am-el* 'they', whereas the voiceless reflex is documented in *hupel* 'shadow', *-pil* 'to return hither', *tſot* 'locust', *katets-eł* 'stars'.

### 9.2.1.8 Word-initial consonant clusters

The word-initial clusters **k'łt*, **tk'ł*, and **qs* have changed in all Wichí dialects: in Southeastern Wichí they are resolved by the epenthesis of *i*, *a*, and *a*, respectively, whereas in all other varieties the first element of these clusters is simply deleted. Four examples are currently known: PW **k'łtá'nih* 'Chaco tortoise', **k'łtéta* 'white algarrobo fruit (*Prosopis elata*)', **tk'énax* 'mountain', and **qséł-tax* 'chequered woodpecker'. Their reflexes are affected by vowel epenthesis in Lower Bermejeño (*tſita'ni* 'Chaco tortoise', *tatſenax* 'mountain', *tatſenax* 'mountain', *qasełtax* 'chequered woodpecker') and in Rivadavia (*tak'énax* 'mountain'), as attested in [Nercesian \(2014\)](#), [Braunstein \(2009\)](#), and [Terraza \(2009b\)](#). The same reflex is seen in the form *tſiteta* 'white algarrobo fruit', documented in an unspecified location in Salta by [Suárez \(2014\)](#). In 'Wéenhayek, Vejoz, and Guisnay the clusters in question are rather eliminated by means of consonant deletion. Examples from 'Wéenhayek include *tá'nih* 'Chaco tortoise', *téta?* 'white algarrobo fruit', *k'énax* 'mountain', and *séłtax* 'kind of small woodpecker with a white crest' ([Claesson 2016](#)). In the Misión Chaqueña subdialect of Vejoz, one finds *ta'ni* 'Chaco tortoise' and *tſenah* 'mountain' ([Viñas Urquiza 1974](#), [Gutiérrez & Osornio 2015](#)). Forms from other, understudied varieties that show the same kind of sound change include Misión La Paz [k'ē'nax], Misión Santa María [tce'nax] ~ [tſe'nax] 'mountain' ([Spinelli 2007](#), [Avram 2008](#): 67).

There are also a few roots where it is possible to reconstruct word-initial clusters of the shape **FW*, where *F* stands for a fricative and *W* for a labial consonant. These are resolved by an epenthetic vowel, whose quality depends on the dialect. In Lower Bermejeño (but not in the closely related Rivadavia subdialect), the epenthetic vowel is *i* in such cases. In the Misión Chaqueña subdialect of

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Vejoz, the epenthetic vowel is *i* ~ *u* after *s* but *u* after *h*. In 'Weenhayek and in the Misión La Paz subdialect of Guisnay, the epenthetic vowel is *u* even after *s*. In the Paraje La Paz subdialect of Vejoz, the epenthetic vowel is *u* at least after *h* (no examples involving *s* are documented in that variety in our sources). Finally, Rivadavia shows *u* (< **o*) after *s* and *e* (< **u*) after *h*. The known examples are listed in Table 9.5.

Table 9.5: Vowel epenthesis between a fricative and a labial

	'ant'	'dove'	'shadow'	source
Proto-Wichí	*swánaχ	*spúp	*hpé ^h	
'Weenhayek	suwán̩-is	supúp	hupé ^h	Claesson (2016)
Misión La Paz	suwaña-s	—	—	Avram (2008)
Misión Chaqueña	suwanah	—	hupel	Viñas Urquiza (1974)
Misión Chaqueña	siwaña-s	sipup	hupe ^h	Gutiérrez & Osor- nio (2015)
Paraje La Paz	—	—	hupel	Fernández Garay (2006–2007)
Rivadavia	suwana, suwaña-s	—	hepel	Terraza (2009b)
Lower Bermejeño	siwaña-s	sipep	hipe ^h	Nercesian (2014), Spagarino et al. (2013 [2011])

### 9.2.1.9 Obstruent loss before glottalized sonorants

Some dialects, notably Southeastern Wichí, have done away with the Proto-Wichí clusters such as **p'l*, **q'l*, **q'j* by deleting their first element. For example, words such as PW **[j]óp'le* 'to hiccup', *-wáq'lah 'nephew', *-wáq'lanih 'niece', **[t]áq'lej* 'to fight', **xʷóq'jaχ* 'Muscovy duck' are reflected in the Lower Bermejeño dialect as *-ju'le*, *-wa'la*, *-wa'lani*, *[t]o'lej-APPL*, *fʷu'jaχ* (Braunstein 2009, Nercesian 2014). The same phenomenon is attested in some other varieties, as in Misión Santa María [owa'la?] 'my nephew' (Spinelli 2007), Lapacho Mocho [ta?le'hnjen] alongside [takle'hnjen] 'they fight', [xʷo'jah] alongside [xʷok'jah] 'duck' (Fernández Garay & Spinelli 2009: 163–164, 167). In the Rivadavia subdialect of Southeastern Wichí, the reflex of PW **η-́jóp'le* 'I hiccup' has been unexpectedly attested as *η-jutle* (Censabella 2009: 134). By contrast, varieties such as 'Weenhayek and Vejoz preserve the clusters in question, though Vejoz may lose the glottal-

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ization in the sonorant: *-wakla* ‘nephew’, *-waklani* ‘niece’, *[j]ople* ‘to hiccup’, *h^wok(j)e-tah* ‘duck’ (Hunt 1913a, Viñas Urquiza 1974, Gutiérrez & Osornio 2015).

Before non-glottalized sonorants, the change does not usually take place; for example, PW **-t-’otle* ‘heart’ and **wáplu* ‘she is pregnant’ consistently preserve the clusters *tl* and *pl* in the daughter lects, as in LB *-t-’utle*, *waple* (Nercesian 2014: 97).

The cluster **tn* is typically preserved as *tn*, but it may also evolve to *kn*, as in Paraje La Paz [tok’nah] ‘toad’ < PW **tátnay*.

### 9.2.1.10 Insertion and deletion of *?* before a pause

In Proto-Wichí, **?* was contrastive in the word-final position, as evidenced by pairs such as **t-ó?* ‘its seed’ vs. **t-ó* ‘his penis’. This is preserved at least in the Lower Bermejeño variety of Wichí as documented by Nercesian (2014), as in LB *-t-u?* ‘seed’ vs. *-t-u* ‘penis’ (Nercesian 2014: 212–213).¹⁴

Other Wichí dialects are less conservative in this regard. For example, ‘Weenhayek no longer allows vowels before a pause (Claesson 1994: 25–26): an epenthetic *?* is systematically inserted after erstwhile utterance-final vowels (or after **j*), and ‘Wk *t-ó?* ‘its seed’ is now homophonous with *t-ó?* ‘his penis’ (Claesson 2016: 75). In the Rivadavia subdialect of Southeastern Wichí, *?* is automatically inserted after utterance-final stressed vowels, even in borrowings, such as *k^jesu?* ‘cheese’ (from Spanish *queso*), *klistina?* ‘Cristina’; unlike in ‘Weenhayek, words with non-final stress, such as *i^x’ala* ‘morning’, do not show the *?*-epenthesis (Terraza 2009a: 48–51). In the varieties of Misión Santa María and Misión La Paz, the epenthesis of *?* is found in some words but not in others: Misión Santa María [i’ma?] ‘s/he sleeps’, [we’ja?] ‘s/he flies’ vs. [a’ma] ‘rat’, [hu’tsa] ‘young woman’; Misión La Paz [oh^wa’po?] ‘my shoulder’, [a’lu?] ‘iguana’, [a:ma?] ‘rat’ vs. [tun’te] ‘stone’, [pi’nu] ‘sugarcane’, [k’ek^je] ‘monk parakeet’ (Spinelli 2007, Avram 2008). The *?*-epenthesis is only rarely found in the variety of Paraje La Paz ([a’ma?] ‘rat’, [ha’la?] ‘tree’ are the only examples documented in Fernández Garay 2006–2007). More research is needed on the varieties such as those of Misión Santa María, Misión La Paz, and Paraje La Paz in order to verify the status of the word-final instances of [?], with a special focus on pairs such as **t-ó?* ‘its seed’ vs. **t-ó* ‘his penis’. Note that in all these dialects the *?*-epenthesis typically fails to occur in words that have diachronically lost PW **h* in the word-final position (§9.2.1.3), as in Misión Santa María [o’ko] ‘my mother’, [o’?o] ‘hen’ (< PW **ñ-qoh*, **hó?oh*), Misión La Paz [otk^jum^jli] (< PW **ñ-t-k^jum-tih*).

¹⁴The distinction is not consistently represented in Braunstein’s (2009) vocabulary of the Bazanero subdialect of Southeastern Wichí.

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In the Misión Chaqueña subdialect of Vejoz, by contrast, [?]? appears to have been eliminated in the word-final position even in words that originally ended in a glottal stop, as in *ta* < PW **ta?* ‘louse’ (Viñas Urquiza 1974: 64). As a result, Viñas Urquiza (1974) and Gutiérrez & Osornio (2015) do not document ? in the word-final position in Vejoz at all.

### 9.2.1.11 PW ^{*x-}

In a limited number of words, ’Weenayek ?i- corresponds to zero in other Wichí varieties. While it is tempting to provide a morphological interpretation for this correspondence (e.g. by positing a fossilized semantically empty prefix ?i- in Weenayek), external comparanda in other Mataguayan languages suggest instead that one must seek a phonological explanation for it. In all likelihood, the correspondence ’Wk ?i- ~ other Wichí dialects Ø- results from attrition of phonological material at the left margin of the word: compare Nivaclé *xiβe'kla* ‘moon’, *ji'jekle* ‘tapir’, *snåβåp* ‘spring’ and ’Wk ?i^wé'lah, ?i^jé'lah, ?iⁿáwop ~ LB *wela, jela, nawup*. It is unclear at present how the segment in question was articulated in Proto-Wichí (some possibilities that we have considered include *?-, *?^w-, ultra-short *?^j-); we symbolize it with an ad hoc character ^{*x-} for the time being. It has been reconstructed in the following roots: ^{*x}wé'lah ‘moon’, ^{*x}jé'lah ‘tapir’, ^{*x}náwop ‘spring’, ^{*x}máwoh ‘fox’, ^{*x}náte ‘rabbit’, ^{*x}x^wála ‘sun, day’, ^{*x}májeq ‘thing, ghost’, ^{*x}sp(')ólop ‘thrush’, ^{*x}ník'ú ‘black-legged seriema (*Chunga burmeisteri*)’, ^{*x}nátaχ ‘tusca fruit’ (whence ^{*x}nát-eq ‘tusca bush’).

The Lower Bermejeno subdialect of Southeastern Wichí always loses ^{*x-}: *we'la* ‘moon’, *je'la* ‘tapir’, *nawup* ‘spring’, *mawu* ‘fox’, *note* ‘rabbit’, *f^wala* ‘sun, day’, *ma(je)q* ‘thing’, *sipulup* ‘thrush’, *nataχ* ‘tusca fruit’, *netʃ'e* ‘black-legged seriema’ (Nercesian 2014, Spagarino et al. 2013 [2011]). This is corroborated by Censabella (2009: 138), who documents forms such as Misión El Carmen [x^wala], Colonia Muñiz [f^wala] ‘day’. Total loss of ^{*x-} is also found in the variety of Misión Santa María: [na'wop] ‘spring’, [ma'wo] ‘fox’, [ma'jek] ‘ghost’ (Spinelli 2007).

In the Rivadavia subdialect of Southeastern Wichí, ^{*x-} is usually lost: *jela* ‘tapir’, *nawup* ‘spring’, *note* ‘rabbit’, *maq* ‘thing’; in three cases, however, the vowel *i* is found as its reflex instead: *imawu* ‘fox’, *i'x^wala* ~ *x^wala* ‘sun, day’, *inek'í* ‘black-legged seriema’ (Terraza 2009b). A similar tendency is found in the Paraje La Paz subdialect of Vejoz: ['mak] ‘something’, [síʃo'lɔp] ‘thrush’, [na'tek] ‘tusca bush’, but [i'je'la] ‘tapir’; note that the latter root shows up without an *i* in the derivative [jela'tax] ‘horse’ (Fernández Garay 2006–2007).

In the Misión Chaqueña subdialect of Vejoz, *i* and Ø are almost equally frequent as reflexes of PW ^{*x-}. The available examples in Viñas Urquiza’s (1974)

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work include *iwela* ‘moon’, *ijela* ‘tapir’, *ihʷala* ~ *hʷala* ‘sun, day’, *nawop* ‘spring’, *maʷwo* ‘fox’, *mak* ~ *majek* ‘thing, something’, *sip’olop* ‘thrush’, *natek* ‘tusca bush’; the noun *hnåte* ~ *hnote* ‘rabbit’ unexpectedly shows *hn* instead of **n*. **Guatiérrez & Osornio’s (2015)** vocabulary of the same variety has *i* in a different set of words: *inawop* ‘spring’, *wela* ~ *iwela* ‘moon’, *hʷala* ~ *ihʷala* ‘sun, day’, *nåte* ~ *inåte* ‘rabbit’, *natek* ‘tusca bush’; in two examples, **xʷm* reflected as *’m*: *’mawo* ‘fox’, *’mak* ‘thing’.

Finally, as noted above, ’Weenhayek consistently shows the reflex *?i*: *?iwé’lah* ‘moon’, *?ijé’lah* ‘tapir’, *?ináwop* ‘spring’, *?imáwoh* ‘fox’, *?ináte?* ‘rabbit’, *?ixʷála?* ‘sun, day’, *?imák* ‘thing’, *?imájek* ‘thing, ghost’, *?ispólop* ‘thrush’, *?inátax* ‘tusca fruit’, *?inját-ek* ‘tusca bush’, *?iník’u?* ‘black-legged seriema’ (**Claesson 2016**).

### 9.2.1.12 PW **n-*

Syllabic **n-* is reconstructed in the first-person singular prefix (PW **n-* with verbs, **ñ-* in nouns). It is preserved as a syllabic nasal in some subdialects of Southeastern Wichí, including Lower Bermejeño (**Nercesian 2014**: 52, 98, 163, 223) and Rivadavia (**Terraza 2009b**: 41–42). In fact, it is reported to preserve its syllabicity preceding vowels in the latter variety: *n.i.hi* ‘I am’, *n.i.qa.na* ‘I am here’. **Censabella (2009**: 132, 134, 137–138) documents this realization in Colonia Muñiz, Bazán, and El Sauzalito (all these communities are located within the Lower Bermejeño zone); in Misión El Carmen, *n-* has been attested alongside *ni-*: [n̩skat] ‘I steal’, [n̩kb̩hi] ‘my pocket’, [n̩los] ‘my son’, [n̩tsem̩hi] ‘I work’, but [ni̩k̩im] ‘I am thirsty’ (**Censabella 2009**: 132, 136–138).

In some dialects, PW **n-*, **ñ-* has become a nasal rounded vowel. Note that Wichí does not otherwise have phonemic nasal vowels (though vowels can be allophonically nasalized following a nasal consonant or /h/), meaning that the innovative reflex of the Proto-Wichí syllabic **n* becomes the first (and only) nasal vowel in the inventory of the dialects in question. In ’Weenhayek, the resulting prefix is *?õ-* in verbs, *?õ-* in nouns (but *?õ-* in those affected by the Watkins’ Law), as in ’Wk *?õ-t-a’m* ‘I’, *?õ-tuxʷ* ‘I eat’, *?õ-qoh* ‘my mother’, *?õ-puhxʷah* ‘my brother’ (**Claesson 1994**: 13). In the subdialect of Southeastern Wichí spoken by **Cayré Baito & Carpio’s (2009)** consultant from Ingeniero Juárez, the prefix in question shows up as *õ-*: [õi̩h̩i] ‘I am’, [õj̩en] ‘I fish’, [õd̩ekʷɛ] ‘I search’, [õse̩lit] ‘I feel sleepy’ (**Cayré Baito & Carpio 2009**: 98, 100–101).

In quite a number of (sub)dialects, the first-person prefix is attested as *o-*, with no traces of nasality. This is the case in the variety of Misión Santa María: [omaka’tsi] ‘I lay down’, [otupe’na] ‘I bend down’, [o’tsu] ‘I win’, [otfun’hi] ‘I work’, [o’koj] ‘I dance’, [otf’o’tē] ‘I help’, [osun’hi] ‘I whistle’, [o’tuh] ‘I eat’, [o’jiɬ] ‘I

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die', [o'lam] 'I', [oni'pil] 'my stomach', [otso'te] 'my tooth', [otso'te] 'my ear', [o't-sak] 'my navel', [oku'se] 'my chin', [otſa'ji] 'my waist', [okʷe'tʃ'o] 'the palm of my hand', [o'ko] 'my mother' (Spinelli 2007). The same kind of reflex is documented in Vejoz, including the subdialects of Misión Chaqueña (Gutiérrez & Osornio 2015, Viñas Urquiza 1974: 131) and of Paraje La Paz: [oji'sit] 'I cut', [opot'pe] 'I bury', [ote'nek] 'I sing', [o'qek] 'I eat', [o'qoj] 'I put clothes on', [o'koj] 'I play', [oka'sit] 'I stand', [o'sek] 'I sweep', [o'tsut] 'my walking stick', [otso'te] 'my tooth', [otso'te] 'my ear', [o'kʷej] 'my hand', [o'les] 'my children' (Fernández Garay 2006–2007). Examples from the Misión La Paz subdialect of Guisnay include [otkʷu'hʷi?] 'I am dizzy', [otkʷum'hi] 'I work', [o'kʷim] 'I am thirsty', [o'ten] 'I copy', [otkʷoi'hi] 'I sing', [otkʷui'hi] 'I vomit', [o'hūt] 'I push', [o'hʷut] 'I sharpen', [oja'hīn?] 'I watch', [o'hʷa'po?] 'my shoulder', [o'lip] 'my piece', [owu'ke?] 'my house', [olej'tek] 'my head', [o'kʷej] 'my arm', [o'wex] 'my buttocks', [oni'pil] 'my stomach', [?owo'le?] 'my hair', [opa'set] 'my lip' (Avram 2008). Numerous examples of the prefix *o-* are documented in Fernández Garay & Spinelli (2009: 163–164, 167–168) in the varieties of Lapacho Mocho, Misión San Luis, and El Cañaveral. Similarly, Spinelli (2015) documents only *o-* as the first-person prefix in an article on causatives and applicatives, where all examples come from the varieties of Santa Victoria Este, Misión San Luis, El Cañaveral, and Misión Santa María.

Finally, Viñas Urquiza (1974: 131) describes the first-person prefix in the Tarta-gal subdialect of Guisnay as *no-*, as in *no-’p’ati* 'I punish'. Several apparent examples of this prefix are attested in the variety of Misión Santa María in Fernández Garay & Spinelli (2009: 167–168): *no-qantsete* 'my knee', *no-kaʔis* 'my girlfriend', *no-k’ahlitfu* 'my tongue'; we believe, however, that these tokens contain an indefinite possessor prefix (PW *[?]*nó-*) and not a first-person prefix, since Spinelli (2007) – our primary source on the variety of Misión Santa María – documents only *o-* as the first-person prefix.

### 9.2.1.13 PM *-t-

The third-person possessive and the second-person active prefixes are homonymous in Wichí. While before vowels both consistently take the allomorph /-t/, before consonants their form varies from dialect to dialect.

The most common form is *la-*; it is found in 'Weenhayek (Claesson 2016: 215), Misión Santa María (Spinelli 2007), Misión La Paz (Avram 2008: 87, 93, 95), Vejoz as spoken in Paraje La Paz (Fernández Garay 2006–2007), and in Southeastern Wichí, including Rivadavia (Terraza 2009b: 67, 100), El Sauzalito, Colonia Muñiz, Teniente Fraga, El Sauzalito, Bazán (Braunstein 2009: 48–49), and Lower Bermejeno in general (Nercesian 2014: 163, 223). Nercesian (2014: 53, 120) documents

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[l] as an optional realization in Lower Bermejeño: [la'muq] ~ [l'muq] 'dust (= its powder)', [la'wu] ~ [l'wu] 'her/his neck', [lapa'tf'u] ~ [lpa'tf'u] 'her/his foot', [la'les] ~ [l'les] 'her/his children'.

In Misión El Carmen, the third-person possessive prefix is attested as [la-] or [la-]: [la'ku] ~ [la'k'u^h] 'her/his mother', [la'ʔax] 'her/his mouth' (Censabella 2009: 127, 130).

The form *le-* is attested in Vejoz as spoken in Misión Chaqueña by Viñas Urquiza (1974: 131) and Gutiérrez & Osornio (2015: 29) as well as in Lapacho Mocho by (Fernández Garay & Spinelli 2009: 164). It is also documented by Fernández Garay & Spinelli (2009: 150–151) in the forms [le'nix] 'its smell' and [le'pes] 'its end', but unfortunately the dialectal provenance of these forms is not identified (in total, five varieties are discussed in the cited paper: Paraje La Paz, Misión Santa María, Lapacho Mocho, Santa Victoria Este, and Las Vertientes).

The most divergent form, *ha-*, is documented in Tartagal, as in [ha,watsan'tsejahl] 'her/his life' (Viñas Urquiza 1974: 131).

It seems unproblematic to reconstruct the preconsonantal allomorph of the PW third-person possessive and the second-person active prefix as **ʔ*.

### 9.2.2 Vowels

The Proto-Wichí vowel inventory */i e a å o u/ is virtually identical to that of Proto-Mataguayan, except that PM *ä merged with PM *e as PW *e (see §9.1.2.1).¹⁵ These Proto-Wichí vowels are largely preserved in all dialects except Southeastern. In addition, there appears to have been a somewhat more marginal seventh vowel, which we symbolize as PW *i; it merged with PW *e in the Southeastern dialect and with PW *i in all other dialects (§9.2.2.1).

In the Southeastern dialect, as discussed in §9.2.2.2, the vowels of Proto-Wichí have undergone considerable change thanks to what we dub the Southeastern Wichí vowel shift (cf. Cayré Baito 2015). It likely originated as a pull chain, whereby PW *u was fronted, lowered, and unrounded to e (merging with the reflexes of PM *i and *i), PW *o was consequently raised to u, and PW *å acquired rounding

¹⁵ Najlis (1971: 129–130) offers a reconstruction of Proto-Wichí ("Premataco") vowels that differs considerably from ours; her proposed inventory of Proto-Wichí vowels includes ten phonemes: */i i e ε i a u ɔ o ɔ/. Since the cited work does not present any linguistic data that would substantiate the analysis therein, we do not discuss Najlis's (1971) proposal any further in this chapter. Nercesian & Arellano (2023) reconstruct a six-vowel inventory identical to ours, but their proposal diverges from ours in significant way, notably in their interpretation of the philological evidence. Regrettably, this book was already completed when we learned of Nercesian & Arellano's (2023) study, and it will not be discussed further in this chapter.

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(the prototypical realization of the resulting vowel in the Southeastern dialect is [ɔ] in Rivadavia and Ingeniero Juárez and [o] in Lower Bermejeño).

Minor phenomena involving vowels are discussed in §9.2.2.4 (translaryngeal vowel copying), §9.2.2.5 (vowel lowering before uvulars and glottals), and §9.2.2.6 (vowel nasalization).

### 9.2.2.1 PW *i

The vowel *i is not preserved in any known variety Wichí as an independent phoneme (it is unrelated to the allophone [i] of the phoneme /i/, which occurs in some Wichí dialects after the palatal approximant: /ji/ [jɪ]). It is reconstructed based on the correspondence between /e/ in Southeastern Wichí and /i/ in other dialects. Note that Southeastern /e/ may also reflect PW *e (reflected as /e/ in all Wichí varieties) or PW *u (reflected as /u/ in all varieties except Southeastern). That way, PW *i merges with *e and *u as /e/ in Southeastern Wichí, but with PW *i in all other varieties.

Three clearest examples of PW *i are the roots PW *-t-ík'ju* 'egg', *hilu* 'yica bag', and **ník'ju* 'black-legged seriema (*Chunga burmeisteri*)'. In Southeastern Wichí, these are reflected with [e], as in the following forms: Rivadavia [tɛk'ɛ], [hɛ'le], [inɛ'k'ɛ] (Terraza 2009b: 89–90, 274), Ingeniero Juárez (Barrio Viejo) [tɛtʃɛ], –, – (Cayré Baito 2015: 360), Bazán [tɛtʃ'ɛ], [hɛ'le?], – (Braunstein 2009: 41, 50). In other varieties, one finds [i]: 'Weenhayek [hi:k'ju?], [hĩ:lu?], [?inĩ:k'ju?] (Claesson 2016: 32, 75, 150, 263), Tartagal [ti:tçu], –, – (Cayré Baito 2015: 360), Misión Chaqueña Vejoz [hit'ju?], [hilu], – (Viñas Urquiza 1974: 57, 106).

Phonetically, PW *i must have occupied an intermediary position between *e and *i (maybe IPA [i], but also [ɛ] is a possibility if the prototypical realization of PW *e was closer to [ɛ]). Alternatively, it could have been a diphthong ([eɪ] or the like), as suggested by the Nivaclé and Chorote cognates of PW *-t-ík'ju* 'egg': Ni *-sajk'u*, PCh **-éjk'u?*.

### 9.2.2.2 Southeastern Wichí vowel shift

One of the most notable features of the Southeastern dialect of Wichí is its vowel system. While the vowels *i, *e, and *a of Proto-Wichí are preserved intact,¹⁶ all back vowels change in the following way.

¹⁶There may be slight allophonic differences across dialects involving these vowels. For instance, in Lower Bermejeño /i/ surfaces as [i] following /j/ and /χ/, as in [jik] 's/he goes away', [jɪ'wət] 'slow', [jukʷa'χɪ] 's/he chews'; /e/ lowers to [ɛ] after a uvular consonant, as in [nã'χɛt] 'it is rotten', [t'a:mãχex] 's/he looks after it'; /a/ surfaces as [a] next to a tautosyllabic uvular, as in [qa'mãχ] 'still', [ta,qʰã'χaq] 's/he is strong', [?is'taq] 'white cactus' (Nercesian 2014: 41). In the

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PW **u* merges with PW **e* as *e* (narrow transcription: [e] or [ɛ]¹⁷) in all subdialects of Southeastern Wichí. It is unknown whether this sound change involved any intermediate steps, such as **i* > **ə*, **y* > **ø*, or **v* > **ə*. At any rate, this non-trivial sound change is exceptionless, and examples abound: PW **túnite* ‘stone’, **nap'u* ~ **náp'u* ~ **nap'úh* ‘s/he licks’, **púle* ‘sky, cloud’ > LB *tente* [ten'te], *nap'e* [nã'p'e], *pele* [pe'le] (Nercesian 2014: 161, 278, 459), Rivadavia *tente* [ten'te], *nape* [nã'pe] (Terraza 2009b: 25, 37), Ingeniero Juárez *nap'e* [nã'bɛ], *pele* [pe'lɛ] (Cayré Baito 2015: 367).

PW **o* raises to *ɔ* in Ingeniero Juárez (Cayré Baito 2015: 362) and to *u* in Rivadavia (Terraza 2009b: 49) and Lower Bermejeño (Nercesian 2014: 41).¹⁸ Examples of this sound change include PW **hi'no* ‘man’, **hólo* ‘sand’, **wóq'oh* ‘owl’ > LB *hi'nu* [hĩ'nũ], *hulu* [hũ'lu], *wuq'u* [wu'q'u] (Nercesian 2014: 66, 161), Rivadavia *hinu* [hĩ'nũ], *hulu* [hũ'lu] ‘dust’, *wuqu* [wu'qu] (Terraza 2009b: 25, 217–218), Ingeniero Juárez *hinu* [hĩ'nõ], *hulu* [hõ'lu], *wuk'u* [wu'k'u] (Cayré Baito 2015: 364, 367).

In turn, PW **å* acquires rounding and raises to *ɔ* in Rivadavia (Terraza 2009a: 77) and in Ingeniero Juárez (Cayré Baito 2015: 362), whereas in Lower Bermejeño its prototypical realization is *o* (Nercesian 2014: 41).¹⁹ For simplicity’s sake, we represent the vowel in question as *o* even in the varieties of Rivadavia and Ingeniero Juárez (except in narrow transcriptions). Examples of this sound change include PW **ha'lå* ‘tree’, **nájix* ‘road’ > LB *ha'lo* [hã'lo], *nojix* [nõ'jix] (Nercesian 2014: 66, 110), Rivadavia *halo* [hã'lɔ], *-nojix* [-nõ'jix] (Terraza 2009b: 68, 83), Ingeniero Juárez *halo* [hẽ'lɔ], *nojix* [nõ'jix] (Cayré Baito 2015: 367, 372). As a consequence, Southeastern Wichí no longer has a back low vowel that would contrast with /a/.

Finally, PW **i*, as shown in §9.2.2.1, also merges with PW **e* and **u* as *e* in Southeastern Wichí.

In the variety spoken in Misión El Carmen, only PW **u* and **o* change to *e*, *u*, respectively: PW **-k'óte* ‘ear’, **tsúxʷlaχ* ‘paralytic’ > *?u'te*, *ts(ʰ)exʷə'lax* (Censabella 2009: 125, 130). The reflex of **o* is also attested as [u] following velar stops and nasals in Misión El Carmen (and in El Sauzalito): [a'muɾ?] ‘grain’, [la'kuɾ]

Ingeniero Juárez variety, Cayré Baito (2015: 362) describes the default realizations of /i/, /e/, and /a/ as [i], [ɛ], and [e], respectively, based on instrumental evidence.

¹⁷The mid-low realization [ɛ] is reported for the Ingeniero Juárez variety (Cayré Baito 2015: 362).

In Lower Bermejeño, [e] is the default allophone, whereas [ɛ] is found after a uvular consonant, as in [nã'χet] ‘it is rotten’, [t'a'mãχex] ‘s/he looks after it’.

¹⁸The allophone [ɔ] shows up in Lower Bermejeño only word-finally when stressed, as in [ʔa'tsíñaj'tsɔ] ‘these women’ (Nercesian 2014: 41).

¹⁹The allophone [ɔ] occurs in Lower Bermejeño next to a tautosyllabic uvular, as in [tɔq] ‘food’, [ʔa'qɔχ] ‘it is tasty’, [tɔχ] ‘realis conjunction’ (Nercesian 2014: 41).

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~ [la'kⁱur^b] 'her/his mother', [kⁱur'kuuk] 'butterfly' < PW *[?]amo 'wound', *[?]qoh, *[?]k^jók^wok^w (Censabella 2009: 127, 132). By contrast, PW *[?]å remains as a low vowel in that variety (Censabella 2009: 135–136), and its range of possible realizations includes [a] and [y]: PW *[?]ik^jåt 'it is red', *[?]n-qhájhih 'my pocket' > Misión El Carmen [i'k^jxt], [nka^hni] (Censabella 2009: 127, 137). PW *a is usually reflected as [a], though [a] and [y] have also been attested, suggesting that the contrast between /a/ and /a/ is fading away at least in some environments in Misión El Carmen: PW *jók^was 'tobacco', *qha ~ *qhá 'no', *-qáno 'needle', *-q'áχ 'mouth', *[?]i-sqat 's/he steals' > [ju'kys], ['k^ba] ~ ['q^ba] ~ ['k'a], [ka'nu], [-'ax] ~ [-'ax], [is'kat] (Censabella 2009: 127, 130, 137).

The sound correspondences that arose as the result of the Southeastern Wichí vowel shift are discussed in Messineo & Braunstein (1990) and Cayré Baito (2015), but no attempt at a comparative reconstruction is made in either of these works.

### 9.2.2.3 Vowels outside Southeastern Wichí

The Wichí dialects that did not undergo the Southeastern Wichí vowel shift typically have a vowel inventory composed of six phonemes: /i e a å o u/ (the seventh vowel of Proto-Wichí, */i/, merged with /i/ in these varieties, as discussed in §9.2.2.1). Their typical realizations are, respectively, [i], [e], [a], [å],²⁰ [o], [u]. In the variety of Tartagal, Cayré Baito (2015: 362) reports /i e a u/ to stand for [i ε e u], based on acoustic evidence. In the variety of Misión Santa María, one minor allophone is [ɛ], which occurs as an optional realization of /e/ word-finally, as in [man'se] ~ [man'sɛ] 'boy' (Spinelli 2007). In the Paraje La Paz subdialect of Vejoz, /i e/ can optionally surface as [i ε] in a number of environments ([i]je'l] 'tapir', [oka'sit] 'I stand', [pu'le?] 'sky'); only [ɛ], but not [e], is reported to occur in the latter variety following uvulars ([la'qε] 'it shines'). The vowel /u/ has the unrounded allophone [w], which occurs following glottalized stops: [ona'þw] 'I lick', [ɸwun] 'it is hard' (Fernández Garay 2006–2007).

In addition, the contrast between /å/ and /a/ has been reported to be fading away or altogether non-existent in quite a number of dialects.

For example, Cayré Baito (2015: 359) explicitly claims that no back low vowel has been attested in the variety spoken in Tartagal, and documents forms such as o-t-'an 'I shout', hala 'tree', sip'a 'police', sop'a 'wax', ts'ak 'navel' (< PW *[?]n-t-'án, *ha'lå, *sip'å(?), *sóp'a, *-ts'aq ~ *-ts'áq), suggesting that PW *a and *å merged in Tartagal as a (phonetically [e]).

²⁰Spinelli (2007) represents this vowel as [å] in the variety of Misión Santa María but still describes it as a "low back open unrounded vowel", suggesting that IPA [a] is the correct symbol also in the Misión Santa María variety.

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In the Misión La Paz subdialect of Guisnay, Avram (2008) documents both [a] and [ɑ] but argues that [a] is an allophone of /a/ in that variety, based on the absence of minimal pairs and on the fact that “the consultants also inconsistently produced and identified the back low unrounded vowel [ɑ]” (Avram 2008: 71). In the available corpus of the Misión La Paz variety, there are examples both of [a] going back to PW **a* (as in [hã't̪es] < PW **hat̪es* ‘aloja, alcoholic beverage’, [qalqal̪tax] < PW **qátlqat̪tax* ‘turkey’, [jaq̪d̪tu?] < PW **qá?tu* ‘it is yellow’, [la'qas] < PW **laqas* ‘horsefly’) and of [a] going back to PW *å (as in [?nołam̪et̪] < PW **no-l-ámet̪* ‘one’s word’, [pã'ñan] < PW **pánhan* ‘red pepper’), though in most cases the lexical distribution of [a] and [ɑ] in Avram’s (2008) description does match the state reconstructed for Proto-Wichí ([hõ'san?] < PW **hósa* 'n ‘ax’, [to'h̪w̪ãj] < PW **towh-áj̪h* ‘pots’, [hã'jax] < PW **ha'jáx* ‘jaguar’, [ni'jaqʷ] > PW **níjákʷ* ‘rope’). Although Avram (2008: 71) is unable to determine the conditioning environment for the occurrence of the back allophone, she notes that “the majority of instances of [ɑ] occur before the following phonemes: /s/, /x/, /ʔ/, /q/, and /hʷ/” and that “[i]t also occurs after /q/ and /h/”, leaving the question for future research. We surmise that the Misión La Paz subdialect of Guisnay may actually preserve the contrast between PW **a* and *å, but in some cases PW **a* may have changed into å (especially next to uvulars) and vice versa.

Although /å/ and /a/ are reported to contrast in the Paraje La Paz subdialect of Vejoz, as in the minimal pair *-paq* ‘to paint’ and *påq* ‘here’, Fernández Garay (2006–2007) notes that /a/ may surface as [ɑ] next to a uvular: [qa'lq] ‘cocoí heron (*Ardea cocoi*)’, [wo'taq] ‘necklace’ < PW **qaláq*, *-’wó-t-’aq.

In the variety of Lapacho Mocho, instances of intraspeaker variation of the types [ʌ] ~ [a] (as in [le'tʃas] ~ [le'tʃas] ‘its tail’) and [ʌ] ~ [o] (as in [i'hnjat] ~ [i'hnjot] ‘clay’) have been documented, corresponding to PW *å (Fernández Garay & Spinelli 2009: 164).

In the variety of Misión Santa María as described by Spinelli (2007) and in the Misión Chaqueña subdialect of Vejoz as described by Viñas Urquiza (1974), /å/ and /a/ are documented as contrastive units, but their distribution does not always match the state reconstructed for Proto-Wichí: compare Misión Santa María [a'kas] ‘it is raw’, [i'tas] ‘matches’, [i'hnjat] ‘clay’ and PW **aqas*, **ʔitá-s* ‘fire.PL’, **ʔijhåt* (Spinelli 2007, Fernández Garay & Spinelli 2009: 168). At least in the case of the Misión Chaqueña subdialect of Vejoz, this may have to do with instances of mistranscription on Viñas Urquiza’s (1974) part rather than with sound change, since a more recent work on the same variety by Gutiérrez & Osornio (2015) does attest /å/ (represented by means of the grapheme <ä>) and /a/ in accordance with our Proto-Wichí reconstruction. For example, the reflex of

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PW **t-ámte-s* ‘her/his words, language’ is attested as *t-amte-s* in [Viñas Urquiza \(1974: 65\)](#), but as *t-ámte-s* in [Gutiérrez & Osornio \(2015: 15, 79\)](#).

### 9.2.2.4 Translaryngeal vowel copying

Translaryngeal vowel copying (sometimes referred to as vowel harmony in the literature) is a very limited phenomenon in Wichí. It has been documented in the Rivadavia and Ingeniero Juárez subdialects of Southeastern Wichí, where the vowel /i/ of the unrealis suffix /-hi/ and of the negative suffix /-hit'e/ progressively assimilates to the vowel /u/ of the preceding applicative suffix /-hu/. Examples from the variety of Ingeniero Juárez include [jeħētʰvħħdɛ] (underlying /i-het-ħu-ħit'e/) ‘s/he does not gather’, [itsɔ'nħħħdɛ] (underlying /i-tson-ħu-ħit'e/) ‘s/he does not pin’, [nħsketʰvħħdɛ] (underlying /ni-sqat-ħu-ħit'e/) ‘I do not hide’ ([Cayré Baito & Carpio 2009: 97](#)). An example from the Rivadavia variety is given below.

- (530) Rivadavia Southeastern Wichí ([Terraza 2009b: 50](#))

- a. wahat-ħe i-tson-ħu-hut'e ħ-qolo  
fish-fishbone 3I-pin-APPL-NEG 1SG-foot  
‘The fishbone did not pin my foot.’

### 9.2.2.5 Vowel lowering

In some dialects of Wichí, the allomorph **ji-* of the Proto-Wichí verbal I-class prefix, which shows up before uvular and glottal consonants, has changed into *ja-*. This development is regular in 'Weenhayek: [ja]qák'u-APPL ‘s/he distrusts’, [ja]qánk'i? ‘s/he destroys’, [ja]qáx ‘s/he crushes’, [ja]qój? ‘s/he plays’, [ja]ħáŋ ‘s/he follows’, [ja]ħó-APPL ‘s/he goes’, [ja]ħút ‘s/he pushes’, [ja]ħán-ex ‘s/he knows’, [ja]ħúmiŋ ‘s/he loves’ ([Claesson 2016](#)). By contrast, the change never occurs in the Lower Bermejeño subdialect of Southwestern Wichí: [ji]qontʃi ‘s/he destroys’, [ji]qox-ti ‘s/he crushes’, [ji]quj ‘s/he plays’, [ji]ħon ‘s/he follows’, [ji]ħu-APPL ‘s/he goes’, [ji]ħet-tsi ‘s/he pushes’, [ji]ħan-ex ‘s/he knows’, [ji]ħemini ‘s/he loves’ ([Nercesian 2014, Braunstein 2009](#)).²¹ In the Rivadavia subdialect of Southeastern Wichí, according to [Terraza \(2009b: 134–135\)](#), verbs that took **ji-* in Proto-Wichí may now take either *ja-* (if the agent acts with low intensity) or *ji-* (if the agent acts with high intensity), as in the following examples.

²¹Note that the sequence /ji/ is pronounced [jɪ] in Lower Bermejeño, as in [jɪk] ‘s/he goes away’, [jɪ'wɪal] ‘slow’ ([Nercesian 2014: 41](#)).

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(531) Rivadavia Southeastern Wichí (Terraza 2009b: 135)

- a. *sip'o ja-hon malewu*  
police 3i-follow thief  
'the police chases the thief' (without too much intention of actually catching up with the thief)
- b. *sip'o ?i-hon malewu*  
police 3i_{ACT}-follow thief  
'the police chases the thief' (until actually catching up)
- c. *atsiña ja-hanex to j-omlı*  
woman 3i-know SUB 3i-speak  
'the woman knows how to speak' (with some knowledge of the language)
- d. *atsiña i-hanex to j-omlı*  
woman 3i_{ACT}-know SUB 3i-speak  
'the woman knows how to speak' (with a very good knowledge of the language)
- e. *hinu ja-hemen atsiña*  
man 3i-love woman  
'the man loves the woman'
- f. *hinu i-hemen atsiña*  
man 3i_{ACT}-love woman  
'the man loves the woman' (and is deeply in love with her)

Little information is available to us on the reflexes of PW **ji-* in other dialects, such as Vejoz and Guisnay. The reflex *ja-* is attested as far east as in the Ingeniero Juárez subdialect of Southeastern Wichí: [jəħēt] 's/he pushes' (Cayré Baito & Carpio 2009: 100).

The same kind of allomorphy is seen in the 'Weenhayek vocative prefix found in some kinship terms (no cognates in other Wichí varieties are known): compare 'Wk *ji-xk'ah* 'father!' and *ja-qoh* 'mother!' (Alvarsson & Claesson 2014: 445). This prefix goes back to the erstwhile first-person singular prefix, PM **ji-*, and is homophonous with the I-class prefix (itself a reflex of an erstwhile third-person prefix, PM **ji-*, extended to other persons by means of Watkins' Law).

The development in question is identical to a process that occurs optionally (or subdialectally) in Iyojwa'aja' (§8.2.3.6).

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## 9.2.2.6 Nasalization

In many dialects of Wichí, vowels are allophonically nasalized following nasal onsets, but also following a /h/, represented by some authors as /ħ/ (Terraza 2009a, Cayré Baito & Carpio 2009). This is described for 'Weenhayek by Claesson (1994: 12–13), for the Ingeniero Juárez subdialect of Southeastern Wichí by Cayré Baito & Carpio (2009: 100), for the Rivadavia subdialect of Southeastern Wichí by Terraza (2009a: 78–79), and for the Lower Bermejeño subdialect of Southeastern Wichí by Nercesian (2014: 41–42).

- (532) 'Weenhayek (Claesson 1994: 12–13)

- a. /∅-nek/ [nēk] 's/he comes'
- b. /mop'i/ [mō'p'i?] 'white heron'
- c. /nísah-és/ [nī:sa'hēs] 'shoes'
- d. /nú-lís/ [nū:lis] 'bones'
- e. /hup/ [hūp] 'hut'
- f. /ha'ják/ [hā'jax] 'jaguar'
- g. /'nó-nhus/ [ʔnō:ṇṇūs] 'one's nose'
- h. /tájhi/ [tā:ṇṇī?] 'woods'
- i. /la-wháj/ [la'ṇṇā:j?] 'its time'

- (533) Southeastern (Ingeniero Juárez) (Cayré Baito & Carpio 2009: 100, 102–103)

- a. /nojix/ [nō'jix] 'road, path'
- b. /inot/ [i'nōt] 'water'
- c. /itox-muk/ [i,tox'mōk] 'ashes'
- d. /mak/ [mēk] 'thing'
- e. /i=ħi/ [iħī] 's/he is'
- f. /jaħet/ [jaħēt] 's/he pushes'
- g. /loj-ħen/ [lō'ħēn] 'they are alive'
- h. /ta-toj-ħit'e/ [taħoħiħidε] 'they do not lose'
- i. /j-op(i)l-ħit'e/ [jopħiħidε] 's/he does not come back'
- j. /tajħi/ [taħi] 'forest'
- k. /fʷiħu/ [fʷiħu] 'charcoal'

- (534) Southeastern (Rivadavia) (Terraza 2009a: 78–79)

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- a. /inot/ [i'ñɔt] 'water'
- b. /la-ñeseq/ [lañẽ'seq] 'her/his spirit'
- c. /ñalo/ [ñã'lɔ] 'tree'
- d. /ñinu/ [ñi'ñu] 'man'
- e. /ta-qataj-ñen/ [taqata'ñjẽn] 'they cook'

(535) Southeastern (Lower Bermejeño) (Nercesian 2014: 42)

- a. /ama/ [a'mã] 'rat'
- b. /note/ [nõ'te] 'tapeti'
- c. /hope/ [hõ'pe] 'copula'
- d. /la-nhes/ [la'ñẽs] 'her/his nose'
- e. /la-whoj/ [la'wõj] 'its time'
- f. /tajhi/ [ta'jĩ] 'forest'
- g. /Ø-tijoχ-pho/ [ti.jɔχ'pʰõ] 's/he jumps over'
- h. /j-uq-tʃhoχ/ [juq'tʃõχ] 's/he crushes'

In the Misión La Paz subdialect of Guisnay, only /h/ – but not the nasals /m n/ – is reported to trigger nasalization in the following vowel, and sometimes in the preceding vowel as well (Avram 2008: 69–71, 83–84).

(536) Guisnay (Misión La Paz) (Avram 2008: 46–47, 70–71, 92)

- a. /holo?/ [hõ'lõ?] 'dust'
- b. /'no-k^jahe?/ [?nok^j'a'hẽ?] 'arrow'
- c. /o-jahi'n/ [oja'hĩn?] 'I watch'
- d. /'no-humin/ [nõhũ'min] 'lover'
- e. /'wahat-wo?/ [?wāhāt'wo?] 'fisherman'
- f. /la-womha-j/ [lawo'ñãj] 'gorges'
- g. /k^jowh-aj/ [k^jo'wāj] 'holes'
- h. /ama?/ [a'ma?] 'rat'
- i. /pinu/ [pi'nu] 'sugarcane'
- j. /nahajox/ [nahā'jox] 'heat'

Some *Wichí* lects lack nasalization in the environments described above. In the Paraje La Paz subdialect of Vejoz, vowels are reported to be nasalized before nasal consonants (Fernández Garay 2006–2007). In Misión Santa María, nasalization is reported to occur after the sequence [ñn] (< PW *jh, *nh), as in [ohñūs] 'my nose', and sometimes next no nasals, as in [as'ñãm] 'blind'.

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### 9.2.3 Word-level prosody

We have seen in §9.1.3 that two suprasegmental phenomena coexisted in Proto-Wichí: contrastive vowel length, which continues the left-aligned accent of Proto-Mataguayan, and right-aligned stress, which in all likelihood represents a Wichí innovation.

The only variety known to preserve the contrastive vowel length of Proto-Wichí is 'Weenayek, whereas in all other lects no equivalent phenomenon has been documented so far. It is possible that it is preserved in some varieties spoken in Argentina, such as the variety of Misión Santa María, where forms such as [wo'jí:s] 'blood' and ['a:m] 'you' (< PW *^hwojí:s and *^há'm) have been attested (Spinelli 2007).²² Avram (2008: 63) reports that in the Misión La Paz subdialect of Guisnay "there is some slight vowel lengthening in certain environments, but at this time, these environments are not clear". Future documentation is needed to ascertain the status of the long vowels in Misión Santa María, Misión La Paz, and possibly other varieties spoken in the vicinities of the Bolivian border. In the Lower Bermejeño subdialect of Southeastern Wichí, vowels that carry primary or secondary stress are automatically lengthened (Nercesian 2014: 123), but this phenomenon clearly has nothing to do with the contrastive vowel length of Proto-Wichí.

As for the right-aligned stress, the general pattern is apparently preserved in all varieties of Wichí, though the underlying specifications of certain suffixes (i. e., whether metrical or extrametrical) may differ across dialects, as we have seen in §9.1.3.2. Secondary stress is relatively well described only for the Lower Bermejeño subdialect of Southeastern Wichí, where iambic feet are built from the left edge of the word and the heads of the non-final feet receive secondary stress, as in (*n*-*j*-*is*)(*t*-^h*i*-*la*)-(*?am*) 'I will cut you', (*la*-*qa*)(*tih*-*jen*)-(^h*n*ú) 'you make me jump' (Nercesian 2014: 122). Since no such information is available on other dialects of Wichí, it is currently not possible to reconstruct the secondary stress pattern of Proto-Wichí.

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²²An anonymous reviewer remarks that the vowel length in these specific examples "seems to be related to stress, but it does not necessarily mean that vowel length is contrastive" in the variety of Misión Santa María. We agree that the evidence is inconclusive, especially given the fact that PW long vowels are often reflected as what Spinelli (2007) documents as short vowels: [ta'tf'i] 'rufous hornero', [h'e'tse] 'her/his thigh' (< PW *táts'i, *t-ék'e). Note, however, that the reflexes of PW short stressed vowels are uniformly attested as short by Spinelli (2007), with no exceptions: [o'jí:l] 'I die', [i'ma?] 's/he sleeps' (< PW *^hñ-jil^h, *^hi-má?). More data would be needed in order to arrive at robust conclusions regarding the status of vowel length in the variety of Misión Santa María.



## 10 Dictionary

This chapter contains a list of Mataguayan cognate sets (and contact etymologies that may be confused for cognate sets). We start by presenting reliable lexical cognate sets with reflexes at least in one of Maká or Nivaclé, and at least in one of Chorote or Wichí (§10.1). We then proceed to nominal derivational affixes (§10.2), valence and spatial suffixes (§10.3), demonstratives (§10.4), inflectional prefixes (§10.5), and inflectional suffixes (§10.6). After that, we list cognates sets restricted to Maká and Nivaclé (§10.7), those restricted to Chorote–Wichí (§10.8). The next section is devoted to roots present only in Iyojwa’aja’ and Wichí (these have been likely borrowed from Wichí to Iyojwa’aja’; §10.9). Finally, we list several etymologies that reunite material which is unlikely to go back to Proto-Mataguayan, but has rather been diffused between Mataguayan languages by direct or indirect contact (§10.10).

When applicable, we include information on uncertainties regarding the phonological or semantic reconstruction, irregularities in specific languages or dialects, forms that we suspect to be ill-transcribed in our sources, and sources of each datum. For nouns, we indicate the plural suffix (or the entire plural forms), whereas verbs are listed with a third-person realis prefix (see §1.4 for more details). We seek to systematically include information on formal lookalikes in the Guaicuruan family (which may turn out to be cognate with the Mataguayan forms if the Macro-Guaicuruan hypothesis is confirmed) and on previous works where the cognate sets in question had been identified.

10 *Dictionary*10.1 *Bona fide* PM etymologies

***-aje'k ~ *-ajé'k; *-q-áje'k 'honeycomb' [1]**

Ni *-aje'tʃ*, *-ajtʃe-j*; *-k-ajetʃ* (Seelwische 2016: 68, 379) || PCh **-q-ájek* > Ijw *ʔin-k-ájik* 'honey' (Drayson 2009: 108)

[1]PM **ʔaqáje'k* 'wild honey' is obviously derived from this root.

Mocoví *-iʔja:k* 'load; honeycomb' (Buckwalter et al. 2014) is somewhat similar to the Mata-guayan forms, but this may be accidental.

Najlis 1984: 12 (**k'ajek*)

***n-ap'u ~ *n-aɸ'u (~ *-á- ~ *-ū) [1] 'to lick'**

Ni *n-ap'u* [2] (Seelwische 2016: 181) || PCh **[ʔi]<n>áp'u?* [3] > Ijw *[ʔi]n̥ép'uw-e?* / *-náp'uw-e?*; I'w *-nápu?*, *-nápu-un*, *-nápu-ʔwe?* [4]; Mj *[ʔi]n̥ép'o?* / *-náp'o?* [5] (Carol 2014b; Drayson 2009: 102; Gerzenstein 1983: 150, 204; Carol 2018) || PW **<n>ap'u* (~ *-á- ~ *-ūh) [1 3] > LB *nap'e*; 'Wk *[ʔi]náp'u?* (Nercesian 2014: 278; Braunstein 2009: 52; Claesson 2016: 257)

[1]The prosodic properties of the root cannot be established because the 'Weenhayek cognate is not attested without extra prefixes (the forms with prefixes are not revealing because in trisyllabic words the vowel of the peninitial syllable is lengthened in any case).

[2]Campbell et al. (2020: 27, 43) attest the variant *n-a?*p'u, where [?p'] is likely an allophone of /p'/.

[3]The cislocative prefix **n-* has been fossilized as a part of the stem in Chorote and Wichí.

[4]The plain stop *p* in Gerzenstein's (1983) data of *Iyo'awujwa* must be a mistranscription.

[5]The lowering of unstressed PCh **u* to Mj *o* is irregular.

Obviously related to Proto-Guaicuruan **-ap'i* 'to lick, to suck' (Viegas Barros 2013b, #81; cf. Viegas Barros 2013a: 304).

Najlis 1984: 9 (**nap'u*); Viegas Barros 2013a: 304 (**-n-ap'u*)

***-á(-j^h)-xiʔ(*-l) [1] 'mouth, door'**

Mk *-e<xiʔ> (-l)*, (Towothli) <-aihe> (Gerzenstein 1999: 168; Hunt 1915: 244) || Ni *-a<ʃi> (-k)* (Seelwische 2016: 49) || (?) PCh **-á<ajʔ> (*-is)* [2] > I'w *-áj (-is)*; Mj *-áajʔ (-is)* (Gerzenstein 1983: 117; Carol 2018) || PW **-l-áj-hi (*-l^h)* >

## 10.1 Bona fide *PM etymologies*

LB *-t-aç-i* ‘word’ (-t); Vej *-t-aj̑-i* [3]; ’Wk *-t-áç-i?* (-t) ‘oral cavity; language; cutting edge’ (Nercesian 2014: 191, 209; Viñas Urquiza 1974: 65; Claesson 2016: 73)

[1] This root is a compound of an unidentified element *-á- (as suggested by modern Maká and Nivaâle) or *-áj- (as suggested by the Towothli doculect of Maká and Wichí) and *-xi? ‘inside a recipient’. It is possible that the Wichí reflex continues a compound with a pluralized first element: PM *-á-j^h-xi?.

[2] It is unclear whether the Chorote form belongs here: the expected reflex would be **-áhi? (**-l), not *-á<haj?> (*-is).

[3] This normalized form is based on the attestations *-tajhni* (Viñas Urquiza 1974: 65) and *tahni* (Fernández Garay 2006–2007: 213).

Najlis 1984: 32 (**hlahni* ‘mouth’); Viegas Barros 2002: 142 (**taxi* ‘door’)

### *n-át ‘to fall on its own’

Ni *n-at* ‘to fall (of ripe fruits)’ (Seelwische 2016: 183) || PW **<n>át* [1] > ’Wk *nát* ‘to fall on the ground (e.g. of leaves)’ (Claesson 2016: 258)

[1] The cislocative prefix *n- has been fossilized as a part of the stem in Wichí.

Viegas Barros (2013a: 320) compares the verb with Proto-Qom *-*ʔot* ‘downwards’, which could be spurious.

Viegas Barros 2013a: 320 (*-(n)-*at*)

### *-áwå(?) ‘flower’

Ni *-aβå* (ChL-Py *-åβå*) (-s) (Seelwische 2016: 51; Campbell et al. 2020: 73) || PCh 3 **hl-áwo?* [1] > Iw 3 *hl-áwo* ~ *hl-áwu* (-l) [2]; Mj 3 *hl-áwo?* (Gerzenstein 1983: 146, 198; Carol 2018) || PW *-*t-áwo* [1] > LB *t-awu*; Vej *t-awo*; ’Wk *-t-áwo?* (Nercesian 2014: 161; Viñas Urquiza 1974: 65; Claesson 2016: 140, 234)

[1] The raising of PM *å to PCh/PW *o is not known to be regular.

[2] The absence of a final ? in Gerzenstein’s (1983) data of Iyo’awujwa’ must be a mistranscription.

Obviously related to Proto-Guaicuruan *-awo<qó> ‘flower’ (the shorter root is preserved in

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Proto-Pilagá-Toba **-awó* ‘to bloom’ (Viegas Barros 2013b, #179; cf. Viegas Barros 2013a: 310).

Viegas Barros 2013a: 310 ( **-awó*); Gutiérrez 2015b: 254

### **-áʔ( *-j^h)* ‘fruit’

Mk 3 *t-e?* (-j) (Gerzenstein 1999: 252) || Ni *-a?* (-j) (Seelwische 2016: 35) || PCh 3 **hl-á?* ( *-j^h) > Ijw 3 *hl-á?* (-j<is>) [1]; I’w 3 *(h)l-á?* (-j); Mj 3 *hl-á?* (-j^h) (Carol 2014a: 77; Drayson 2009: 130; Gerzenstein 1983: 145, 199; Carol 2018) || PW **-t-á?* ( *-j^h) > LB *-t-a?* (-j); Vej *-t-a-j*; ’Wk *-t-á?* (-ç) (Nercesian 2014: 65, 170; Viñas Urquiza 1974: 65; Claesson 2016: 73, 230)

[1]The Iyojwa’aja’ plural suffix is innovative.

Obviously related to Proto-Guaicuruan **-a* ‘fruit (suffix)’, **-e'l>á* ‘fruit’ (with a fossilized third-person prefix) (Viegas Barros 2013b, #705, #212; cf. Viegas Barros 2013a: 310).

Viegas Barros 2013a: 310 ( **-a?*); Gutiérrez 2015b: 254

### **-áɸe(?)* ‘tooth’

Mk (Lengua) *<hiafué>* (Demersay 1860: 456) || PCh **-áhwe?* ( *-j^h) > I’w *-áfwe?* (-j); Mj *-áhwe?* (-j) (Gerzenstein 1983: 117; Carol 2018)

Obviously related to Proto-Guaicuruan **-owe* ‘tooth’ (Viegas Barros 2013b, #463).

### **n-ájin* ‘to go first’

Mk *[wa]<th>ajin* [1] (Gerzenstein 1999: 363) || Ni *n-ájin* (Seelwische 2016: 215) || PCh **[pi]<n>ájin* [2] > Ijw *[pi]n^já'n / -ná'n* [3]; I’w *-nájin*; Mj *[?i]néjin / -nájin* (Carol 2014a: 77, fn. 4; Drayson 2009: 102; Gerzenstein 1983: 149; Carol 2018)

[1]We have no explanation for the occurrence of the sequence *-th-* in Maká.

[2]The *cislocative* prefix **n-* has been fossilized as a part of the stem in Chorote.

[3]The sequence **-ji-* was irregularly lost in Iyojwa’aja’.

### PM 1 **h-ák*, 2 **t-ák*, 3 **[j]ik*, 1IRR **j-ik*, 2IRR **-ʔák*, 3IRR **n-äk* ‘to go away’; CISL **n-äk* ‘to come, to walk’

Mk 1 *h-ak*, 2 *t-ak* [1], 3 *ik*, 2IRR *∅-ak*, 3IRR *n-ak* [1]; *n-ek* (Gerzenstein 1994: 92; Gerzenstein 1999: 227, 268) || Ni 1 *x-ák*, 2 *t-ák* [1], 3 *[j]itʃ*, 1IRR *j-itʃ*, 3IRR *n-ák* [1]; *n-atʃ* (Seelwische 2016: 152, 380) || PCh 1 **∅-ʔák*, 2 **hl-ék*, 1IRR **j-ík*, 2IRR **∅-ʔák*, 3IRR **n-ék* [2] > Ijw 1 *ʔá-k*, 2 *hl-ék*, 1IRR *j-ík*, 2IRR *∅-ʔák*, 3IRR *(?i)n-ék*; I’w 1 *á-k* ~ *a-ék*; 2 *hl-ék*; Mj 1 *ʔa-ʔék*, 2 *hl-ék*

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(Carol 2014a: 100; Drayson 2009: 158; Gerzenstein 1983: 103; Carol 2018) || PW 2 **t*-eq, 3 [j]iq; **n*-eq > LB 2 *t*-eq, 3 [j]iq; *n*-eq; Vej [j]ijk ~ [j]ik ~ [j]ek [3]; *n*-ek; 'Wk 2 *t*-ek, 3 [j]ik; *n*-ek (Nercesian 2014: 145, 226; Viñas Urquiza 1974: 68, 84; Gutiérrez & Osornio 2015: 38; Claesson 2016: 261, 544)

[1] Maká and Nivačle point to PM **t*-äk 'you go' and **n*-äk 'that s/he go' rather than **t*-äk 'you go', **n*-äk 'that s/he go', possibly due to analogy with the first-person form. The same allomorph of the root is also found in the unrealis paradigm (Mk 1 *h*-ak, 2 Ø-ak, 3 *n*-ak, 1+2 *xin*-ak-kij; Ni 3 *n*-äk, 1+2 *fn*-äk, but 1 *jit*-, 2 *m*ā) and, in Nivačle only, in the first-person inclusive realis (1+2 *fn*-äk).

[2] In Chorote, the third-person realis of this verb is suppletive: PCh *[j]á'm > Ijw [j]á'm; I'w [j]ém; Mj [j]é'm.

[3] The variation attested in Vejoz is probably due to the fact that /ji/ surfaces as [ji] in Wichí.

Obviously related to Proto-Guaicuruan *-eko ~ *-iko 'to go' (Viegas Barros 2013b, #202; cf. Viegas Barros 2013a: 305).

Viegas Barros 2013a: 305 (*-ak ~ *-ek ~ *-uk)

*[j]ám 'to arrive' (MN), 'to go away' (Ch); CISL **n*-ám 'to arrive here' (MN), 'to come here' (ChW)

Mk *n*-am (Gerzenstein 1999: 118) || Ni [j]am; *n*-am (ChL-Py *n*-ám) (Seelwische 2016: 43, 180; Campbell et al. 2020: 236) || PCh *[j]ám 'to go away' 3IRR' > Ijw [j]á'm; I'w [j]ém; Mj [j]ém [1]; **<n>ám* [2] 'to come here' > Ijw ná'm; Mj nám (Carol 2014a: 77, fn. 4; Drayson 2009: 141, 158; Gerzenstein 1983: 103; Hunt 1994; Carol 2018) || PW **<n>ám* [2] > LB *nom*; Vej nám; 'Wk nám (Nercesian 2014: 145; Braunstein 2009: 53; Viñas Urquiza 1974: 68; Claesson 2016: 252)

[1] Carol (2018) documents this Manjui form as [j]é'm, which could be a mistranscription.

[2] The cislocative prefix **n*- has been fossilized as a part of the stem in Chorote and Wichí.

Fabre 2014: 306

*-á-mmi-*s*, *-lé-mmi-*ts* 'small, thin' [1]

Mk -*a*-mmi-*s*, -*li*-mmi-*s* 'small' [2] (Gerzenstein 1999: 247) || Ni -*<t>amis-tf'e* (Seelwische 2016: 163) || PW *-*<t>áms<aχ>*, *-léms<*a*>-*s* > LB -*to(m)sax* 'small' [3], -*temsas* 'small' [4]; Vej -*tamsah*, -*lemsa-s* [5]; Guisnay -*támsah*, -*<le>lemsa-s* 'small' (Braunstein 2009: 51; Nercesian 2014: 355, 374, 386; Viñas

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Urquiza 1974: 65; Gutiérrez & Osornio 2015: 63; Lunt 2016: 57)

[1] This term is evidently derived from PM *-á's 'son', *-léts 'offspring' by means of the infix *-mmi-. The derivation model is still morphologically transparent in Maká, where the masculine form -a-mmí- is derived from -a's 'son', feminine form -asi-mmí- is derived from -asi? 'daughter', and the plural form -li-mmí-ts is derived from -lits 'children'.

[2] The preglottalized coda in Maká is attested in the New Testament (e.g. James 3:4).

[3] The Lower Bermejeño reflex is attested as -lomsax by Braunstein (2009) and as -losax by Nercesian (2014). The irregular loss of *m is also documented in the Rivadavia subdialect by Terraza (2009b: 127, 199).

[4] In Lower Bermejeño, -lemsas (with an irregular t instead of the expected *l) no longer behaves as the plural form, judging by the examples given in Nercesian (2014: 355, 374).

[5] The Vejoz singular reflex is unexpectedly documented as -lamsah rather than *-låmsah.

### *[t](')án [1] 'to shout'

(?) Mk [t]an 'to win' (Gerzenstein 1999: 121) || Ni [t]án (Seelwische 2016: 104) || PCh *[t]án > Ijw [t]á'n; I'w -án-ej 'to call'; Mj [t]án (Drayson 2009: 149; Gerzenstein 1983: 121; Carol 2018) || PW *[t]án > LB [t]on; Vej [t]án; 'Wk [t]áñ (Nercesian 2014: 42; Viñas Urquiza 1974: 78; Claesson 2016: 428)

[1] Nivañe and Chorote point to PM *-án, Wichí and Maká (if the Maká word belongs to this cognate set) to *-áñ.

Najlis 1984: 21 (3 *j-t'án)

### *-áni's 'stinger'

Mk 3 t-ani's, t-ansi-ts; -ansi-?i 'to sting' (Gerzenstein 1999: 247) || Ni 3 t-áni (-ik) (Seelwische 2016: 170) || PCh 3 *hl-áni > Ijw 3 hl-áni; Mj 3 hl-áni (Drayson 2009: 129; Carol 2018) || (?) PW 3 *t-áni [1] > 'Wk 3 t-áni? (-lis) (Claesson 2016: 70)

[1] The preglottalized coda in PM is reconstructed based on the Maká reflex, as attested in the New Testament (1 Corinthians 15:56).

[2] It is not clear that the 'Weenhayek word belongs here (the expected reflex would be *t-áni).

Mocoví -a?na 'needle, stinger' (Buckwalter et al. 2014) and Abipón -aana 'thorn, needle' (Najlis 1966: 11) are somewhat similar to the Mataguayan forms, but this may be accidental. Viegas

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Barros (2013a) traces the Mocoví form back to Proto-Qom **-qaná* ‘needle’.

***-áp, 3 *-[j]ip [1] ‘to cry’**

Mk *-ap*, 3 *ip* (Gerzenstein 1999: 122) || Ni *-ap* (ChL-Py *-áp*), 3 *[j]ip* (Seelwische 2016: 46) || PCh **[j]áp* ‘to cry, to make noise (of animals)’ > Ijw *[j]áp*; I’w/Mj *[j]ép* / *-áp* (Drayson 2009: 158; Gerzenstein 1983: 43, 121; Carol 2018) || PW **[j]ip* ‘to make noise (of animals)’ > LB *[j]ip-li* ‘to chirp’; Vej *[j]ip* ‘to chirp’ [2]; ’Wk *[j]ip* (Nercesian 2014: 186; Viñas Urquiza 1974: 84; Claesson 2016: 125)

[1] This verb evidently presented the same alternation as PM **-ʔá(̥)l*, 3 **-[j]i(̥)l* ‘to die’ (ChW). Chorote and Wichí generalized the allomorphs with **á* and **i*, respectively.

[2] The absence of a glottal stop or glottalization in the root-initial position in Viñas Urquiza’s (1974) attestation of the Vejoz reflex could result from mistranscription.

Possibly related to Proto-Guaicuruan **-ap'a* ‘to suffer’ (Viegas Barros 2013b, #65; cf. Viegas Barros 2013a: 304).

Viegas Barros 2013a: 304 (*-ap)

***-[w]ápil ‘to return thither’ [1]**

Mk *[w]apil* ‘to return from an unspecified place’ (Gerzenstein 1999: 296) || Ni ChL-Pi *[β]apek*, ChL-Py *[β]ápēk* [2] (Seelwische 2016: 178; Campbell et al. 2020: 238) || PCh **[j]ápil* ‘to return’ > Ijw *[j]ápi?* / *-ápi?* [3], *[j]ápil-i* / *-ápil-i*; I’w *-ápil-met*, *-ápil-i*; Mj *[j]épil* / *-ápil* (Drayson 2009: 158; Gerzenstein 1983: 121; Carol 2018) || PW **[j]ápil^h* > LB *[j]opil* ‘to return to one’s place of origin’; Vej *[j]apil*; ’Wk *[j]ápil* / *[j]ápη-* (Nercesian 2014: 308; Viñas Urquiza 1974: 85; Claesson 2016: 516–519)

[1] Obviously derived from PM **[t]píl* ‘to return hither’ and related to Proto-Guaicuruan **-op'il* ‘to return’ (Viegas Barros 2013b, #443).

[2] The irregular vowel *e* in Nivaclé is likely a dialectal development in Chishamnee Lhavos (the verb is not attested in Shichaam Lhavos), just like in *[t]pek* ~ *[t]pik* ‘to return hither’ (Stell 1987: 498).

[3] The loss of the stem-final **l* in Iyojwa’aja’ is irregular. Cf. the form *[j]ápil^h-a-hahme* ‘it

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returned again' (Carol 2014b), where *l* resurfaces before the punctive suffix *-a*.

Hunt 1915: 239

### *[*j*]áp'ā(?)*l* ~ **[j]áp'ā(?)l* 'to burn'

Ni [*j*]ap'at ~ -áp'at (Seelwische 2016: 47) || PCh **[j]áp'et* > Ijw [*j*]áp'i^l / -áp'i^l  
'to throw in a large fire' (Drayson 2009: 158) || PW **[j]áp'et* > 'Wk [*j*]áp'e^l  
(Claesson 2016: 517)

### *-aq, *-qá-ts 'food'

Mk -aq, -(a)qa-ts [1] (Gerzenstein 1999: 124) || Ni -ák, -ká-s (Seelwische 2016: 348) || PCh *-ák, *-qá-s > Ijw -ák, -ká-s; I'w -ák, -ák-es [2]; Mj -ák, -ká-s (Carol 2014a: 77, 79, fn. 6; Drayson 2009: 129; Gerzenstein 1983: 118; Carol 2018) || PW *-t-áq > LB -t-oq; Vej -t-ák; 'Wk -t-áq (Nercesian 2014: 166; Viñas Urquiza 1974: 65; Claesson 2016: 71); PW *-qá<s> 'cultivated plant (possessed)' [3] > LB -qo<s>; 'Wk -qá<s> 'plant (possessed), vegetable' (Nercesian 2014: 215; Claesson 2016: 82, 220)

[1] Both -qa-ts and -aq-ats are reported as the plural forms of -aq in Maká. Only -qa-ts appears to be etymological; the variant -aq-ats must have been analogically based on the singular form -aq.

[2] The plural Iyo'awujwa' form attested by Gerzenstein (1983) is not etymological.

[3] PW *-qás 'cultivated plant (possessed)' is a phonologically regular (but semantically shifted) reflex of PM *-qá-ts 'food (plural)'; the erstwhile plural suffix is no longer segmentable.

Obviously related to Proto-Southern Guaicuruan *-oq 'food', with reflexes in all daughter languages, including Mocoví -oq (Buckwalter et al. 2014), Toba–Qom -oq (Buckwalter & Buckwalter 2013: 2), Pilagá 3 hal-oq (Vidal 2001: 31), Abipón -ak '(?)' [27]EN66.

Campbell & Grondona 2007: 15

### *-á's 'son'

Mk -a's [1] (Gerzenstein 1999: 128) || Ni -á's (Gutiérrez 2015b: 36; Seelwische 2016: 46) || PCh *-ás > Ijw/I'w/Mj -ás (Carol 2014a: 94; Drayson 2009: 129; Gerzenstein 1983: 122; Carol 2018) || PW *-t-á's > LB -t-os; Vej -t-ás; 'Wk -t-ás (Nercesian 2014: 166; Viñas Urquiza 1974: 65; Claesson 2016: 71, 400)

[1] The preglottalized coda in Maká is attested in the New Testament (e.g. Matthew 1:7) as well

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as in Braunstein (1987: 62).

Viegas Barros (2013a: 312) notes the similarity with Proto-Guaicuruan **-et'ē-t̪i-k* (male), **-et'j-o* (female) ‘**orphan; stepchild**’, which could be spurious.

Hunt 1915: 240; Viegas Barros 2013a: 312 (**-as*)

***-āse?** [1] ‘**daughter**’

Mk *-asi?* (-j) [2] (Gerzenstein 1999: 128) || Ni *-āse* (Seelwische 2016: 213) || PCh **-āse?* > Ijw/I'w/Mj *-áxse?* (Carol 2014a: 79, fn. 7; Drayson 2009: 129; Gerzenstein 1983: 124; Carol 2018) || PW **-t-āse* > LB *-t-ose*; Vej *-t-āse*; 'Wk *-t-āse?* (Nercesian 2014: 166; Viñas Urquiza 1974: 65; Claesson 2016: 71)

[1] The root is obviously derived from PM **-ā's* ‘son’ by means of the non-productive feminine suffix **-e?*.

[2] Maká has innovated in having a plural form of this noun; all other languages point to a suppletive plural **-lēts* ‘offspring (sons and/or daughters)’.

Hunt 1915: 240; Najlis 1984: 11 (**āhse*, 3 **hl-āse*); Viegas Barros 2013a: 312 (**-as-e?*)

***[n]åt ~ *[n]āt ‘to bleed’**

Mk *[n]at-xu?* [1] (Gerzenstein 1999: 132) || Ni *[n]åt* (Seelwische 2016: 201) || PCh **<n>åt->* Mj *náht-ij?*, CAUS *[?i]n(i)éht-it / -náht-it* || PW **<n>åt- ~ *<n>āt-* > Vej *nåt-ti* ‘to bleed (of nose)’ (Lunt 2016: 64)

[1] Maká *-?athi-ts* ‘blood’, *[t]’athi-j* ‘to menstruate’ (Gerzenstein 1999: 131) hardly belong here, since the stem-initial glottal stop lacks any correspondence in Manjui and Vejoz.

Viegas Barros (2013a: 309) compares this suffix to Proto-Southern Guaicuruan **-?et’otá* ‘vein’ (Viegas Barros 2013b, #684). We suggest that it could be compared to Proto-Guaicuruan **-awot* ‘blood’ (Viegas Barros 2013b, #180) instead.

Viegas Barros 2013a: 309 (**-at’*)

***-ā't, *-āt-its ‘drink’**

Ni *-å't*, *-åt-is* (Seelwische 2016: 356) || PCh **-åt* (**-es*) > Ijw *-åt*; Mj *-åt* (*-es*) (Drayson 2009: 129; Carol 2018) || PW **-t-åt* > LB *-t-ot*; Vej *-t-åt*; 'Wk *-t-åt* (Nercesian 2014: 213; Viñas Urquiza 1974: 66; Claesson 2016: 71)

Viegas Barros (2013a: 300) notes the similarity with Proto-Guaicuruan **-Vtá-qa* ‘(alcoholic) drink’ (Viegas Barros 2013b, #611) and attributes it to language contact.

**Rejected:** Najlis (1984: 46) compares Ni *-å't* ‘drink’ to the reflexes of PM **?at'e(')t(s)* ~

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*?at'ā(?)*t* *s* ‘*aloja* drink’.

### *[j]áte(?)χ ‘to be fat’

Ni [j]átex (Seelwische 2016: 389) || PCh *[j]átaḥ > Ijw [j]áta; I'w -átaḥ; Mj [j]éta / -áta (Drayson 2009: 158; Gerzenstein 1983: 122; Carol 2018) || PW *[j]átaχ > LB [j]otax; Vej [j]atah [1]; 'Wk [j]átaχ (Nercesian 2014: 224, 252; Viñas Urquiza 1974: 83; Claesson 2016: 519)

[1] The Vejoz form is likely mistranscribed in Viñas Urquiza (1974: 83); the expected reflex would be *[j]átaḥ.

Likely related to Proto-Guaicuruan *-ot'jáqa ‘to be fat’ (Viegas Barros 2013b, #454; cf. Viegas Barros 2013a: 308).

Najlis 1984: 44 (**ja*átha); Viegas Barros 2002: 143 (*-atax); Viegas Barros 2013a: 308 (*-atah)

### *-á'w-APPL ‘to be’ [1]

Mk 1 *h-a'w-APPL*, 2 *t-a'w-APPL*, 1+2 *xu-u'w-APPL* -*kii*, 3IRR *n-a'w-APPL*, 1+2IRR *xina-[?]w-APPL* -*kii* (Gerzenstein 1994: 92; Gerzenstein 1999: 359) || Ni 1 *x-á'β-APPL*, 2 *t-á'β-APPL*, 3 [j]i-APPL, 1+2 *fn-á'β-APPL*, 1IRR *j-i-APPL*, 3IRR *n-á'β-APPL* (Fabre 2014: 146; Seelwische 2016: 46) || PCh 1+2 *[?]áw- ~ *[?]áw- > Ijw *?*áw<*ak*>, IRR *?*íw^j<*ek*>; I'w 1+2 *aw-áh*; Mj 1+2 *?*áw-ah (Carol 2014b; Drayson 2009: 160; Gerzenstein 1983: 103; Carol 2018)

[1] This is a suppletive allomorph of the root *-é- / *[j]í-. Its distribution in Chorote (first person inclusive only) appears to be the original one, whereas in Maká and Nivaclé it replaced the original allomorph *-é- throughout the paradigm.

### *n-áχ ‘to end up’

Mk *n-ax* (Gerzenstein 1999: 128) || Ni *n-áx* (Seelwische 2016: 199) || PCh **<n>óhw-APPL* > Ijw *<n>óhw-i?* ‘to be empty, to dry out’, *<n>óhw-e* ‘to gather’, *<n>óhw-e?* ‘to end up’; I'w *<n>óf^w-ik*; Mj *<n>óhw-ij?* ‘to end up’, *<n>óhw-e* ‘to be ready’, *<n>óhw-e?* ‘to melt’ (Carol 2014a: 85; Drayson 2009: 141; Gerzenstein 1983: 151; Carol 2018) || PW **<n>ox^w* > LB *<n>uf^w*; Vej *<n>oh*; 'Wk *<n>ox^w* (Nercesian 2014: 272, 357; Viñas Urquiza 1974: 68; Claesson 2016: 274)

### *[j]án ‘to put’

Mk [j]en-APPL (Gerzenstein 1999: 153–154) || Ni [j]an (Seelwische 2016: 105) || PCh *[j]én > Ijw [j]ín-APPL / -én-APPL; I'w -én-APPL, -án; Mj [j]ín / -én ~ -áiñ

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~ -äin [1] (Drayson 2009: 159; Gerzenstein 1983: 126–127, 216; Carol 2018) || PW *[j]én ‘to put a snare’ > LB [j]en ‘to fish’; ’Wk [j]éñ (Nercesian 2014: 226; Claesson 2016: 532)

[1] In the Jlimnájnas subdialect of Manjui, [ai] ~ [æi] are allophones of /e/ before a sonorant.

Obviously related to Proto-Guaicuruan *-a(‘)n ‘to put’ (Viegas Barros 2013b, #49; cf. Viegas Barros 2013a: 304).

Viegas Barros 2013a: 304 (*-an)

***-äφ, *-φä-ts ‘wing’**

Mk 3 *t*-ef, *te*-fe-ts (Gerzenstein 1999: 249) || Ni -aφ, -<a>φa-s ‘wing, feather’ (Seelwische 2016: 39, 162) || PCh *-hw<és> (*-is) [1] > Ijw -hwés (-is); I’w -fʷés (-is); Mj -hwés (Drayson 2009: 120; Gerzenstein 1983: 129; Carol 2018) || PW *-t-exʷ (*-ís) [2 3] > LB -t-efʷ (-is); Vej -hʷ<is> (-et) [1]; ’Wk -t-exʷ (-ís) (Braunstein 2009: 50; Viñas Urquiza 1974: 59; Gutiérrez & Osornio 2015: 60; Claesson 2016: 73, 235)

[1] In Chorote and Vejoz, the plural form of PM has been reanalyzed as a singular one, with the erstwhile plural suffix being reinterpreted as a part of the root.

[2] The plural suffix -ís, found in Wichí, is non-etymological: in all other languages, its vowel is a copy of the root vowel.

[3] Lunt (2016: 56, 58) documents the form -t-ahʷ(-is) alongside -t-ehʷ(-is), but does not indicate whether it is representative of Vejoz or Guisnay. If it turns out to be a Guisnay form, it could be a Nivâcle borrowing.

Possibly related to Proto-Guaicuruan *-a’wá ‘wing’ (Viegas Barros 2013b, #182; cf. Viegas Barros 2013a: 309).

Najlis 1984: 27 (*hlahw); Viegas Barros 2013a: 309 (*t-ahʷ)

***-ä’j, *-äj-its ‘yica bag’**

Ni -a’j, -aj-is (Seelwische 2016: 35) || PCh *-éj? (*-is) > Ijw -éj?; I’w -éj (-is); Mj -éj? (-is) (Drayson 2009: 131; Gerzenstein 1983: 125; Carol 2018) || PW *-t-éj? (*-is) > LB -t-ej; ’Wk -t-éj?(-is) (Nercesian 2014: 174; Claesson 2016: 74)

Fabre (2014: 306) notes the similarity with the Enlhét-Enenlhét term for ‘yica bag’: Enlhét *a-jen*, Enenlhét-Toba *ajen*, Enxet *ajen* (Unruh & Kalisch 1997: 12; Unruh et al. (2003): 304;

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Elliott 2021: 704).

Fabre 2014: 306

### *-e, *-é-*l* ‘thorn’

Mk 3 *t-i?*, *<t>i?* [1] (Gerzenstein 1999: 341) || Ni *-e?*(-*k*) (Seelwische 2016: 123, 355) || PCh 3 **hl-é?*(*-*l*) > Ijw 3PL *hl-é-’l* [2]; Mj 3 *hl-é?*(-*l*) (Drayson et al. 2000: 74; Carol 2018) || PW *-*t-e* > (?) LB *-t-e* ‘fishbone’ [3], ’Wk 3 *t-e?*, *t-é-ç* [4] (Nercesian 2014: 170; Claesson 2016: 235)

[1] The origin of the variant *ti?* in Maká is unclear. The alternation *t-/l-* occurs at the left boundary of the stem in multiple Maká verbs of the so-called 7th conjugation, but in that case it seems to continue PM **t-*.

[2] Drayson (2009: 130) documents *hléł* instead, which could be a mistranscription.

[3] LB *t-e* is attested only in the example ’*wahat te* ‘fishbone’ (Nercesian 2014: 170). Despite the semantic divergence, it likely belongs to the cognate set under consideration; note that in Spanish both meanings (‘thorn’ and ‘fishbone’) are colexified as *espina*, which could also be the case in Lower Bermejeño.

[4] The plural suffix attested in ‘Weahayek does not correspond to what is found in Nivaclé and Manjui.

Obviously related to Proto-Guaicuruan *-<?e’l>é ‘thorn’, with a fossilized third-person prefix (Viegas Barros 2013b, #671).

### *-é-APPL, 3/1IRR **[j]í-APPL* ‘to be’ [1]

Mk 3 *i-^{’w}-APPL* [2] (Gerzenstein 1994: 92; Gerzenstein 1999: 359) || Ni 3 *[j]i-APPL*, 1IRR *j-i-APPL* (Fabre 2014: 146; Seelwische 2016: 46) || PCh 1 **?a-?é-?*, 2 **hl-é-?*, 3 **[j]i?*, 1IRR **j-é?*, 2IRR **?a-?é-?*, 3IRR **n-é-?* [3] > Ijw 1 *?á?* [1], 2 *hl-é?*, 3 *j-i?* [4], 1IRR *j-í?*, 2IRR *Ø-?á?*, 3IRR *n-é?* ~ *?iné?*; ’W 1 *Ø-éj*, 2 *hl-éj*, 3 *j-í*; Mj 1 *?a-?éj?*, 2 *hl-éj?*, 3 *[j]í?*, 1IRR *j-í?*, 2IRR *?a-?éj?*, 3IRR *n-éj?* (Carol 2014b; Drayson 2009: 160; Gerzenstein 1983: 103; Carol 2018) || PW 2 **t-é-APPL*, 3 **’í-APPL*, 3IRR **n-é-APPL* > LB 2 *t-é-APPL*, 3 *’í-APPL*; Vej 3 *?i-*; ’Wk 2 *t-é-APPL*, 3 *’í-APPL*, 3IRR *n-é-APPL* (Nercesian 2014: 226, 276; Viñas Urquiza 1974: 60; Claesson 2016: 21–22)

[1] In Maká, Nivaclé, and (in the first person inclusive) in Chorote, this root alternates with its suppletive allomorph *-*å’w-*, which has replaced *-é(j)- in the former two languages in the entire paradigm.

[2] The element -*’w-* in Maká is taken through intraparadigmatic analogy from the suppletive

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allomorph  $-a^w$ . The preglottalization is attested in the New Testament (e.g. Mark 1:30).

[3] The allomorph  $-\acute{e}j$  (instead of the expected  $-\acute{e}$ ) is seen in Chorote first- and second-person realis as well as in second- and third-person unrealis.

[4] For some speakers of Iyojwa'aja', 3 [j]í? behaves as /jé/, and for others as /jéj/. Both representations are unexpected.

### $^{*}-\acute{e}j$ ( $^{*}-its$ ) 'name'

Mk  $-ij$  ( $-its$ ) (Gerzenstein 1999: 190) || Ni  $-ej$  ( $-is$ ) (Seelwische 2016: 345) || PCh  $^{*}-\acute{e}j?$  ( $^{*}-is$ ) > Ijw  $-\acute{e}?$  ( $-jis$ ); I'w  $-\acute{e}j$  [1]; Mj  $-\acute{e}j?$  ( $-is$ ) (Carol 2014a: 88; Drayson 2009: 131; Gerzenstein 1983: 125; Carol 2018) || PW  $^{*}-\acute{t}-\acute{e}j$  ( $^{*}-is$ ) > LB  $-\acute{t}-ej$  ( $-is$ ); Vej  $-\acute{t}-ej$ ; 'Wk  $-\acute{t}-\acute{e}j?$  ( $-is$ ) (Nercesian 2014: 166, 394; Viñas Urquiza 1974: 66; Gutiérrez & Osornio 2015: 66; Fernández Garay 2006–2007: 220; Claesson 2016: 74)

[1] The absence of a final  $?$  in Gerzenstein's (1983) data of Iyo'awujwa' must be a mistranscription.

[2] Likely related to Proto-Guaicuruan  $^{*}-ej$  'to name, to call' (Viegas Barros 2013b, #197).

### $^{*}[j]ékpha^{\circ}x$ [1] 'to bite'

Mk  $[j]ikfe^{\circ}x$  [1] (Gerzenstein 1999: 195) || PCh  $^{*}[j]ókwah$  [2] > Ijw  $[j]ók^je$ ; I'w  $-\acute{ó}ka$ ; Mj  $[j]óka$  (Drayson 2009: 161; Gerzenstein 1983: 152; Carol 2018) || PW  $^{*}[j]ók^wax$  [2] > LB  $[j]uk^wax$ ; Vej  $[j]ok^wah$ ; 'Wk  $[j]ókax$  (Nercesian 2014: 148; Viñas Urquiza 1974: 84; Claesson 2016: 550)

[1] The preglottalized coda in PM is reconstructed based on the Maká reflex, as attested in the New Testament (e.g. Revelations 16:10).

[2] PM  $^{*}e$  was apparently rounded to  $^{*}o$  in PCh/PW before a  $^{*}k\phi$  > PCh/PW  $^{*}k^w$ . It may have been a regular sound change.

[3] Likely related to Proto-Guaicuruan  $^{*}-ewakto$  bite (Viegas Barros 2013b, #240).

### $^{*}-\phiáji^{\circ}x$ 'right (side)'

Mk  $-feji^{\circ}x$  [1],  $-fejix-ets$  'left, left hand' (Gerzenstein 1999: 174) || Ni  $-\phiáji^{\circ}f$ ,  $-\phiájif-ik$  (Seelwische 2016: 131) || PCh  $^{*}-hwíjah$  [2] > Ijw  $-hwéje$ ; I'w  $-f^wéje$  (-j)

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~ *-f^wéji*; Mj *-hwíji* (Drayson 2009: 120; Gerzenstein 1983: 129, 194; Carol 2018)

[1] The preglottalized coda in Maká is attested in the New Testament (e.g. Mark 15:27).

[2] Chorote shows an irregular metathesis.

Possibly related to Proto-Qom *-ojik 'right' (Viegas Barros 2013a: 309).

Viegas Barros 2002: 143 (*-x^wejix); Viegas Barros 2013a: 309 (*-h^wejih) 'left/right'

### **ɸajXo?*, **ɸajXó-l* / *-*ɸájXo?* (*-l) 'charcoal, ember'

Ni *ɸajxo?* / -*ɸajxo?* (-k) (Seelwische 2016: 129) || PCh **hwa(h)jó-ke?* [1] > I'w *f^wajó-ki?*, Mj *hwajó-ki?* [1] (Gerzenstein 1983: 128; Hunt 1994) || PW **x^wijho?*, **x^wijhó-l^h* / *-*x^wijho?* (*-l^h) [2] > LB *f^wicu?* (-t) [3]; Vej *h^wijño* (-t) [4]; 'Wk *x^wicō?*, *x^wicó-t* / -*x^wicō?* (-t) (Nercesian 2014: 53; Gutiérrez & Osornio 2015: 48; Claesson 2016: 61, 173)

[1] The Iyo'awujwa' and Manjui reflex has *-j-* instead of the expected *-hj-. It is unclear whether the irregular loss of **h* occurred in Proto-Chorote or in Proto-Iyo'awujwa'-Manjui, as no cognates in Iyojwa'aja' are known.

[2] The vowel raising **a* > **i* in Wichí is not known to be regular.

[3] The Lower Bermejeno Wichí form is attested as *h^wijño* in Braunstein (2009: 43), with *o* (rather than the expected *u*) corresponding to PW **o*. It is possible that LB *u* is pronounced as a high-mid vowel by some speakers in Bazán.

[4] The Vejoz form is mistranscribed as *h^wino* in Viñas Urquiza (1974: 59).

Najlis 1984: 10, 32 (**hwajhnó*)

### *-*ɸá-’mat* [1] 'disease'

Mk <*eq>fe-’met* [2] (Gerzenstein 1999: 157) || Ni -*ɸa-’mat* (Seelwische 2016: 130) || PCh *-*hwá-’mat* > Mj *-hwá’mat* ~ *-hwó’mat* (-es) [3] (Carol 2018)

[1] Contains the PM suffix *-’mat 'negative quality, physical defect'.

[2] The Maká reflex contains an unidentified element *eq-*. The preglottalized coda is attested in the New Testament (e.g. Revelations 8:12).

[3] The variant *-hwó-’mat*, attested in Manjui, is irregular.

### *-*ɸapá(?)* 'shoulder', *-*ɸapá-ke?* (*-j^h) 'shoulder blade'

Ni -*ɸápá-ke* (-j) (Seelwische 2016: 136) || PCh *-*hwopó?*; *-*hwopó-ke?* (*-j^h) > Ijw *-hwópo* (-?) 'upper arm'; I'w *-f^wópo-ki?* 'armpit'; Mj *-hwopó-ki?* (-j)

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(Drayson 2009: 120; Gerzenstein 1983: 130; Carol 2018) || PW *-xʷápo ‘shoulder’ > LB PL -w̥apu-*t* [1]; Vej -hʷap(ʰ)o (-i) [2]; ’Wk -xʷápo? (-i) (Nercesian 2014: 249; Viñas Urquiza 1974: 58; Gutiérrez & Osornio 2015: 60; Claesson 2016: 60)

[1] Lower Bermejeño *w*, as documented by Nercesian (2014), is entirely unexpected. The expected reflex, -fʷapu?(-i), is attested by Braunstein (2009: 43).

[2] The non-etymological aspiration in the Vejoz reflex is attested by Gutiérrez & Osornio (2015), but not by Viñas Urquiza (1974).

***ɸát ~ *ɸá́t ‘fire’**

Mk *fét*, *fet-ej* (Gerzenstein 1999: 173; Braunstein 1987: 199) || PCh *hwát > Ijw *hwát* (Drayson 2009: 133)

***ɸátsu(χ), *ɸátshu-ts ‘centipede’**

Ni *ɸatsux*, *ɸatsxu-s* (Campbell et al. 2020: 51) || PCh *(h)wásuh, *(h)wásu-s [1] > Mj *wáxsu*, *wáxso* (-s) [1] (Carol 2018; Hunt 1994) || PW *xʷátsuxʷ > ’Wk *xʷátsuxʷ* (Claesson 2016: 164)

[1] It is unclear whether the irregular loss of *h* had already occurred in Proto-Chorote or in the independent history of Manjui.

**Rejected:** Najlis (1984: 26) lists Chorote *impes'uk* under this etymology, a form incompatible with *ɸátsuχ for phonological reasons. Moreover, we have been unable to identify the dialect to which it belongs.

Najlis 1984: 26 (*pawtshu)

***[ji]ɸá́x ‘to cut down’**

Mk *-fex-inet-ki?* (-j ~ -l) ‘ax’ (Gerzenstein 1999: 174) || Ni [ji]ɸáf (Seelwische 2016: 127) || PCh *[ʔi]hwáh-APPL > Ijw [ʔi]hwéh-APPL / -hwáh-APPL; I'w -fʷáh-aj; Mj [ʔi]hjéh-APPL / -hwáh-APPL (Drayson 2009: 99; Gerzenstein 1983: 129; Carol 2018) || PW *[ʔi]xʷáχ > LB [ʔi]fʷáχ; Vej -hʷah-o ‘to nail down’; ’Wk [ʔi]xʷáχ (Nercesian 2014: 351; Viñas Urquiza 1974: 58; Claesson 2016: 162)

Najlis 1984: 29 (1 *ahwa); Viegas Barros 2002: 143 (*-xʷex)

***ɸaʔáj (fruit); *ɸaʔáj-u'k, *ɸaʔáj-ku-jʰ (tree) ‘white algarrobo (*Prosopis alba*)’**

Ni *ɸaʔaj*; *ɸaʔaj-*<j>uk**, *ɸaʔaj-ku-j* (Seelwische 2016: 127) || PCh *hwaʔáj?;

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**hwa?*áj-uk, **hwa?*áj-ku-*j^h* > Ijw *hwa?*áj-; *hwa?*áj-uk, *hwa?*á-*tsu-**l*; I'w *f*wa?áj(-*j*) [1]; *f*wa?áj-uk, *f*wa?áj-si-*?*; Mj *hwa?*áj-*j*; *hwa?*áj-uk ~ -*ik*, *hwa?*áj-*fi-j* (Drayson 2009: 133; Gerzenstein 1983: 128; Carol 2018) || PW **x*wa?áj^h [2], **x*wa?áj-uk^w, **x*wa?á-k'u-*j^h* > LB *f*wa?áa(-*j*) [1]; *f*wa?aj-ek^w, *f*wa?a-tf-*ej*; Vej *h*wa?aj; *h*wa?aj-uk, *h*wa?a-ttsu-*j* [3]; 'Wk *x*wa?á-*ç*; *x*wa?áj-uk, *x*wa?á-k'u-*ç* (Nercesian 2014: 192, 212, 245; Viñas Urquiza 1974: 58; Gutiérrez & Osornio 2015: 17; Claesson 2016: 162)

[1] In Iyo'awujwa' and Lower Bermejeño Wichí, the form with a final *-j* has been attested as a plural form. These two varieties must have innovated by back-deriving a *j*-less singular from a reflex of **fa?*áj. Note that at least in Lower Bermejeño Wichí the form *f*wa?a-*j* is much more frequent than the singular *f*wa?a (*attested only in the compound f*wa?a *muk* 'Prosopis alba flour'), and the derivation processes take the plural form *f*wa?a-*j* as the base (Nercesian 2014: 196). LB *f*wa?aj is also the only form attested in Spagarino (2008: 60).

[2] PW *-áj^h, reconstructed based on the 'Weenayek reflex with -ç, does not correspond to PCh *-áj? (underlying: */-áj/). The root must have been remodeled based on the plural suffix *-j^h.

[3] In Vejoz, Gutiérrez & Osornio (2015: 17) document an irregular variant *h*wa?a-*tf-uk* alongside *h*wa?a-*aj-uk*.

Viegas Barros (2013a: 300) notes the similarity with Lule *waja* 'green and black algarrobo' and Proto-Guaicuruan **wa?*ek (Viegas Barros 2013b, #619) > Mbayá 〈guayegi〉 'jasper-colored algarroba', Abipón *oai-k* 'Prosopis alba' (Najlis 1966: 110), which is attributed to lexical diffusion.

Najlis 1984: 12, 17, 27, 39, 46 (**hwá*(-)*á* (fruit); **hwáajuk* (tree); **hwajcat* (grove)); Campbell & Grondona 2007: 19; Gutiérrez 2015b: 77

### *[*ji*]fáł 'to tell'

Mk *n(i)-fel-i'm* (Gerzenstein 1999: 172) || Ni *n(i)-fak* / *n(i)-fakl-* (Seelwische 2016: 189) || PCh **[?i]hwél* > Ijw *[?i]hwí'l* / -*hwé'l*; I'w *[i]híl-am* / -*f*é(h)*l-am*; Mj *[?i]hjíl* / -*hwél* (Drayson 2009: 100; Gerzenstein 1983: 44, 130, 185; Carol 2018) || PW **[?i]x*wé'l^h / **[?i]x*wé'l- > LB *[?i]f*wé'l / *[?i]f*wé'l- / *[?i]f*wé'l-; Vej -*h*wé'n [2]; 'Wk *[?i]x*wé'l (Nercesian 2014: 150, 184, 259; Viñas Urquiza 1974: 59; Claesson

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2016: 167)

[1] The preglottalized coda in Maká is attested in the New Testament (e.g. John 17:8).

[2] The Vejoz reflex attested in Viñas Urquiza (1974: 58) is not known to be regular.

***-ɸälits ‘sister-in-law; daughter-in-law’**

Mk *-felits*, *-feltsi-?* ‘daughter-in-law; brother-in-law’s wife’ (Gerzenstein 1999: 172) || Ni *-ɸaklits* <?a> (-k) ‘sister-in-law’ (Seelwische 2016: 128) || PCh **-hwélis*, **-hwélsV-wot* ‘daughter-in-law’ > Ijw *-hwélis*, *-hwélse* ~ *-hwélse-wot*; Iw *-f'élis*; Mj *-hwéles*, *-hwélsa-wot* (Drayson 2009: 120; Gerzenstein 1983: 129; Carol 2018)

***-ɸäl?u? (*-ts) ‘son-in-law; brother-in-law’**

Mk *-felu?* (-ts) ‘son-in-law; sister-in-law’s husband’ (Gerzenstein 1999: 172) || Ni *-ɸakl?u* (-s) ‘brother-in-law’ (Seelwische 2016: 128) || PCh **-hwílu?* ~ **-hwélu?* (*-s) [1] ‘son-in-law’ > Ijw *-hwél'u?* (-s); Iw *-f'élu?* (-s); *-f'élis*; Mj *-hwíl'u?* ~ *hwéil'u?* (-s) (Drayson 2009: 120; Gerzenstein 1983: 129; Carol 2018)

[1] PCh **í* (whose reconstruction is supported by the Iyojwa’aja’ and Manjui cognates) is not the expected reflex of PM **ä*. By contrast, Iyo’awujwa’ points to PCh **é* (as shown by the absence of palatalization in *l*).

***-ɸät ~ *-ɸä't [1] ‘belt’**

Mk *(-)fet<i(')t>*, *fet<il>-its* ‘men’s belt or skirt made of feathers worn at festivals’ [2] (Gerzenstein 1999: 174) || Ni *-<nuk>fat* (-es) ‘belt, sash’ [3] (Campbell et al. 2020: 95) || PCh **-hwét* > Mj *-hwét*, *-hwet-ájh* (Carol 2018)

[1] The vowel is reconstructed as unaccented based on the plural form attested in Manjui. It is unclear whether the coda should be reconstructed as preglottalized (Ni *-nukfat* does not show any traces of preglottalization, but this could possibly be the case due to deglottalization in unaccented syllables).

[2] We have no explanation for the element *-i'l* or *-i't* in Maká (the term is not attested in our sources that distinguish between plain and preglottalized stops).

[3] We have no explanation for the element *-nuk-* in Nivañe.

***ɸä'x ~ *ɸä'x ‘field’**

Ni *ɸa'ʃ*, *ɸaf-ik* ‘field, lowland’ (Seelwische 2016: 127) || PCh **hwéh* > Iw *f'éh*;

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Mj *hwéh* (Gerzenstein 1983: 129; Carol 2018)

Najlis 1984: 29 (**hwéhn*)

*[*ji*]ɸá[?]ja[?] ~ *ɸä[?]ja[?] ‘to fly’

Ni [*ji*]ɸá[?]ja[?] (Seelwische 2016: 136) || PCh *[*ji*]hwé[?]ja[?] > Ijw [*ji*]hwí[?]ja[?] / -hwé[?]ja[?]; I’w -f^wéje[?]; Mj [*ji*]hjí[?]je[?] / -hwé[?]je[?] (Drayson 2009: 100; Gerzenstein 1983: 129; Carol 2018) || PW *x^we[?]ja[?] ~ *w- ~ *-i- [1] > LB wi[?]jo; Vej -h^wijsa; ’Wk we[?]ja[?] (Nercesian 2014: 258; Viñas Urquiza 1974: 59; Claesson 2016: 481)

[1] The correspondences between the Wichí varieties are entirely irregular. Only Vejoz points to PW *x^w (which matches the evidence from Chorote and Nivaâle), while other varieties point to PW *w. Only ’Wenayek and the variety of Misión Santa María (*weja?* in Spinelli 2007) point to PW *-e- (which matches the evidence from Chorote), while other varieties point to PW *-i-.

Possibly related to Proto-Guaicuruan *-a(?)jo ‘to fly’ (Viegas Barros 2013b, #11; cf. Viegas Barros 2013a: 304), though a better comparandum for the Guaicuruan form is Mk *n-a[?]ja* ‘to fly’ (Gerzenstein 1999: 138).

Viegas Barros 2013a: 304 (*-(*h^w*)e[?]ja[?])

*(-)ɸe[?]lek (~ *-é[?]le- ~ *-e[?]lé-) [1] ‘mortar’

Mk (-)fi[?]lik(-i) ‘drum’ (Gerzenstein 1999: 175) || Ni -ɸe[?]let[?], -ɸe[?]ltse[?]-j (Seelwische 2016: 132) || PCh *(-)hwVhlek [2] > Ijw (-)(*h*)wánhlek, (-)(*h*)wánhle-[?]e; I’w wi[?]lhlik(-is); Mj (*h*)wihlík (wihlík-is ~ wi[?]lk-íjh) (Carol 2014a: 78; Drayson 2009: 133; Gerzenstein 1983: 170; Carol 2018) || PW *x^wé[?]leq > LB f^we[?]leq; Vej h^we[?]lek(-t^fo); ’Wk x^wé[?]lek (Nercesian 2014: 300; Viñas Urquiza 1974: 59; Gutiérrez & Osornio 2015: 48; Fernández Garay 2006–2007: 215; Claesson 2016: 167)

[1] The prosodic properties of the root are difficult to reconstruct: Iyo’awujwa’ and Manjui point to *phi[?]lek or *phi[?]lék, ’Wenayek to *phi[?]lek, and Iyojwa’aja’ to *(-)phi[?]án[?]lek or *(-)phi[?]án[?]lék (see below on the irregular segmental correspondences).

[2] Each Chorote variety presents some irregularity in the phonological development of this root. In Iyojwa’aja’, one finds the vowel *a* in the first syllable followed by a nasal consonant, with no parallels either in other Chorote varieties or in other Mataguayan languages; the expected outcome would be *hwéhlek. In Iyo’awujwa’ and Manjui, the first syllable contains the unexpected vowel *i*; furthermore, the initial consonant is *w* (rather than **hw*) in Iyo’awujwa’.

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(and optionally in Iyojwa'aja' and Manjui).

***(-)ɸétä'ts 'root'**

Mk *fitets* (-*its*) 'Dorstenia sp.', 3 *te-fitets* [1] (-*its*) 'root' (Gerzenstein 1999: 178, 249) || Ni *-ɸeta's*, *-ɸetats-ij* [2] (Seelwische 2016: 132) || PCh *-hwéetus [3] > Ijw *-hwétis*, *-hwétis-u'l*; I'w *fʷétis* (-*i?*); Mj *-hwétus* (-*ej* ~ -*uj*) (Drayson 2009: 120; Gerzenstein 1983: 129; Carol 2018) || PW *(-)xʷétes, *xʷétes-el^h / *-xʷéts-il^h [4] > LB PL *-fʷets-il*; Vej *-hʷetes*; 'Wk (-)xʷétes, xʷétes-el / -xʷéts-il (Nercesian 2014: 324; Viñas Urquiza 1974: 59; Claesson 2016: 61, 168)

[1]The Maká reflex unexpectedly lacks preglottalization in the coda in the singular form, as attested in the New Testament (Romans 11:18; Luke 3:9).

[2]Nivaclé also has *ɸetāx*, *ɸetx-ās* 'peel of a root' (Seelwische 2016: 132), which is obviously related (cf. also *-ʔāx* (-*is*) 'skin, bark'), but the derivational relation is obscure.

[3]PM *ä has undergone irregular change in Chorote and irregular syncope in the Wichí possessed plural form.

[4]The vowel syncope in the Wichí plural is irregular.

Possibly related to Proto-Guaicuruan *-pat'ád 'trunk, root' (Viegas Barros 2013b, #479). Viegas Barros (2013a: 313) notes the similarity of the PM form with Kadiwéu *-itodi* 'root', which is likely spurious.

Najlis 1984: 9, 19, 43 (**hwetets*); Viegas Barros 2013a: 313 (**hʷetets*)

***[ji]ɸi'j ~ *[ji]ɸí'j [1] 'not to be afraid'**

Ni [ji]ɸi'j (Seelwische 2016: 133) || PCh *[i]hwíj? > Ijw [i]hwíj-e / -hwéj-e; I'w há *fʷíj-in* 'fearful'; Mj [i]hjíj? / -hwíj? ~ -hwéi? (Drayson 2009: 100; Gerzenstein 1983: 172; Carol 2018) || PW *[i]xʷíj-eh > 'Wk [i]xʷíj-eh (Claesson 2016: 172)

[1]The prosodic properties of the root cannot be established because the 'Weenhayek cognate is not attested without applicative morphology (the form with an applicative suffix is not revealing because in trisyllabic words the vowel of the peninitial syllable is lengthened in any case).

***ɸi'já̄t 'cold weather, south wind'**

Ni *ɸi'jat* (-*is*) 'south wind' (Seelwische 2016: 134) || PCh **hwi'jét* 'ice, frost' > Ijw *wi'jít*; Mj *hwi'jít* (Drayson 2009: 157; Carol 2018) || PW **xʷi'jét* (*-il^h) 'winter, cold weather' > LB *xʷi'jét*; Vej *hʷi'jet* (-*il* ~ -*it*) [1]; 'Wk *xʷi'jét* (-*it*)

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(Nercesian 2014: 200, 212; Gutiérrez & Osornio 2015: 43; Claesson 2016: 61, 168)

[1] Viñas Urquiza (1974: 59) mistranscribes this word (possibly the plural form) as *h^wijet til*.

### *[ji]ɸi'k ~ *[ji]ɸi'k 'to hide'

Ni [ji]ɸi'tf (Seelwische 2016: 133) || PCh *[ʔi]hwík > Ijw [ʔi]hwík / -hwék 'to keep in secret', [ʔi]hwík-i / -hwék-i 'to hide'; Mj [ʔi]hjík / -hwík (Drayson 2009: 100; Carol 2018)

### *ɸinä(?)χ 'crab'

Ni φinax, φinxa-s (Seelwische 2016: 133) || PCh *hwíneh > Ijw hwéni; Mj hwíni (Drayson 2009: 133; Carol 2018)

### *ɸi's 'leech' [1]

Ni φi's, φis-ik (Seelwische 2016: 113) || PW *x^wis > 'Wk x^wis (Claesson 2016: 170)

Proto-Qom *pit 'leech' may have been borrowed from Mataguayan.

### *ɸít'i(?) ~ *ɸít'ih 'dragonfly'

Ni φit'i(-k) (Seelwische 2016: 134) || PCh *hwí(n)t'i... [1] > Ijw hwént'i<je>(-jis) [1] (Drayson 2009: 133) || PW *x^wit'i<s> [2] > Vejoz or Guisnay *h^wit'i<s>* (Lunt 2016: 32)

[1] The Iyojwa'aja' reflex is quite irregular: it contains an unexpected nasal consonant and an unidentified element fossilized to the erstwhile root.

[2] The Wichí reflex includes a non-etymological element *s. In Nercesian (2021), an irregular dialectal form <fwich'i> is also documented, it is attributed to the Pilcomayeño variety (corresponding to our Guisnay).

Najlis 1984: 39 (*hwethne)

### *ɸkéna(?)χ 'north wind, north'

Ni φtſenax, φtſenxa-s (Seelwische 2016: 132) || PCh *hw^wkénah > Ijw/I'w wikína [1]; Mj hwikína (Carol 2014a: 74, fn. 1; Drayson 2009: 157; Gerzenstein 1983: 170; Carol 2018)

[1] Iyojwa'aja' and Iyo'awujwa' w- is not a regular reflex of PCh *hw-

**Rejected:** Najlis (1984: 11) compares Ni *ftſenax* with Chorote and Wichí words meaning 'moun-

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tain', which are derived from PM **tkénax* 'precipice; hill, mountain' in our proposal.

***-*ϕo*(?) ~ *-*ϕó*(?) 'foot' [1]**

Mk *-fo*<*nxe?* (-j)ankle [2] (Gerzenstein 1999: 180) || Ni *-ϕo?* (-k)foot, *-fo*<*klå* (-s) 'ankle bracelet with white feathers' [3], *-fo-xij*(-is) 'stirrup' (Seelwische 2016: 135)

[1] This root certainly reconstructs all the way to Proto-Mataguayan, since Chorote and Wichí reflect a likely derivative *-*ϕolXa'n* 'ankle'.

[2] The formative *-nxe?* in Maká does not appear to be morphologically segmentable, but it is also found in *-wonxe?* 'neck' and other body-part terms.

[3] Ni *-fo**klå* includes a fossilized reflex of PM *-*'lå?* ~ *-*'lå?* 'adornment'.

***-*ϕqató* (*-*l*) 'elbow'**

Ni *-(?V)ϕkato* (-k) (Seelwische 2016: 131) || PCh *-*qató?* (*-*l*) > Ijw *-káto-ki?*, I'w *-kató?* ~ *-kató-ki?*, Mj *-kat3?*(-*l*) (Carol 2014a: 76, 91, fn. 22; Drayson 2009: 121; Gerzenstein 1983: 137; Carol 2018) || PW *-*qáto* (*-*l^b*) > LB *-qatu*; Vej *-kåto* [1]; 'Wk *-qáto*(-*l*) (Braunstein 2009: 47; Viñas Urquiza 1974: 62; Claesson 2016: 87)

[1] The vowel *å* in the Vejoz reflex is unexpected and could be a mistranscription on Viñas Urquiza's (1974) part.

Possibly related to Proto-Guaicuruan *-*q'oté* 'elbow' (Viegas Barros 2013b, #542).

Najlis 1984: 10 (**qatɔq*); Campbell & Grondona 2007: 15

****ϕtsána*(')χ 'Baccharis sp.'**

Ni *ϕtsåna*, *ϕtsåna*-s (Seelwische 2016: 137) || PCh **sánah* > Ijw/Mj *sána* (Drayson 2009: 144; Carol 2018) || PW **xʷitsánaχ* > Vej *hʷitsånah*, *hʷitsåñ-as* [1] (Gutiérrez & Osornio 2015: 18)

[1] Viñas Urquiza (1974: 59) mistranscribes the root as *hʷitsanah*.

Najlis 1984: 29 (**hwitsåhna*)

****ϕts-u'k*, collective **ϕis-kat* [1] 'Copernicia alba palm'**

Mk *fits-uk* [2], *fis-kw-i*; *fis-ket* (Gerzenstein 1999: 178) || Ni *ϕts-u'k*; *ϕis-tʃat*; stem used in derivatives: *ϕts-uk-i-* (Seelwische 2016: 133, 137–138) || PCh **hwis*<*úk* [3] > Ijw/I'w (*h*)*wisjúk*; Mj (*h*)*wisjúk* (-*ij*) [4] (Drayson 2009:

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157; Gerzenstein 1983: 170; Scarpa 2010: 186; Carol 2018) || PW **xʷits<ukʷ>* > LB *fʷitsekʷ* ‘*Ruprechtia triflora*’; Vej *hʷitsuk* (-*lajis*) [5]; ’Wk *xʷitsuk* (Spagarino 2008: 59; Braunstein 2009: 43; Viñas Urquiza 1974: 59; Gutiérrez & Osornio 2015: 17–18; Claesson 2016: 172)

[1] Based on the Nivaâle reflex, we reconstruct a non-productive alternation pattern, whereby the PM cluster **pts-* before vowels would have alternated with **pis-* before consonants (with an irregular deaffrication of **ts* and epenthesis of **i*, likely motivated by the necessity to avoid a tautosyllabic cluster **ptsk*). We surmise that the epenthetic **i* has been analogically extended to the prevocalic allomorph in all languages except Nivaâle.

[2] The Maká reflex unexpectedly lacks preglottalization in the coda in the singular form, as attested in the New Testament (Revelations 7:9).

[3] In Chorote, PM **ɸ* in this word is irregularly reflected as *w* alongside the expected reflex *hw*. It is unclear why the vowel **i* rather than **ə* was epenthized.

[4] The plural form attested in Manjui is innovative.

[5] The absence of labialization in the reflex of PW *-*kʷ* in Vejoz is unexpected.

Viegas Barros (2013a: 310) notes the similarity with Proto-Guaicuruan **tsjáwa* ‘*Copernicia alba* palm’ (VB 2013b, #584), which could be spurious.

Najlis 1984: 16 (**hwitsúk*); Campbell & Grondona 2007: 15 (“diffused?”); Viegas Barros 2013a: 310 (**hʷits-uk*)

### *[*ji*]ɸúju ‘to blow’

Mk [ji]ɸuju (Gerzenstein 1999: 183) || Ni [ji]ɸuju ‘to blow, to play a woodwind instrument’ (Seelwische 2016: 138) || PCh *[ʔi]hwúju-APPL > Mj [ʔi]hjúji-i’m ~ [ʔi]hjúju-u’m / -hwúji-i’m ~ -hwúju-u’m to blow at, [ʔi]hjúji-ʔi? ~ [ti]hwúji-ʔi? ‘to blow’ (Carol 2018)

### *[*ji*]ɸún ‘to be hesitant with, to respect’

Ni [ji]ɸun-a ‘to be delicate with, to respect’ (Seelwische 2016: 138) || PW *[ʔi]xʷún > Vejoz or Guisnay [i]hʷun ‘to be timid, to be lazy, not to feel like doing something’ (Lunt 2016: 34; Claesson 2016: 177)

### *-ɸu’*t* ~ *-ɸú’*t*, *-ɸtú-*ts* [1] ‘flatulence’

Mk -*ftu?*, -*ftu-ts* [2] (Gerzenstein 1999: 141) || Ni -*ɸu’*t**, -*ɸtu-s* (Seelwische 2016: 138) || PCh *-*hwút* > Ijw/Mj -*hwút* (Drayson 2009: 120; Carol 2018) ||

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PW *[*t*]<*e*>*x^wtu-j* ~ *[*t*]<*e*>*x^wtú-j* ‘to fart’ > LB [*t*]*ef^wte-j* (Nercesian & Ama-  
rilla 2021: 278)

[1] The plural form is reconstructed based on Maká and Nivaclé; it is thus technically reconstructible only for Proto-Maká–Nivaclé.

[2] The singular form in Maká has been reshaped based on the plural form. One would expect **fu^t, ftu-ts*.

Viegas Barros (2013a: 310) notes the similarity with Proto-Guaicuruan *-*wit’i* ‘flatulence, to fart’ (Viegas Barros 2013b, #632), which could be spurious.

Viegas Barros 2013a: 309 (*-*eh^wutu?*)

*[*ji*]*ɸχän-* ~ *-*ä-* ‘to kill a bird’

Ni [*ji*]*ɸxan-APPL* (Seelwische 2016: 39) || PCh *<*?a*>*hwén-(n)ah* ‘bird’ [1] > Ijw <*?a*>*hwén-a*, <*?a*>*hwéhn-a-s*; I’w <*a*>*f^wén-a-ki* (-*ji*); Mj <*?a*>*hwén-a*, <*?a*>*hwéhn-a-s* (Drayson 2009: 93; Gerzenstein 1983: 117; Carol 2018) || PW *<*?a*>*x^wén-k^je* (*-*j^h*) ‘bird’ [1] > LB <*?a*>*f^wen-tse* (-*j*); Vej <*?a*>*h^wen-tse* (-*j*); ’Wk <*?a*>*x^wén-k^je?* (-*ç*) (Nercesian 2014: 196, 253; Braunstein 2009: 37; Viñas Urquiza 1974: 50; Gutiérrez & Osornio 2015: 19; Claesson 2016: 10)

[1] In Chorote and Wichí, the original verb is not preserved, but the term for ‘bird’ appears to be its nominalization. The prefixed element **?a*- is of unclear origin.

*-*ɸχúx*, *-*ɸχú-ts* ‘finger’

Mk *-fxux* (-*uts*) [1] (Gerzenstein 1999: 183) || Ni *-ɸxux*, *-ɸxu*-stoe (Seelwische 2016: 135) || PCh *-*hwu-ké?* > Ijw *-hwú-ki?* (-*l*); I’w *-f^wi-kí?*, *-ji* ‘toe’ [2] (Drayson 2009: 120; Gerzenstein 1983: 130) || PW *-*x^wúx^w*, *-*x^wú-s* > LB *-f^wef^w*, *-f^we-s*; Vej *-h^wuh*, *-h^wu-s* [3]; ’Wk *-x^wúx^w* (-*x^wú-s) (Nercesian 2014: 191; Viñas Urquiza 1974: 58; Gutiérrez & Osornio 2015: 32, 60; Claesson 2016: 62)*

[1] The Maká plural form is non-etymological.

[2] The vowel *i* as a reflex of PCh **u* in Gerzenstein’s (1983) data of *Iyo’awujwa*’ is irregular; alternatively, it could be a mistranscription.

[3] The singular form of the Vejoz reflex irregularly lacks labialization in the final consonant.

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It is mistranscribed as *-huh* in Viñas Urquiza (1974: 58).

Najlis 1984: 15 (PL **hwuq-s*)

### **(-)ɸ'elxVtséχ, *(-)ɸ'elxVtsé-ts* [1] ‘poor’

Mk *-f'ilketsaχ*, *-f'ilketsi-ts* ‘poor’; *-f'ilketsi-?* ‘poverty’ (Gerzenstein 1999: 183) || PCh **p'ilusáh*, **p'ihlusé-s* [2 3] > Ijw *p'il'úxse* ~ *p'élis'e*, *p'ihl'úksi-s*; I'w *-pelíxsa*; Mj *p'ilisáh*, *p'ilisé-s* [2] (Carol 2014b; Carol 2014a: 92; Drayson 2009: 144; Gerzenstein 1983: 155; Carol 2018) || PW **p'elitsaχ*, **p'elítse-s* [2] > LB *p'alitsaχ* [3]; Vej *p'elitsah*; 'Wk *p'alítsax*, *p'alítse-s* [4] (Braunstein 2009: 54; Viñas Urquiza 1974: 71; Gutiérrez & Osornio 2015: 52; Claesson 2016: 297)

[1] Regarding the vowel of the medial syllable, Maká points to PM **a* or **ä*, Chorote to **u*, and Wichí to **i*.

[2] PM **x* is inexplicably lost in the Chorote singular form (in Manjui also in the plural) as well as in Wichí.

[3] The Proto-Chorote stress is unexpectedly retracted to the peninitial syllable in *Iyo'awujwa'*, and to the initial syllable in the *Iyojwa'aja'* variant *p'élis'e*.

[4] PW **e* is regularly reflected as *e* in Vejoz, whereas Lower Bermejeño and 'Weenhayek show the irregular reflex *a*.

### **(-)háqke?* (**-j^h*) ‘well’

Mk *haqqi?* (*-l*) [1] ‘river’ (Gerzenstein 1999: 186) || Ni *-xáke* (*-j*) ‘dry well’ (Seelwische 2016: 153) || PCh **-háåke?* ‘artificial well, ditch’ > Ijw *-háki?*; I'w *-háki?* (*-ji*); Mj *-háaki?* (*-j*) ‘artificial well, ditch’ (Drayson 2009: 129; Gerzenstein 1983: 173; Carol 2018)

[1] The plural form in Maká is non-etymological.

Najlis 1984: 14 (**hnawq*)

### **-i(t)s'i?* (**-l*) ‘resin, sap’

Ni *-its'i* (*-k*) [1] ‘resin, earwax’ (Seelwische 2016: 142) || PCh 3 **hl-íts'i?* (**-l*) > Ijw *hl-éts'i* ‘resin, sap, wax’; Mj 3 *hl-éits'e?* (*-l*) ‘sap’ [2] (Drayson 2009: 131; Carol 2018) || PW **-t-íts'i* > LB *-t-its'i* ‘wax’; 'Wk *-t-íts'i?* ‘resin, rubber’

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(Nercesian 2014: 267; Claesson 2016: 75, 236)

[1] Seelwische (2016: 142) actually attests *-iʔts'i*, where [ʔts'] is likely an allophone of /ts'/.  
[2] Manjui *e* is not known to be a regular reflex of unstressed PCh **i*.

### *-játl 'breath'

Ni *-jal* (-*ij*) (Seelwische 2016: 338) || PCh *-játl > Ijw *-jét*; I'w *-jél*; Mj *-jét* (Drayson 2009: 127; Gerzenstein 1983: 133; Carol 2018) || PW *-játl > LB/Vej *-jal*; 'Wk *-jál* (-lajis) (Braunstein 2009: 60; Viñas Urquiza 1974: 83; Claesson 2016: 104)

Najlis 1984: 46 (**jahl*)

### *[ji]jjá? 'to drink' [1]

Mk <*i>ja?* (Gerzenstein 1999: 224) || Ni [ji]jjá? / -(*i*)jjá? (Seelwische 2016: 387) || PCh *[*i*]jjá? 'to drink alcohol' [2] > Ijw [*i*]jjá?; I'w *-jé* [3]; Mj [*i*]jjé? (Drayson 2009: 118; Gerzenstein 1983: 186; Carol 2018) || PW *[*i*]jjá? > LB [*i*]jo? 'to drink water'; Vej [hi]jjá [4]; 'Wk [*i*]jjá? 'to drink alcohol' (Nercesian 2014: 241, 251; Braunstein 2009: 46; Gutiérrez & Osornio 2015: 41; Claesson 2016: 512)

[1] The underived verb is intransitive. Applicative derivations are used for expressing the ingested substance.

[2] The glottalization in PCh **j* appears to be irregular (the seemingly plain reflex in Iyo'awujwa' could be a mistranscription on Gerzenstein's part).

[3] The absence of a final *?* in Gerzenstein's (1983) data of Iyo'awujwa' must be a mistranscription.

[4] In Viñas Urquiza (1974: 82), the root is mistranscribed as *-ja*.

Najlis 1984: 15 (2 **hl-jae*)

### *-jáqsi? ~ *-jáqsi? 'finger'

Mk *-jaqsi?* (-*j*) 'finger, claw, ring' (Gerzenstein 1999: 397) || PCh *-<*i>jási-ke?* ~ *-<*i>jási-ke?* (*-*j^h*) [1] > I'w *-jési-ki?* (-*ji*); Mj *-(i)jéxfi-ki?* (-*jh*) [1] (Gerzenstein 1983: 134; Carol 2018)

[1] We have no explanation for the element *i*- in the Manjui third-person form (*t-ijéxfi-ki?*), which disappears in other inflected forms and lacks a counterpart in Maká.

Likely related to Proto-Guaicuruan *-a(')jaqats'V 'finger' (Viegas Barros 2013b, #9; cf. Viegas

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Barros 2013a: 308).

Viegas Barros 2013a: 308 (*-jaqsi?)

### *(-)jája(?) 'grandmother'

Ni *jaja* 'grandmother, old woman (possibly vocative)' (Campbell et al. 2020: 495) || PCh *(-)jéja? > Mj (-)jíje? ~ jíji? (Carol 2018)

### *ijá'ts 'dew'

Mk *ije'ts* [1], *ijets-its* (Gerzenstein 1999: 225) || Ni *jija's* (Seelwische 2016: 385) || PCh *?ijés-tah > Ijw *jís-ta* [2]; I'w *-jís-ta* ~ *-jís-te* [2]; Mj 〈ajísta, ijísta〉 [2] (Drayson 2009: 160; Gerzenstein 1983: 33, 134; Hunt 1994) || PW *?ijás > LB *?ijas*; 'Wk *?ijás (-lis)* (Nercesian 2014: 48; Claesson 2016: 43)

[1] The presence of a preglottalized coda in Maká is inferred based on the Nivaclé cognate; the singular form is not attested in our sources that distinguish between plain and preglottalized stops.

[2] The root-initial vowel has suffered irregular change or loss in all Chorote varieties (only in Manjui has the expected form been attested alongside an innovative one).

Viegas Barros (2013a: 312) notes the similarity with Proto-Guaicuruan *ewi 'dew' (Viegas Barros 2013b, #245), which could be spurious.

Viegas Barros 2013a: 312 (*ija-ts)

### *ji'jå'X₁₂ 'jaguar'

Ni *ji'jå'x*, *jijxå-s* (Seelwische 2016: 386; Campbell et al. 2020: 52) || PCh *?a'jáh (*-es) > I'w *ajéh* (-es); Mj *?a'jéh*, *?a'jé-es* (Gerzenstein 1983: 118; Carol 2018) || PW *ha'jåχ > LB *ha'joχ*; Vej *ha'jåh* (-tajis) [1]; 'Wk *ha'jåx*, *ha'jå-s* (Nercesian 2014: 53; Gutiérrez & Osornio 2015: 20; Claesson 2016: 141)

[1] Viñas Urquiza (1974: 57) mistranscribes this word as *hajoh*.

Najlis 1984: 36, 41 (*jåq); Campbell & Grondona 2007: 20

### *ji'lå? ~ ji'lå?, *ji'lå-j^h [1] 'tree'

Ni *ji'klå? (-j)* [2] (Campbell et al. 2020: 58) || PCh *?a'lå? (*-j^h) > Ijw *?a'lå?*; I'w *alå? (-j)* [3]; Mj *?a'lå? (-jh)* (Carol 2014a: 99; Drayson 2009: 95; Gerzenstein 1983: 119; Carol 2018) || PW *ha'lå, *ha'lå-j^h > LB *ha'lo*, *ha'lo-j*; Vej *ha'lå*,

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*ha'lä-j* [4]; 'Wk *ha'lä?*, *ha'lä-ç* (Nercesian 2014: 191; Gutiérrez & Osornio 2015: 18; Claesson 2016: 139)

[1] Nivaclé points to PM **?a'lä?*, Lower Bermejeño Wichí to **?a'lä*.

[2] Seelwische (2016: 379) documents *jeklää?* (-j) 'wood, firewood', which must be an irregular Shichaam Lhavos form. The basic term for 'tree' in that variety is *?a'kxi-juk* (Seelwische 2016: 35), of unknown origin.

[3] The absence of preglottalization in I'w *-l-* in this word is probably a mistranscription on Gerzenstein's (1983) part.

[4] Viñas Urquiza (1974: 56) mistranscribes the Vejoz reflex as *ha'la* ~ *hala*.

Hunt 1915: 239; Najlis 1984: 36 (**la*); Gutiérrez 2015b: 253

***jinǻt, *jinǻt-its 'water'**

Mk (Guentusé) <enaat> [1] (Aguirre 1793) || Ni *jinǻt*, *jinǻt-is* / -^β*inǻt* (-is) (Seelwische 2016: 361, 382) || PCh **ʔi'nǻt* (*-es) [2] > Ijw *ʔi'nǻt*; I'w *?anǻt* [3]; Mj *?a'nǻt* (-es) [3] (Carol 2014a: 99; Drayson 2009: 117; Gerzenstein 1983: 127; Carol 2018) || PW **ʔinǻt* (*-es) > LB *ʔinot*; 'Wk *?inǻt* (-es) (Nercesian 2014: 150; Braunstein 2009: 45; Claesson 2016: 31)

[1] In modern Maká, this root has been replaced by *iweli?* 'water' (in earlier sources *ewale?*; Hunt 1915: 243).

[2] The glottalization in PCh *^β*n* appears to be irregular (the seemingly plain reflex in Iyo'awujwa' could be a mistranscription on Gerzenstein's part). PM **ji* evolves to *ʔi* in Iyo'awujwa', as if it were followed by a plain consonant, but to *?a* in Iyo'awujwa', as expected before an etymological glottalized consonant.

[3] The low vowel in the first syllable in Iyo'awujwa' and Manjui could be due to the general dispreference for structures of the type #*ʔiCÁ...*, where C' stands for a glottalized consonant and Á to a stressed low vowel (these sequences were eliminated in Chorote and Wichí by means of the sound change **ji*- > **ʔi*- > **?a*- before glottalized consonants followed by stressed vowels).

Najlis 1984: 10, 28, 32, 44 (**ihnǻt*)

***{j/ʔ}is{a/å/e}χ ~ *{j/ʔ}is{á/å/é}χ 'sand'**

Mk *isaχ* [1], *isaχ-its* (Gerzenstein 1999: 207) || PCh **ʔisáh* ~ **?isáh* > I'w *is'é*; Mj (*ʔi)séh* (Gerzenstein 1983: 132; Carol 2018)

[1] The preglottalized coda in the singular form in Maká is attested in the New Testament

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(Hebrews 11:12).

Viegas Barros 2002: 144 (**isAχ*)

### **jit'á?*, **jit'á-l* ‘turkey vulture’

Ni *jit'á?*(-*k*) (Seelwische 2016: 384) || PCh **itat'á?*(*-*l*) > Ijw *itat'á?*(-*l*) ‘black vulture’; Mj *itat'á?* ‘turkey vulture; lesser yellow-headed vulture’ (Drayson 2009: 95; Carol 2018) || PW **hat'á* > LB *hat'o*; ’Wk *hat'á?* (Spagarino et al. 2013 [2011]; Claesson 2016: 147)

### **jitsu'x* ~ **jitsú'x*, **jitsx-áj^h* ‘male’

Mk *te-Ø-tsu'x* [1], *te-Ø-tsux-its* [2] (Gerzenstein 1999: 251) || Ni *jitsu'x*, *jitsx-áj* ‘male, man’, -*ka*-*β*-*tsux*, -*ka*-*βi*-*tsx-áj* ‘male relative’ (Campbell et al. 2020: 101, 103) || PW **tsh<á><wet>*, **tsh<á><t>-áj^h* ‘animal’ [3] > LB *ts^howet*, *ts^hot-oj*; ’Wk *ʔits^háwet*, *ʔits^hát-áç* (Nercesian 2014: 193; Claesson 2016: 41)

[1] The presence of a preglottalized coda in Maká is inferred based on the Nivaâle cognate; the singular form is not attested in our sources that distinguish between plain and preglottalized stops. We assume this form contains a zero allomorph of the relationalizing prefix -^hw-, parallel to *te-^hw-efu* ‘female’; /w/ is deleted before a consonant.

[2] The plural form in Maká is non-etymological.

[3] The identity of the element *-wet* / *-t-* in Wichí is unclear. It has been fossilized to what looks like an innovative vocalic stem **jitsx<á>-* > **ts^h<á>-*.

### **jixá* ~ **jixá?* ~ **jixá?* ~ **jixá?* [1] ‘true’

Mk *ixa* (Gerzenstein 1999: 219) || Ni *jixá?* (Seelwische 2016: 381) || PCh **ʔihá<wet>* [2] > Ijw *ʔihját*; I'w *ihjét*; Mj *ʔihjéwet-e* (Carol 2014a: 87; Drayson 2009: 96; Gerzenstein 1983: 132; Carol 2018)

[1] Maká points to the absence of a word-final *? in PM, Nivaâle to its presence.

[2] We have no explanation for the element *-(*wé*)*t* in Chorote.

Viegas Barros 2002: 143 (**ixA*)

### **-ju's* / **jiju's* ‘wax’

Ni *-ju's*, *-jus-ik* / *jiju's* (Seelwische 2016: 69, 391) || PCh **ʔijús* > I'w *ijús* (-*is*)

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(Gerzenstein 1983: 130)

***-ka, *-ká-l ‘tool; person skillful for’**

Ni *-tʃa?*(-k) (Seelwische 2016: 94) || PCh *-ká?(*-l) > Ijw *-k'é?*(-l); I'w *-k'é?*(-l); Mj *-k'é?*(-t) (Carol 2014a: 76; Drayson 2009: 122; Gerzenstein 1983: 117; Carol 2018) || PW *-k^ja, *-k^já-l^h > LB *-tʃa* (-t); Vej *-tʃa*; 'Wk *-k'á?*, *-k'á-l* (Nercesian 2014: 150, 201; Viñas Urquiza 1974: 51; Claesson 2016: 64)

***[ji]ka[?]χ ~ *[ji]kå[?]χ [1] ‘to take away’**

Mk *[j]<e>ka[?]χ* ‘to take away’, *[j]<e>-n-ka[?]χ* ‘to bring’ [2] (Gerzenstein 1999: 143) || Ni *[ji]tʃa[?]χ* (Seelwische 2016: 94) || PW **[?i]k^jåχ* > LB *[?i]tʃoχ*; Vej *-tʃåh* ‘to take away, to buy’ [3]; 'Wk *[?i]k^jåχ* ‘to take away, to buy’ (Nercesian 2014: 225; Viñas Urquiza 1974: 51; Gutiérrez & Osornio 2015: 33; Claesson 2016: 179)

[1] The Nivaclé form points to **[ji]ka[?]χ*, the Wichí one to **[ji]kå[?]χ*, and Maká is ambiguous, because PM *å, *a and *e all merged before a *χ in that language.

[2] The function of the element *-e* in Maká is unclear, but note that the cislocative prefix *-n-* comes between it and the (etymological) root in *[j]e-n-kax*, showing that it must have originally been a separate morpheme. The preglottalized coda is documented in the New Testament (e.g. Mark 6:29).

[3] Viñas Urquiza (1974) documents *-tʃah*, which is more likely a mistranscription on Viñas Urquiza’s part rather than a retention from PM.

**Rejected:** Najlis (1984) lists Chorote *aki* and *akahaj* ‘I buy’ as cognates. In fact, PCh **[t^o]qaháj?* or **[t^o]qáháj?* ‘to buy’ (> I'w *-kaháj-i*; Mj *[ti]kaháj?* and *[ti]kaháj-e*) cannot be a reflex of PM **[ji]ka[?]χ* ~ **[ji]kå[?]χ*, because PCh **q* cannot continue PM **k* in the onset position. Ijw *∅-ák-i* ‘I take away/buy’ is in fact a combination of the verb *∅-ák* ‘I go’ and the applicative */-eh/*, as evidenced by the conjugated forms *hl-ék-i* ‘you take away/buy’, *j-ám-e* ‘he/she takes away/buys’.

Najlis 1984: 24 (**caq*); Gutiérrez 2015b: 64

***-kán (*-its) ‘testicle’**

Ni *-kán-ʃi(j)* (-is) (Seelwische 2016: 75; Campbell et al. 2020: 130) || PCh *-kán<is> (*-is) [1] > Ijw *-k'ánis* (-is); Mj *-k'énis*, *-k'énif-is* (Drayson 2009: 122; Carol 2018) || PW *-k^ján<is> [1] > LB *-tʃanis*; Vej *-tʃanis* [1]; 'Wk *-k'ánis*,

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*-k^jáhs-i-lis* (Nercesian 2014: 213; Viñas Urquiza 1974: 52; Claesson 2016: 63)

[1] In Chorote and Wichí, the PM plural suffix has been fossilized as a part of the root.

### *-ká's, *-kás-él 'tail'

Ni *-ká's*, *-kás-ek* (Seelwische 2016: 75) || PCh *-kás > Ijw *-k^jás*; I'w *-k^jés*, *-k^jéxs-is* [1]; Mj *-k^jés* (Carol 2014a: 76; Drayson 2009: 122; Gerzenstein 1983: 142; Carol 2018) || PW *-k^jás, *-k^jás-*el^h* > LB *-tʃos* (-*et^l*); Vej *-tʃás* (-*et^l*) 'tail; lower back' [2]; 'Wk *-k^jás*, *-k^jás-*et** (Nercesian 2014: 191; Viñas Urquiza 1974: 52; Gutiérrez & Osornio 2015: 60; Claesson 2016: 63)

[1] The plural suffix attested by Gerzenstein (1983) for *Iyo'awujwa'* does not match the Nivaclé and Wichí data.

[2] The form is mistranscribed as *-tʃas* in Viñas Urquiza (1974).

Najlis 1984: 27 (*cáhs); Campbell & Grondona 2007: 17

### *[ji]ká't-APPL 'to fall'

Ni [ji]ká't-APPL (Seelwische 2016: 75) || PW *[ni]k^já't(-APPL) 'to fall, to be born' > LB [ni]tʃot-tʃo?; Vej *-tʃat*(-APPL) [1]; 'Wk [ni]k^já't-APPL (Nercesian 2014: 219, 333; Viñas Urquiza 1974: 52; Claesson 2016: 183–184)

[1] The vowel *a* (as opposed to *á*) in Viñas Urquiza (1974) could be a mistranscription.

### *kéłχa-ju'k, *kéłχa-jku-j^h 'red quebracho (*Schinopsis balansae*)'; *kéłχa-jku-'*p* 'fall season'

Mk *kele-jku-te-'*k; *kele-jku-'*p (-its) (Gerzenstein 1999: 229; Paraguay 2020: 23–25) || Ni *tʃełχa-juk*, *tʃełχa-ku-j* 'Myracrodruon balansae tree' (Seelwische 2016: 97) || PCh *kéhla-juk; *kéhla-jku-*p* > Ijw *kíhla-jik*; *kíhla-si-p*; I'w *kíhla-jik*; Mj *kíhl(í)e-ek* ~ *kíhla-jik* ~ *kíhli-jik*; *kíhle-fe-*p** (Carol 2014a: 92; Drayson 2009: 136; Gerzenstein 1983: 141; Carol 2018) || PW *k^jéł-juk^w, *k^jéł-k^ju-j^h; *k^jéł-k^ju-*p* > LB *tʃeł-jek^w*, *tʃeł-tʃe-j*; Vej *tʃe(́)t-juk*; *tʃeł-tʃu-p*; 'Wk *k^jéł-juk*, *k^jéł-k^ju-ç*; *k^jéł-k^ju-*p** (Nercesian 2014: 192; Viñas Urquiza 1974: 52; Gutiérrez & Osornio 2015: 17; Claesson 2016: 186, 187)

Najlis 1984: 51 (*cehlaj(uk), PL *cehlajuk-j); Campbell & Grondona 2007: 17

### *[ji]kén 'to send'

Mk [j]<u>*kin* (Gerzenstein 1999: 227, 353) || Ni [ji]tʃen (Seelwische 2016: 97) || PCh *[ʔi]kén > Mj [ʔi]ʃín / -kín (Carol 2018) || PW *[ʔi]k^jén > LB/Vej *-tʃen*;

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¹Wk [ʔi]k'éñ (Braunstein 2009: 39; Viñas Urquiza 1974: 52; Claesson 2016: 188)

***kɸáts'i(?) 'Molina's hog-nosed skunk'**

Ni *kxats'i* ~ *txats'i* [1] (Seelwische 2016: 70) || PCh *k^hhwáts'i? > I'w *kiwáts'e?* ~ *kifwáts'i?* 'liar'; Mj *kihwáts'e* (-s) [2] (Gerzenstein 1983; Carol 2018)

[1] The variant *txats'i* is marked as “T. Lh.” in Seelwische (2016: 70), which likely stands for “Tavashai Lhavos” (or maybe “Tovôc Lhavos”).

[2] The absence of a stem-final -? in the singular form in Manjui could be due to a mistranscription.

***-kɸe(?)**, ***-kɸé-j^h** [1] 'ear' [2]

Mk *-kfi?* (-j) 'ear; corner' (Gerzenstein 1999: 143, 250) || Ni *-kɸe?* (-j) (Seelwische 2016: 69) || PW *-(*t*-)*k^we<j>*, *-(*t*-)*k^we-* (in compounds) 'arm, hand' > LB *-t-k^we<j>* (-aj); *-t-k^we-* (in compounds); Vej *-k^we<j>*; 'Wk *-k(w)e<j>*?; *-k(w)é<j>-aç* ~ *-eq*, 3 *ta-ke<j>?*; *-ke-*, 3 *ta-ké-* (in compounds) (Nercesian 2014: 112, 154, 164; Viñas Urquiza 1974: 63; Gutiérrez & Osornio 2015: 60, 61; Fernández Garay 2006–2007: 214, 215; Claesson 2016: 62)

[1] The uncertainty regarding the reconstruction of the word-final glottal stop is due to the fact that the Lower Bermejeño Wichí reflex never occurs without a suffix.

[2] Following Najlis (1984: 29), we suggest that PW *-(*ta-*)*k^we<j>* (in compounds *-(*ta-*)*k^we-*) 'arm, hand' is a semantically shifted reflex of PM *-kɸe(?) (*-j^h) 'ear'. Despite the semantic difference, cases of colexification of the concepts such as 'ear' and 'shoulder' do exist (cf. Rzymski & et al. 2019). Also note that the Wichí word contains the prefix *-t(a)-*, found in a number of body part terms (Nercesian 2014: 164–165) and absent in the proposed cognates in other languages; it is conceivable that the Wichí term for 'arm, hand' arose as a compound whose original meaning was close to 'ear of body'.

**Rejected:** Campbell & Grondona (2007: 15, 17) claim the Wichí noun to be cognate with the Maká and Chorote reflexes of PM *-ko(?)j (*-áj^h) 'hand, arm'. This is impossible for phonological reasons.

Najlis 1984: 29 (**takhwεj*); Gutiérrez 2015b: 77

***[ji]kɸ'ás ~ *[ji]kɸ'ás 'to be torn open'** [1], CAUS ***[ji]kɸ'ás-at** [2]

Ni *[ji]k'as-APPL* 'to break up into pieces', CAUS *[ji]k'as-at* (Campbell et al. 2020: 304) || PCh *[ʔi]k'(w)ós, CAUS *[ʔi]k'(w)ós-at > Mj [ʔi]tʃ'ós / -ʔós,

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CAUS ⁷[*j*óxs-at (Carol 2018) || PW **[hi]k^wes* ~ **[hi]k^wés* [1] > LB *[hi]k^wes*; 'Wk *[hi]k^wés-k^je?* (Nercesian 2014: 49, 263; Claesson 2016: 179)

[1] The prosodic properties of the root cannot be established because the 'Weenhayek cognate is not attested without applicative morphology (the form with an applicative suffix is not revealing because in trisyllabic words the vowel of the peninitial syllable is lengthened in any case).

[2] The reconstruction of the cluster **kφ*' is rather tentative. It aims to account for the unique vowel correspondence between Chorote and the remaining languages, and for the PW **k^w*, an extremely rare consonant. We do not exclude the possibility that Mk *-apk'as* 'piece' (Gerzenstein 1999: 248) is also related, but Mk *a* is not a regular reflex of PM **ā*.

### **khát* (fruit); **khát-u^jk*, **khát-ku-j^h* (plant) 'cactus'

Mk *khat-u^jk* [1], *khat-kw-i* '*Cereus stenagonus*' (Gerzenstein 1999: 230) || Ni *kxat*; *kxat-uk*, *kxat-ku-j* [2] (Seelwische 2016: 69) || PCh **kåhåt*; **kåhåt-uk*, **kåhåt-ku-j^h* '*Cereus forbesii*' > Ijw *k^jahåt^j-uk*; Mj *k^jehét*; *k^jehét-uk*, *k^jehét-ki-j* (Drayson 2009: 135; Carol 2018) || PW **k^jahåt*; **k^jahåt-uk^w* > LB *tsjohot-ek^w*; Vej *tsåhåt* (-*łajis*), 'Wk *k^jåhåt*; *k^jåhåt-uk* (Spagarino 2008: 60; Gutiérrez & Osornio 2015: 17; Claesson 2016: 179)

[1] The preglottalized coda in the Maká suffix for tree names is attested elsewhere (Paraguay 2022: 7).

[2] Ni *a* is not the regular reflex of PM **ā*.

Campbell & Grondona 2007: 16

### *-*kípha*, *-*kípha-ts* (m.); *-*kípha-ke?*(*-*j^h*) (f.) 'neighbor' [1]

Mk *-kife* (-*ts*); *-kife-ki?*(-*j*) (Gerzenstein 1999: 230) || Ni *-tsjípha* (-*s*) 'fellow resident of the same village' (Seelwische 2016: 101) || PCh *-*kíhwah*, *-*kíhwa-s*; *-*kíhwa-ke?* > Ijw *-kíhwa* 'partner'; Mj *-kíhwa* (-*s*); *-kíhwa-ki?* (Drayson 2009: 122; Carol 2018)

[1] This noun obviously contains the suffix *-*phah*, *-*pha-ts* 'companion'.

### **kijápo*([?])*p* ~ **k'ijápo*([?])*p* [1] 'common potoo (*Nyctibius griseus*)'

Ni *ts'ijapop* (-*is*) (Seelwische 2016: 110) || (?) PCh **qalápop* [2] > Ijw *kalápop*; Mj *kalápup* [3] (Drayson 2009: 134; Carol 2018) || PW **k'ijápop* > LB *tsjapup*;

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¹Wk *k^jijápop* (Nercesian 2014: 157; Claesson 2016: 192)

[1] The Nivaâle reflex points to PM **k*', and the Wichí one to PM **k*.

[2] The Chorote form is divergent, casting doubts on whether it is related to the Nivaâle and Wichí forms.

[3] Hunt (1994) documents the Manjui form as *kalápop*.

Toba–Qom shows a similar form, *qapap* ~ *qopap* ‘common potoo’ (Buckwalter & Buckwalter 2013: 167).

### ***-kilá? (*-wot) ‘elder brother’**

Ni *-tsek̩la?* (-*βot*) [1]; *-tfik̩la-jinxat* ‘deceased elder brother’ (Seelwische 2016: 100) || PCh **-kilá?* (*-wot) > Ijw *-kil^j<a>* [2], *-kil^je-wot*; Iw *-kil^jé?*; Mj *-kil^jé?* (-*wat*) (Drayson 2009: 122; Gerzenstein 1983: 139; Carol 2018) || PW **-k^jila* (*-lis) [3] > LB *-tsila*; Vej *-tsila* (-lis); Wk *-k^jila?* (-lis) (Nercesian 2014: 194; Viñas Urquiza 1974: 53; Gutiérrez & Osornio 2015: 29; Claesson 2016: 65)

[1] The vowel *e* in Nivaâle is irregular. The expected vowel *i* shows up in *-tfik̩la-jinxat* ‘deceased elder brother’.

[2] The Iyojwa’aja’ reflex *-kil^ja* /-k^jilâh/ is irregular. One would expect **-kil^jé?* /-k^jilá/. Maybe this noun contains an opaque suffix /-âh/ (not present in the plural form).

[3] The Wichí plural suffix does not match its Nivaâle and Chorote counterparts and must be innovative.

Najlis 1984: 50 (**c’εjlá*)

### ***-kitá? (*-wot) ‘elder sister’**

Ni *-tfita?* (-*βot*) (Seelwische 2016: 103–104) || PCh **-kitá?* (*-wot) > Ijw *-kit^j<a>* [1], *-kit^je-wot*; Mj *-kité?* (-wot) (Drayson 2009: 122; Carol 2018) || PW **-k^jita* (*-lis) [2] > LB *-tsita*; Vej *-tsita* (-lis); Wk *-k^jita?* (-lis) (Nercesian 2014: 194; Viñas Urquiza 1974: 53; Gutiérrez & Osornio 2015: 29; Claesson 2016: 65)

[1] The Iyojwa’aja’ reflex *-kit^ja* /-k^jilâh/ is irregular. One would expect **-kit^jé?* /-k^jitá/. Maybe this noun contains an opaque suffix /-âh/ (not present in the plural form).

[2] The Wichí plural suffix does not match its Nivaâle and Chorote counterparts and must be

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innovative.

Najlis 1984: 50 (**c'εjtā*)

***-ko(’)j, *-koj-áj^h ‘hand, arm’**

Mk *-koj* (-ej) ‘hand, arm, forearm’ (Gerzenstein 1999: 232) || PCh *-kój?, *-koj-áj^h > Ijw *-k'ój?*, *-k'ój-e*; I'w *-k'ój*, *-kij-éj*; Mj *-k'ój?*, *-kij-éjh* (Carol 2014a: 77, 100; Drayson 2009: 122; Gerzenstein 1983: 143; Carol 2018)

**Rejected:** Campbell & Grondona (2007: 15, 17) include the Wichí noun for ‘hand, arm’ (PW *-(*t*)-*kʷe*-*j* / *-(*t*)-*kʷe*-*e*), which is impossible for phonological reasons. It is considered here to be a reflex of PM *-k^hfe(?) ‘ear’ instead.

Campbell & Grondona 2007: 15

***kój-?** ~ ***k'ój-APPL [1] ‘round’**

Mk *k'o:j-xi?*, *k'o:j-om-xi?* ‘round (2D), disk-shaped’ (Gerzenstein 1999: 237) || PCh **kój*-*oj*-APPL > Ijw *k'ójjo-ts'i* ‘cylindrical’, *k'ójohj-i'n* ‘round’; I'w *k'ój-xi?*; Mj *ʔéti k'ójhjo-oj* (Drayson 2009: 136; Gerzenstein 1983: 143; Carol 2018)

[1]The Maká form points to PM **k*, and the Chorote one to PM **k*.

***[t]kúj-j-APPL ‘to vomit’; *-kúj-hat?** ~ ***-kúj-et [1] ‘vomit’**

Mk [t]<’e>*kuj(i)-kij* [2] ‘to vomit’ (Gerzenstein 1999: 144) || Ni [t(’a)]*ku*^j-APPL ‘to vomit’ [2]; -*kuj-et* ~ -*kuj-it*, *kuj-te-s* ‘vomit’ (Seelwische 2016: 83, 282) || PCh *[t^h]*quj-*?*n*, *[t^h]*quj-eh* [3] ‘to vomit’ > Ijw [ta]*kó-*?*n*<*i*>, [ta]*kój-i*; I'w *-kó-hin*; Mj [ʔi]*k'új-?**in* / -*k'ój-?**in*; *-*qu*<*h*>*j*-*at* [3] ‘vomit’ > Ijw *-kóhjet*; Mj *-kóhjet* (Drayson 2009: 123, 149; Gerzenstein 1983: 144; Carol 2018) || PW *[t]k^j*új*-APPL [4] ‘to vomit’ > LB [ta]*tʃej-lin*; Vej [ta]*tʃuj*-APPL; ’Wk [t(a)]*k'új*-APPL [5]; *-*k'új-hat* [4] ‘vomit’ > Vej *-tʃúçat*; ’Wk *-k'úçat* (-*k'úçt-es*) (Braunstein 2009: 56; Viñas Urquiza 1974: 54; Gutiérrez & Osorio 2015: 33, 47; Claesson 2016: 69, 209, 365)

[1]Nivaclé points to *-*kúj-et* ~ *-*kúj-it*, and Chorote and Wichí to *-*kúj-hat*.

[2]We have no explanation for the element -’e- in Maká and its likely cognate -’a- in Nivaclé

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(in the latter language, it disappears in some inflected forms).

[3] In the Chorote reflex, PM **k* unexpectedly yields PCh **q*.

[4] The glottalization in Wichí **k'* is irregular.

[5] The loss of PW **j* in the 'Weenhayek verb is irregular (compare Vej *le-ta-tʃ'uj-li* and 'Wk *la-tá-k'u-łih*, both meaning 'you vomit').

### **kula'j* ~ **kulá'j* 'sun'

Ni <*xum*>*kukla'j* [1] (Seelwische 2016: 158) || PCh **k'uláj?* > Ijw *kil'é?* ~ *kili?*é; I'w *kiláj*; Mj *kiláj?* (Carol 2014a: 92; Drayson 2009: 136; Gerzenstein 1983: 139; Carol 2018)

[1] The element *xum-* of unknown origin occurs in a number of Nivaclé words whose cognates in other languages lack any counterpart thereof, suggesting that it was etymologically a prefix.

Najlis 1984: 33, 38 (**(hnu)culaj*)

### *[*ji*]*kú'ł* 'to answer'

Mk [*j*]<*e*>*ku'ł* [1] (Gerzenstein 1999: 144) || Ni [*ji*]*ku'ł* (Seelwische 2016: 82) || PCh **[?i]kúhl-APPL* > Ijw *[?i]s'úhl-i* / -*k'úhl-i*; Mj *[?i]fúhl-APPL* / -*k'úhl-APPL* (Drayson 2009: 112; Carol 2018) || PW **[ni]k'úł* > LB *[ni]tset-u*; Vej *-tsut-o*; 'Wk *[ni]k'úł* (Nercesian 2014: 402; Viñas Urquiza 1974: 53; Claesson 2016: 198)

[1] The preglottalized coda in Maká is attested in the New Testament (e.g. Luke 19:34).

### *[*t*]*kú'm-APPL* 'to grab; to work'

Mk [*t*(')*e*]*ku'm-APPL* [1] (Gerzenstein 1999: 144) || Ni [*t'a*]*ku'm-APPL* (Seelwische 2016: 282) || PCh **[?i]kúm-APPL* > Ijw *[?i]sí'm* / -*kí'm* 'to grab', *[?i]síhm-e'n* / -*kíhm-e'n* 'to work' [2]; I'w -*kí'm-e?* 'to grab', -*kíhm-en* 'to work' [2]; Mj *[?i]fúm-APPL* / -*k'úm-APPL* (Carol 2014a: 90; Drayson 2009: 111–112; Gerzenstein 1983: 140, 141; Carol 2018) || PW **[t]k'ú(?)m-APPL* > LB *[ta]tsem-APPL*; Vej *-tsum-APPL*; 'Wk *[t(a)]k'ú(?)m-APPL* (Nercesian 2014: 238; Viñas Urquiza 1974: 53; Claesson 2016: 360–362)

[1] The preglottalized coda in Maká is attested in the New Testament (e.g. Luke 7:41; Luke 24:43; Mark 14:46).

[2] Of all Chorote varieties, only Manjui preserves the etymological vowel *u*. Iyojwa'aja' and

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Iyo'awujwa' show a non-palatalizing *i* (underlying /e/).

Najlis 1984: 16, 51 (**cuhme*)

### *-kun ~ *-kún 'to eat (intr.)'; CAUS *[?i]kún-han 'to feed'

Mk [j]<e>kun-hen [1] 'to feed' (Gerzenstein 1999: 142) || Ni <*tsak*>kun [2]; [ji]kun-xan (Seelwische 2016: 81, 291) || PCh *[t^o]<'-já>kun 'to eat (intr.)' [3] > Iwj [ti]jék'ju'n; I'w -jék'un; Mj [ti]jékin; *[?i]qúhn-an 'to feed' [4] > Iwj [ta]kóhn-e'n; I'w -kóhn-an; [?i]k'úhn-an / -kóhn-an (Drayson 2009: 149, 152; Gerzenstein 1983: 144; Carol 2018) || PW *[?i]k^jún-han> 'to feed' > LB [?i]tseñan; Vej -tsuñen [5]; 'Wk [?i]k^júñan (Nercesian 2014: 336; Viñas Urquiza 1974: 53; Claesson 2016: 199)

[1]We have no explanation for the element *e* in Maká.

[2]We have no explanation for the element *tsak*- in Nivaclé. Note that this verb belongs to the *t*-class and thus contains the zero allomorph of the prefix *t*- in the third-person realis form.

[3]We have no explanation for the element *'-já- in Chorote.

[4]In the Chorote causative, PM **k* unexpectedly yields PCh **q*.

[5]The vowel in the causative suffix is unexpectedly attested as *e* (rather than *a*) in the Vejoz reflex.

**Rejected:** Najlis (1984: 28) compares the Wichí causative with Iwj *k^jún'e* 'jaguar' (Drayson 2009: 137), which is impossible both for phonological and semantic reasons.

### *kús 'heat'

(?) Mk *kus* (-its) 'Pyrocephalus rubinus' [1] (Gerzenstein 1999: 233) [1] || Ni *kus* (-ik) (Seelwische 2016: 81) || PCh **kús-APPL* 'to be hot' > I'w *k^júxs-APPL*; Mj *k^júxf-APPL* (Gerzenstein 1983: 144; Carol 2018)

[1]The semantic relation between the Maká ornithonym *kus* and the PM term for 'heat' may have something to do with the seasonal migration pattern of *Pyrocephalus rubinus*.

**Rejected:** Najlis (1984: 12) compares Nivaclé *kus* with the Wichí and Chorote terms for 'sweat' (PW **k^júxw*, PCh *-kún'i?) and reconstructs PM **cu* 'heat'. This is impossible for phonological reasons.

Campbell & Grondona 2007: 15

### *-kút-ex 'to meet'

Mk [w(e)]kut-ix-u^jt [1] (Gerzenstein 1999: 365) || Ni [βa]kut-eʃ (Seelwische

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2016: 81) || PCh **[?i]kút-eh* > Ijw *[?i]s^jút-i / -k^jút-i*; I^jw *-k^jút-e?* [2]; Mj *[?i]fút-e* / *-k^jút-e* (Drayson 2009: 112; Gerzenstein 1983: 143; Carol 2018) || PW *-k^jút-e^j > Vej *-t^jfut-eh*; 'Wk *[ni]k^jút-ex* (Viñas Urquiza 1974: 54; Claesson 2016: 200)

[1] The preglottalized coda in the Maká applicative suffix is attested in other verbs in the New Testament (e.g. *[t]’eku’m-ixu’l* ‘to grab something from one’s front’ in Luke 24:43).

[2] The stem-final glottal stop in Iyo’awujwa’ must be a mistranscription on Gerzenstein’s (1983) part.

***kú’X₁₂ ‘sweat’**

Ni *-β-ku’x, -β-kux-is* (Seelwische 2016: 336) || PW *k^júx^w > LB *tsef^w ?i-lon X* ‘X sweats’ (literally ‘*tsef^w* kills X’); Vej *tuh^w* [1]; 'Wk *kú’x* (Braunstein 2009: 39; Viñas Urquiza 1974: 53; Claesson 2016: 196)

[1] Attested without the labialization of the final consonant (*tuh*) in Fernández Garay (2006–2007: 221).

**Rejected:** Najlis (1984: 12) compares the Wichí word with Nivaclé *kus* ‘heat’ and with the Chorote term for ‘sweat’ (PCh *-kúni?) and reconstructs PM *cu ‘heat’. This is impossible for phonological reasons.

***k’alxó, *k’alxó-ts ‘southern three-banded armadillo’**

Mk *k’olo’x (-its)* [1] (Gerzenstein 1999: 237) || Ni *k’akxo (-s)* [2] (Seelwische 2016: 84) || PCh **k’ihló? (*-s)* [3] > Ijw *k’ihl^jó?*; I^jw *?ihl^jó?, ?ihl-ís*; Mj *?ihl^jó? (-s)* (Carol 2014a: 82; Drayson 2009: 137; Gerzenstein 1983: 132; Carol 2018) || PW **k’anhóh* > LB *t’anu*; Vej *t’eno* [4]; 'Wk *k’anjóh* (Nerceanian 2014: 51; Gutiérrez & Osornio 2015: 20; Claesson 2016: 204)

[1] The singular form in Maká was first reshaped based on the PM plural form (**k’alxóh, *k’alxó-ts* > **k’olo’x, *k’olox-ts*); later the plural form was reshaped based on the innovative singular one (*k’olo’x, k’olox-its*). One would expect **k’olxo* (*-ts). The preglottalized coda in the singular form is attested in Braunstein (1987: 51).

[2] The failure of PM **k*’ to palatalize in Nivaclé is unexpected.

[3] The development of PM **a* to Chorote *i* is not known to be regular.

[4] Vejoz *e* is not the regular reflex of PW **a*. The datum is mistranscribed as *t’eno* in Viñas Urquiza (1974: 54).

**Rejected:** Najlis (1984) compares Ni *k’akxo* with the Wichí term for ‘big hairy armadillo’

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(PW **hówanax*) and reconstructs PM **qo*. The comparison is untenable.

Najlis 1984: 48 (**cehl(h)no*)

### *[t]k'aw-APPL 'to hold in one's arms, to hug' [1]

Mk [t]<i>k'ej-ix [2] (Gerzenstein 1999: 196) || PCh *[?i]k'aw-(...)-hop > Ijw [?i]ts^jéhw-ap / -k^jéhw-ap; I'w -k^jaf^w<él>-ap [3 4]; Mj [?i]tʃ'e<h>w<é>h<l>-ap / -?a<h>w<é>h<l>-ap [4] 'to raise with one's arms', [?i]tʃ'e<h>w<él>-e / -?a<h>w<él>-e [4] 'to raise or hold with one's arms' (Drayson 2009: 114; Gerzenstein 1983: 141; Carol 2018) || PW *[t]k^jáw-ex > 'Wk [t(a)]k^jáw-ex (Claesson 2016: 364)

[1] This constitutes one of the few cases of potential PM **w* in coda position. Since in Chorote this stem is documented without an applicative (with an NP followed by a postposition instead) it is reasonable to assume this also existed in PM.

[2] Maká *j* is not the expected reflex of PM **w*. It is possible that Mk [t]<i>k'aw 'to have sex' (Gerzenstein 1999: 196) is also related, with the expected consonant *w* but with an unexpected lowered vowel.

[3] Gerzenstein's (1983) attestation of the Iyo'awujwa' reflex must be a mistranscription for -k^jaf^wéhlap.

[4] The Iyo'awujwa' and Manjui include the element /-hél/, originally probably a verbal root (see PM *-phél ~ *-phál 'to wrap, to hug' in §10.8).

### *-k'áxe? (*-l) 'arrow (made of wood)'

Mk (-)qaxi? (-l) [1] (Gerzenstein 1999: 304) || Ni <βat>k'áxe (-j) [2] 'diesel tree (*Copaifera langsdorffii*; wood used for making arrows)' (Seelwische 2016: 343) || PCh *-k'áhe? (*-l) > Ijw -k^jáha? (-l); Mj -éhe? [3] (Drayson 2009: 123; Gerzenstein 1983: 198) || PW *-k^jáhe (*-l^h) > LB PL -tʃ'ohē-l; Vej -tʃ'ahni [4]; 'Wk -k^jáha? (-l) [5] (Nercesian 2014: 331; Viñas Urquiza 1974: 54; Claesson 2016: 67)

[1] The stem-initial consonant in Maká is irregularly reflected as *q* rather than the expected **k*.

[2] The plural form in Nivaclé is non-etymological.

[3] The Manjui form is attested in Gerzenstein (1983: 198) as -éhe?. It must be a mistranscription for -p^jéhe?.

[4] The expected reflex in Vejoz would be *-tʃ'áhe [tʃ'ahē]. It is possible that the representation

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*hni* in Viñas Urquiza (1974) results from a mistranscription of a phonetically nasalized vowel.

[5]’Weenhayek *a* is not the regular reflex of PW **e*.

Najlis 1984: 21 (**c’ānhne*); Campbell & Grondona 2007: 16

***k’å ~ *k’ā ‘variable antshrike (*Thamnophilus caerulescens*)’**

Mk *k’äa* ‘sibilant sirystes (*Sirystes sibilator*)’ (Braunstein 1987: 65) || Ni *k’å?<å>(-k)* (Campbell et al. 2020: 288) || PW **k’å* ~ **k’āh* > LB *tf’o* (Spanigarino et al. 2013 [2011])

***-k’ālpha ‘spouse’ [1]**

Ni *-tf’akpha* (Campbell et al. 2020: 191) || PCh *-*k’élhwah* > (?) Ijw *-k’émhla* (-jes) [3 4]; I’w *-ʔilfʷaʔ* (-jis) [4]; Mj *-ʔilhwa* (Carol 2014a: 100; Drayson 2009: 123; Gerzenstein 1983: 130; Carol 2018) || PW *-*k’éhxah* > LB *-tf’ehʷa* (-j); Vej *-tf’ehʷa* (-s); ’Wk *-k’éhxah* (Nercesian 2014: 163; Viñas Urquiza 1974: 54; Gutiérrez & Osornio 2015: 29; Claesson 2016: 67)

[1]This noun obviously contains the suffix *-*phah*, *-*pha-ts* ‘companion’.

[2]The Nivaclé reflex has an unexpected allomorph *-ktf’akpha* when it combines with the indefinite possessor prefix *βat-* (Campbell et al. 2020: 97). It is thus possible that the correct PM reconstruction is actually *-*lk’ālpha*. However, *k* is not found in other possessed forms.

[3]If the Iyojwa’aja’ word belongs here, it must be considered quite irregular: one would expect *-*k’ilhwa* and not *-k’émhla*.

[4]In Carol’s (2014a) and Gerzenstein’s (1983) attestations of the reflexes in Iyojwa’aja’ and Iyo’awujwa’, there is an unexpected word-final glottal stop.

**Rejected:** Najlis (1984: 37) includes reflexes of PCh *-*nå?* ‘father’, which cannot be related.

Najlis 1984: 37 (**celna*)

***[ji]k’ān ‘to stretch out’**

Ni *[ji]t’an* (Seelwische 2016: 109) || PCh *[ʔi]k’én-APPL > Ijw [ʔi]ts’ín-APPL / -*k’ín-APPL*; Mj [ʔi]t’íhn-a’m / -*ʔíhn-a’m* (Drayson 2009: 115; Carol 2018) || PW *[hi]k’én > Vej [hi]t’en [2]; ’Wk [hi]k’én (Gutiérrez & Osornio 2015: 32; Claesson 2016: 205)

[1]Viñas Urquiza (1974: 103) documents this root as *-tfen<pa>*, which must be a mistranscrip-

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tion.

### *[ji]k'ása'χ ~ *[ji]k'áse'χ 'to divide'

Mk [j]<a>k'esa'χ [1] (Gerzenstein 1999: 115, 117) || PCh *[j]k'ésah > Ijw [ʔi]ts'íxsa / -k'íxsa; I'w [i]tsíxsa-ji / -ísa-ji [2]; Mj [ʔi]tʃ'íxsah-APPL / -ʔíxsah-APPL (Drayson 2009: 115; Gerzenstein 1983: 45; Carol 2018) || PW *[hi]k'ésaχ > LB [hi]tʃ'esaχ; Vej [hi]tʃ'esah; 'Wk [hi]k'ésax (Nercesian 2014: 242; Gutiérrez & Osornio 2015: 32; Claesson 2016: 206)

[1]The preglottalized coda in Maká is attested in the New Testament (e.g. 2 Corinthians 9:9).

[2]The Iyo'awujwa' reflex is likely a mistranscription for [ʔi]ts'íxsa-ji / -ʔíxsa-ji.

Viegas Barros (2013a: 305) compares the verb to Proto-Guaicuruan *-kef'óqo (with reflexes in Mbayá 'to peck', Abipon 'to cut wood', Pilagá 'to split wood, to axe', Toba-Qom 'to axe'), an etymology not mentioned in an updated work by the same author (Viegas Barros 2013b).

Viegas Barros 2013a: 305 (*-k'ésah) 'to split'

### *k'ék'eh 'monk parakeet'

Ni tʃ'etʃ'e (-k) [1 2] (Seelwische 2016: 110) || PCh *kék'eh > Ijw kík'i (-wa); I'w k'ík'ih (-jis) [1]; Mj kíʔih (-wa?) (Drayson 2009: 136; Gerzenstein 1983: 139; Carol 2018) || PW *k'ék'j'e > LB/Vej tʃetʃ'e; 'Wk k'ék'j'e? (-lis) (Nercesian 2014: 157; Gutiérrez & Osornio 2015: 20; Claesson 2016: 186)

[1]In the Yita' Lhavos dialect of Nivaclé, this word is attested with a high vowel: tʃitʃ'i (Gutiérrez 2015b: 38).

[2]The glottalized stem-initial consonant in Iyo'awujwa', as attested in Gerzenstein (1983), could be a mistranscription.

**Rejected:** Gutiérrez (2015b: 64) compares the Nivaclé word to Maká k'ek'e (-l) 'white-winged parakeet' (Gerzenstein 1999: 235), whose vowel cannot correspond to Ni e except before uvulars. Instead, we propose that the Maká term is an early borrowing from Nivaclé.

### *-k'ínix, *-k'ínxi-ts 'younger brother'

Mk -k'ínix, -k'ínx-ats (Gerzenstein 1999: 236) || Ni -tʃinif / -tʃinfi-klaj (Seelwische 2016: 110, 336) || PCh *-k'ínih, *-k'íhni-s > Ijw -k'íni ~ -jíni, -ʔíhni-s; I'w -jíni; Mj -jíni, -jín'a-wot (Drayson 2009: 123, 128; Gerzenstein 1983: 134; Carol 2018) || PW *-k'ínix, *-k'ínhi-s > LB -tʃinix [2]; Vej -tʃinih, -tʃinji-s [2]; 'Wk -k'ínix, -k'ínji-s (Nercesian 2014: 194; Gutiérrez & Osornio 2015: 29;

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Claesson 2016: 68)

[1] The plural form is reconstructed based on the evidence of Iyojwa'aja' and Wichí. It is thus technically reconstructible only for Proto-Chorote–Wichí.

[2] The Lower Bermejeño Wichí form, as attested by Nercesian (2014), is irregular in having a plain initial consonant rather than the expected **tʃ*. Viñas Urquiza (1974) also documents plain *tʃ* in Vejoz, but this must be a mistranscription.

Najlis 1984: 20, 50 (**c'ihni*, **c'ejhni*); Campbell & Grondona 2007: 16; Gutiérrez 2015b: 255–256

*-*k'inxâ?* ~ *-*k'inxâ?* [1] (*-*wot*) 'younger sister'

Mk -*k'inxâ?* ~ -*k'inxâ?* [1] (-*j*) [2] (Gerzenstein 1999: 236) || Ni -*tʃinxâ* (-*βot*) (Seelwische 2016: 337) || PCh *-*k'ihnâ?*(*-*wot*) > Ijw -*k'ihn̥a* ~ -*žihn̥a*, -*žihn̥-is* [3]; I'w -*kihn̥e?*, -*kihn̥a-wot* [4]; Mj -*žihn̥e?* (-*wat*) (Drayson 2009: 123, 128; Gerzenstein 1983: 141; Carol 2018) || PW *-*k'ínhâ* (*-*lis*) [2] > LB -*tʃino* [4]; Vej -*tʃiŋâ* (-*lis*) [4]; 'Wk -*k'íŋâ?* (-*lis*) (Nercesian 2014: 194; Gutiérrez & Osornio 2015: 29; Claesson 2016: 68)

[1] The Maká reflex is attested with *χ* in Gerzenstein (1999) and with *x* in the New Testament (e.g. in Mark 3:35; Matthew 12:50; John 11:5).

[2] The plural forms in Maká and Wichí are innovations.

[3] The absence of a stem-final -? in the singular form in Iyojwa'aja' is unexpected.

[4] The Iyo'awujwa' and Lower Bermejeño Wichí forms, as attested by Gerzenstein (1983) and Nercesian (2014), are irregular in having a plain initial consonant rather than the expected I'w **k*, LB **tʃ*. Viñas Urquiza (1974: 53) also documents plain *tʃ* in Vejoz, but this could be a mistranscription.

Campbell & Grondona 2007: 16; Gutiérrez 2015b: 64

*-*k'o*, *-*k'ó-l* 'bottom'

Ni -*k'o?* (-*k*) 'anus' (Seelwische 2016: 86) || PCh *-*k'ó?* 'bottom', *-*k'ó-ke?* 'waist' > Ijw -*k'ó?* 'mount', -*k'ó-ji* 'bottom', -*k'ó-ki?* [1] 'waist'; I'w -*k'ó-ki?*; Mj -*žó-ki?* 'waist' (Carol 2014a: 77; Drayson 2009: 123; Gerzenstein 1983: 143, 190; Carol 2018) || PW *-*k'ó*, *-*k'ó-l^h* > LB -*tʃ'ú* (-*l*); Vej -*tʃ'o*; 'Wk -*k'o?*, -*k'ó-ł* (in compounds such as [ta]ké-*k'ó* 'palm of hand', -*wilis-k'ó?* 'armpit') (Nercesian 2014: 201; Viñas Urquiza 1974: 54; Gutiérrez & Osornio 2015: 61, 66;

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Claesson 2016: 62, 102)

[1] Drayson (2009: 123) mistranscribes the Iyojwa'aja' form for 'waist' as *-k'ó-ki*.

Rejected: Najlis (1984: 44) compares the Wichí word (glossed as 'bark') with the Nivaclé and Chorote terms for 'horn' (< PM **-k'u*, **-k'ú-l* 'horn; club').

***-k'u, *-k'ú-l 'horn; club'**

Mk *-k'u?* [1] (*-l*) 'club' (Gerzenstein 1999: 237) || Ni *-k'u?* (*-k*) 'weapon; digging stick' (Seelwische 2016: 90; Fabre 2014: 83) || PCh **-k'ú?* (**-l* ~ **-l-is*) > Ijw *-k'ú?* (*-l-is*) 'horn', *-k'ú?* (*-l*) 'stick, hammer for killing fish'; I'w *-k'ú?* (*-lis*) 'horn, club'; Mj *-?ú?* (*-l*) 'horn' (Drayson 2009: 123; Gerzenstein 1983: 143; Carol 2018) || PW **-k'ú*, **-k'ú-l^b* 'horn' > LB *-tf'e*; 'Wk *-k'ú?*, *-k'ú-l* (Nercesian 2014: 48; Claesson 2016: 68)

[1] The root-final *?* in the Maká singular form is attested in the New Testament (Revelations 12:5; Revelations 19:15). Gerzenstein (1999) attests *-k'u*.

Rejected: Najlis (1984: 44) compares the Nivaclé and Chorote terms for 'horn' with reflexes of PW **-k'ó* (**-l^b*) 'bottom' (glossed as 'bark' in Najlis 1984).

Najlis 1984: 16, 44 (**co* 'club', **c'o* 'horn'); Campbell & Grondona 2007: 15 ('club'), 17 ('horn')

***k'uj ~ *k'új 'cold'**

Mk *k'wi* / *k'uj-* (Gerzenstein 1999: 238) || Ni *k'uj* (*-jis*) (Seelwische 2016: 91) || PCh **k'új?* > I'w *júj-APPL*; Mj *?új?* (Gerzenstein 1983: 135; Carol 2018)

Fabre 2014: 306

***k'ú(t)sta(?)χ, *k'ú(t)sta-ts 'barn owl (*Tyto alba*)'**

(?) Ni *k'ustax*, *k'usta-s* 'chalk-browed mockingbird (*Mimus saturninus*)' (Seelwische 2016: 91) [1] || PCh **k'ústah*, **k'ústa-s* > Ijw *k'ústa*; I'w *k'ú(h)stah* (*-as*) [2]; Mj *?ústa* ~ *?ústa* (*-s*) (Drayson 2009: 138; Gerzenstein 1983: 205; Carol 2018) || PW **k'ústax* > LB *tf'estaχ*; 'Wk *k'ústax* (Nercesian 2014: 198; Claesson 2016: 209)

[1] Phonologically, the Nivaclé ornithonym is a perfect match with Chorote and Wichí, but the species denoted by it has nothing in common with the barn owl (*Tyto alba*). It is possible that the Nivaclé term arose as a contamination of two similar-sounding PM roots, **k'ú(t)stax* 'barn owl' and **k'á(t)stax* 'chalk-browed mockingbird' (whence PCh **k'ástah*, **k'ásta-s* 'chalk-browed mockingbird' > Ijw *k'ásta* (*-s*); Mj *?esta* (*-s*); see Drayson 2009: 138; Carol 2018).

[2] The plain *k'* in Gerzenstein's (1983) data of Iyo'awujwa' must be a mistranscription, and

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the plural form in that variety is non-etymological.

***k'utX₂₃á'n, *k'utX₂₃án-its 'thorn'**

Ni *k'utxa'n, k'utxan-is* (Seelwische 2016: 91) || PCh **k'utá'n, k'után-is* > Ijw *k'it'é'n; I'w ɿitán, ɿítán-is; Mj ɿitá'n, ɿiten-éis* [1] (Drayson 2009: 137; Gerzenstein 1983: 132) || PW **k'uthá'n, k'uthán-is* > LB *tf'it^han* [2]; Vej *tf'ut^han; 'Wk k'ut^há'n, k'ut^hán-is 'thistle sp.'* (Spagarino 2008: 60; Nercean 2014: 362; Gutiérrez & Osornio 2015: 17; Claesson 2016: 209)

[1]The stress in the Manjui plural form is non-etymological.

[2]The expected form would be **tf'et^han*.

Campbell & Grondona 2007: 17, 20

***k'utsa'χ, *k'utshá-s / *-k'útsa'χ, *-k'útsha-ts 'old' [1]**

Mk *k'utsa'χ* [2], *k'utshe-ts* (Gerzenstein 1999: 237) || Ni *k'utsa'x, k'utsxa-s* (Seelwische 2016: 92) || PCh *-*k'úsah, -k'úsa-s* > Ijw *-k'úxs-e?* 'friend, boss'; I'w *-júxsa; Mj -ɿúxsa, -ɿ'uxse-s* (Drayson 2009: 123; Gerzenstein 1983: 135; Carol 2018) || PW *-*k'útsaχ* > 'Wk *ɿatsína-k'útsax* 'old woman' (Claesson 2016: 18)

[1]In Maká, Nivaclé, and 'Weenhayek, the reflex of this etymon refers to old humans; in Iyo'awujwa' and Manjui, to old objects.

[2]The presence of a preglottalized coda in the singular form in Maká is inferred based on the Nivaclé cognate; this form is otherwise not attested in our sources that distinguish between plain and preglottalized stops, such as Paraguay (2022) and the New Testament.

**Rejected:** Najlis (1984: 26) and Campbell & Grondona (2007: 20) includes also the reflexes of PW *[hi]k'út 'old' and **k'utsáx* 'cháguar (*Bromelia hieronymi*)' (only Najlis), which cannot be related for phonological reasons.

Najlis 1984: 27–28 (**cutsha*); Campbell & Grondona 2007: 20

***lásási(?) ~ *lásási(?) ~ *lasási(?) ~ *lásási(?) [1] 'slippery'**

Mk <*qa>lasasi<j>* 'to slip' [2] (Gerzenstein 1999: 124) || PCh **lásási?* ~ **lásási?* ~ **lasási?* ~ **lásási?* [1] > (?) Ijw *lálíksi?* [3]; I'w *lasáksi?*; Mj *lásaxsi?* (Drayson 2009: 138; Gerzenstein 1983: 146; Carol 2018)

[1]The Iyo'awujwa' reflex points to initial stress in PCh and PM. The Manjui reflex points to

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peninitial stress in PCh and PM.

[2] The Maká verb contains a fossilized alienizing prefix and verbalizing suffix ('to have slipperiness').

[3] The Iyojwa'aja' term is entirely irregular and might be non-cognate. There is a similar term *láxsaxsi* 'blue', *láxsa apeʔe* 'purple' (Drayson 2009: 138), cognate with Iyo'awujwa' *láxsa(sen)* ~ *laxsá* 'blue', which is hardly related for semantic reasons.

### *[*ji*]lǻj 'to withstand'

Ni [*ji*]kłǻj (Seelwische 2016: 101) || PCh *[*ʔi*]lǻj-eh > Ijw [*ʔi*]lǻj-i / -lǻj-i; Mj [*ʔi*]l(í)éj-i / -lǻj-i (Drayson 2009: 101; Carol 2018) || PW *[*ʔi*]lǻj > LB [*ʔi*]loj-eχ; Vej -laj [1]; 'Wk [*ʔi*]lǻj? 'to be satisfied, to live' (Nercesian 2014: 338; Viñas Urquiza 1974: 63; Claesson 2016: 214)

[1] The vowel *a* in the Vejoz reflex is likely a mistranscription on Viñas Urquiza's (1974) part.

### *[*ji*]lǻn 'to kill'

Mk [*ji*]lan (Gerzenstein 1999: 239) || Ni [*ji*]kłǻn (Fabre 2014: 246) || PCh *[*ʔi*]lǻn > Ijw [*ʔi*]lǻn / -lǻn; I'w -lán; Mj [*ʔi*]lén / -lán (Carol 2014a: 77, 83; Drayson 2009: 101; Gerzenstein 1983: 145; Carol 2018) || PW *[*ʔi*]lǻn > LB [*ʔi*]lon; Vej [*i*]lǻn; 'Wk [*ʔi*]lǻŋ (Nercesian 2014: 241; Viñas Urquiza 1974: 64; Gutiérrez & Osornio 2015: 34; Claesson 2016: 212)

Najlis 1984: 15 (3PL *lǻn-hné); Gutiérrez 2015b: 253

### *lá́p'íh ~ *láphíh 'snail'

Ni kłǻp'i (Campbell et al. 2020: 27) || PCh *lá́p'íh (*-is) > Ijw lá́p'i, lá́p'íh-is; I'w lá?pih, lápih-is [1]; Mj láp'i, láp'íh-wa? [2] (Drayson 2009: 138; Gerzenstein 1983: 146; Carol 2018)

[1] The Iyo'awujwa' form must be a mistranscription for *lap'íh* (-is).

[2] The Manjui plural does not match the form found in Iyojwa'aja' and Iyo'awujwa' and thus must be an innovation.

**Rejected:** Najlis (1984: 48) includes a reflex of PW *móp'i? 'white heron' into the comparison and reconstructs *p'i 'antenna, crest'. This is implausible for semantic, phonological, and

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morphological reasons.

Najlis 1984: 48 (*p'i* ‘antenna, crest’)

*[*ji*]låt ~ **[ji]låt* ? **[ji]let* ~ **[ji]lét* [1] ‘to flee’

Mk <*i>lat* ~ <*i>lit* (Gerzenstein 1999: 198) || Ni *[ji]klåt* (Seelwische 2016: 101) || PCh **[j]í>lt<an>* ~ [ʔi]<*jí>lt<an>* [2 3] > Ijw *[j]íltan* ~ [ʔi]*jíltan*; Mj *[?i]jíltan* ‘to separate from’ (Drayson 2009: 118, 165; Carol 2018) || PW **[?i]lét<han>* [3] > 'Wk *[?i]lét^haŋ* (Claesson 2016: 225)

[1] Nivaclé points to PM **[ji]låt* or **[ji]låt*, Wichí to **[ji]let* ~ **[ji]lét*, whereas Maká has reflexes of both variants.

[2] We have no explanation for the element **jí-* or **jí-* in the Chorote form. The loss of the root vowel is likewise irregular.

[3] The Chorote and Wichí reflexes contain a fossilized suffix (PCh *-an, PW *-han).

Likely related to Proto-Guaicuruan *-*ʔi*(*’*)*lote* ‘to flee’ (Viegas Barros 2013b, #688; cf. Viegas Barros 2013a: 306).

Viegas Barros 2013a: 306 (*-*ilåt*)

*-*lå?*, *-*lå-j^h* ‘domestic animal’

Ni *-klå?* (-j) ‘domestic animal; one’s sport’ (Seelwische 2016: 337) || PCh *-*lå-hwah* [1] > Ijw *-låhwa* (-s); Iw *-låf^wa* (-j); Mj *-låhwa*, *-låhwaa-j* (Drayson 2009: 123; Gerzenstein 1983: 145; Carol 2018) || PW *-*lå?*, *-*lå-j^h* > LB *-lo?* (-j); Vej *-lå-j*; 'Wk *-lå?*, *-lå-ç* (Nercesian 2014: 195, 169; Viñas Urquiza 1974: 64; Claesson 2016: 69)

[1] In Chorote, the suffix *-*hwah* ‘companion’ has been fossilized to the root.

Obviously related to Proto-Southern Guaicuruan *-*lo* ‘domestic animal’ (Viegas Barros 2013b: 280, fn. 157).

Najlis 1984: 35 (**lå*)

**lätseni*(?) (fruit); **lätsen-u^wk*, **lätsen-ku-j^h* (tree) ‘chañar (*Geoffroea decorticans*)’

Mk <*xu>letsin-u^wk*, <*xu>letsin-kw-i* [1] (Gerzenstein 1999: 393) || PCh **léseni?*; **léseni-k* > Ijw *lésini*; *lésini-k* (Drayson 2009: 138) || PW **létse^wnih*; **létsen-uk^w* > LB *lets’enek^w* [2]; Vej *letse^wni*; *letsen-uk*, *letsen-ku-j* [3 4]; 'Wk *létse^wnih*;

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*lētsen-uk, lētseñ-u-ç* [4] (Nercesian 2014: 193; Gutiérrez & Osornio 2015: 18; Claesson 2016: 225)

[1] The origins of the element *xu-* in Maká are unclear. The preglottalized coda in the Maká suffix for tree names is attested elsewhere (Paraguay 2022: 7).

[2] The glottalization in LB *ts'* is irregular.

[3] Viñas Urquiza (1974: 64) documents Vej *letsenn-uk*, which must be a mistranscription.

[4] The plural forms Vej *letsen-ku-j* and 'Wk *lētseñ-u-ç* do not correspond either to each other or to Maká <xu>*letsin-kw-i*. One would expect Vej **letsen-tsu-j*, 'Wk **lētsen-k'u-ç*.

Najlis 1984: 36 (**letseni*)

*[*ji*]le-n ~ **[?i]lē-n* ‘to tattoo, to paint one’s face’; *-le-t ~ *-lē-t ‘tattoo, face painting’ [1]

Mk [*ji*]lin-ix ‘to oint, to paint’ (Gerzenstein 1999: 243) || PCh **[?i]lē<n>* [2] > Ijw [*ti*]l'í'n / -l'í'n ‘to paint one’s face’; I'w -lén ‘to paint’ [3]; Mj [*ti*]lín / -lén (Drayson 2009: 117; Gerzenstein 1983: 147; Carol 2018) || PW *-le<t> ~ *-lē<t> ‘tattoo’ [4] > LB/Vej -let ‘tattoo’; 'Wk -let ~ -lét ‘face painting’ [4] (Nercesian 2014: 410; Viñas Urquiza 1974: 64; Claesson 2016: 70)

[1] PM *-n is a verbalizer and *-t is a nominalizer (*nomen instrumenti*). Neither suffix is synchronically productive in the contemporary languages. Maká and Chorote have preserved only the verb, and Wichí only the noun.

[2] The glottalization in PCh *l is irregular.

[3] The seemingly plain reflex of PCh *l in Iyo'awujwa' could be a mistranscription on Gerzenstein’s (1983) part.

[4] The 'Weenhayek reflex is only attested with the indefinite possessor prefix *nó-*; for this reason, we do not know if it has an underlying short or long vowel.

*-lēts ‘offspring (sons and/or daughters)’ (*pluralia tantum*)

Mk -lits (Gerzenstein 1999: 243) || Ni -k̄l̄es ‘offspring, sperm’ (Seelwische 2016: 337) || PCh *-lēs > Ijw -lés; I'w -lés; Mj -lés (Drayson 2009: 124; Gerzenstein 1983: 122, 124; Carol 2018) || PW *-lēs > LB/Vej -les, 'Wk -lés (Nercesian 2014: 215; Viñas Urquiza 1974: 64; Claesson 2016: 69)

Viegas Barros (2013a: 312) notes the similarity with Proto-South Guaicuruan *-jalé ‘daughter’,

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*-jalé-k 'son', which could be spurious.

Najlis 1984: 11 (*les); Viegas Barros 2013a: 312 (*-le-ts)

***[ji]lē'x 'to wash'**

Mk [ji]li'x-xu? [1] 'to clean' (Gerzenstein 1999: 244) || Ni [ji]k̪lē'ʃ (Seelwische 2016: 117) || PCh *[ʔi]lēh > Ijw [ʔi]līh / -lēh; I'w [i]lī / -lē; Mj [ʔi]līh / -lēh (Drayson 2009: 101; Gerzenstein 1983: 41, 146; Carol 2018) || PW *[ʔi]lēχ > LB [ʔi]lēχ; Vej [hi]leh; 'Wk [ʔi]lēx (Nercesian 2014: 244; Braunstein 2009: 44; Viñas Urquiza 1974: 64; Gutiérrez & Osornio 2015: 36; Claesson 2016: 223)

[1] The preglottalized coda and the presence of two *x* is documented in the New Testament (*ne-n-li'x-xu?* in Ephesians 5:26; Revelations 21:4).

Gutiérrez 2015b: 64, 253

***lim ~ *lím 'white'**

Ni k̪lím (Seelwische 2016: 118) || PCh *lím- > Ijw lém< i>, lém< ih>-ji; I'w lém< i?> [1]; Mj léim< i?> (Drayson 2009: 138; Gerzenstein 1983: 146; Carol 2018)

[1] Gerzenstein (1983: 186) also documents an irregular variant *hlém< i?>*, which must be a mistranscription. Elsewhere (Gerzenstein 1983: 146), one finds multiple attestations with *l-* (*lémi?*, *lémi-tsi?*, *lémi-jin*).

Najlis 1984: 36 (*lem); Gutiérrez 2015b: 253

***(-)lkā(?)t 'nasal mucus, cold'**

Mk -leke(?)t (-its) (Gerzenstein 1999: 241) || PCh *kéł > Ijw kít; Mj kít (-es) (Drayson 2009: 136; Carol 2018) || PW *k^jéł-tax, *k^jéł-ta-s > LB tset-tax; Vej tset-tah; 'Wk k^jéł-tax, k^jéł-ta-s (Braunstein 2009: 39; Viñas Urquiza 1974: 52; Gutiérrez & Osornio 2015: 47; Claesson 2016: 186)

Campbell & Grondona 2007: 16

***lkéte (fruit); *lkéte-(ju)k (plant) 'squash'**

Mk lekiti; lekit-u'k [1], lekiti-kw-i (Gerzenstein 1999: 241; Braunstein 1987: 85) || PCh *kéte?; *kéte-k > I'w kítí?; Mj kít^je? ~ kítí?; kít^je-k (Gerzenstein 1983: 140; Carol 2018)

[1] The preglottalized coda in the Maká suffix for tree names is attested elsewhere (Paraguay

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2022: 7).

Campbell & Grondona 2007: 16

### ***(-)lo(?) ~ *(-)ló(?) ‘ashes’**

Mk *lo?*(-*l*) (Gerzenstein 1999: 235) || PCh *-*ló?* > Ijw -*ló?* ‘burnt remains, ashes (of something)’ (Drayson 2009: 124)

Obviously related to Proto-Guaicuruan *á(?)*lo* ‘ashes’ (Viegas Barros 2013b, #33; cf. Viegas Barros 2013a: 311).

Viegas Barros 2013a: 311 (**lo?*)

### ***lo’p ~ *ló’p, *lop-íts ~ *lóp-its [1] ‘winter’**

Mk *lo’p* [2], *lop-its* (Gerzenstein 1999: 245; Paraguay 2020: 23–25) || Ni *klo’p*, *klop-is* (Seelwische 2016: 119) || PCh **lóp* > Ijw *lóp* ‘fall; hunger season’ (Drayson 2009: 138) || PW **lop* ~ **lóp* > LB *lup* (Nercesian 2014: 49)

[1]The plural form is reconstructed based on Maká *lop-its* and Nivaclé *klop-is*; it is thus technically reconstructible only for Proto-Maká–Nivaclé.

[2]The Maká reflex is mistranscribed as *lop* in the New Testament (John 10:22); the expected form *lo’p* is otherwise documented (Paraguay 2020: 23–25).

Gutiérrez 2015b: 253

### ***lóta-(ju)’k ‘iscayante tree (for making bows)’**

Ni *klotá*<*tf*> (Seelwische 2016: 119) || PCh **lóta-juk* ‘*Mimozyganthus carinatus*’ > Ijw *lóta*<*k*>-*ik*; I’w *lóta*<*k*>-*ik* ~ *lóta*-*?ik*; Mj *lóta*-*?ik* ~ *lóte*-*jik* (Drayson 2009: 138; Scarpa 2010: 186; Carol 2018) || PW **lóte*<*q*>, **lót*<*h*>-*aj^h* > LB *luteq*, *lut^h-aj* ‘arrow’; Vej *lotek*; ’Wk *lotek*, *lót^h-aç* ~ *lót^h-eç* ‘*Prosopis abbreviata*; bow, arrow’ (Nercesian 2014: 192; Gutiérrez & Osornio 2015: 18, 57; Claesson 2016: 226)

### ***[?a]lóχ, *[?a]ló-ts ‘many’**

Mk <*o>lo*<*ts*> [1 2] (Gerzenstein 1999: 281) || Ni <*?a>klox* (Seelwische 2016: 38) || PCh *[?a]’*lóh* [3] > Ijw ’*lóh*; I’w [a]’*lóh*; Mj [?a]’*lóh* (Carol 2014a: 78; Drayson 2009: 162; Gerzenstein 1983: 120; Carol 2018) || PW *[?a]’*ló*<*s*> [2 4] > Vej *los*;

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*Wk <?a>lós (Viñas Urquiza 1974: 64; Claesson 2016: 11)

[1] The third-person prefix *?a- has been fossilized in all languages except Chorote.

[2] The plural suffix *-ts has been fossilized in Maká and Wichí.

[3] The glottalization in PCh *?l appears to be irregular (the seemingly plain reflex in Iyo'awujwa' could be a mistranscription on Gerzenstein's (1983) part).

[4] In Southwestern Wichí, one finds *lus* 'two' (Terraza 2009b: 93; Nercesian 2014: 359; Braunstein 2009: 50), which could be a phonologically regular reflex of PW *-lós 'many', but it is more probable that this number term is a recent loan from Spanish *dos*.

Hunt 1915: 242; Gutiérrez 2015b: 253

*(-)lútse 'x, *(-)lútsxe-s 'bow'

Ni *klutsef* / -*klutseʃ* [1], (-)*klutsfe-s* 'bow, gun' (Seelwische 2016: 345) || PCh *(-)lúseh (-es) > Ijw (-)lóxse (-hes) [1]; I'w lóxse? [2]; Mj -lóxse, -lóxsi-is (Drayson 2009: 124, 138; Gerzenstein 1983: 147; Carol 2018) || PW *(-)lútseχ, *(-)lúts-es > LB -*letseχ*, *lets-es*; Vej -*lutseh*; 'Wk (-)lútsex, (-)lúts-es (Braunstein 2009: 49; Viñas Urquiza 1974: 64; Claesson 2016: 70, 228)

[1] The allomorph -*klutseʃ* is attested in Seelwische (2016: 345) in the form *βat-klutseʃ*, yet the form *kas-klutsef* is unexpectedly attested with a plain coda.

[2] The expected reflex in Iyo'awujwa'aja' would be *-lóksi. The failure of *e to raise is unclear.

[3] The expected reflex in Iyo'awujwa' would be *-lóxse. Gerzenstein (1983) systematically transcribes [ʊ] as o in her data, but the word-final glottal stop must be a mistranscription.

Hunt 1915: 242; Najlis 1984: 11 (**lutshe*); Campbell & Grondona 2007: 19; Viegas Barros 2002: 143 (*-*lutsex*)

*[ji]lXón 'to roast'

Ni [ji]kxon 'to cook in ashes' (Seelwische 2016: 112) || PCh *[?i]hlón > Ijw [?i]hljó'n / -hló'n; Mj [?i]hl(j)ón / -hlón (Drayson 2009: 99; Carol 2018) || PW *[t]nhón > LB [t]<i>ηnun; 'Wk [t(a)]ηónη (Braunstein 2009: 57; Claesson 2016: 369)

*-lå? ~ *-lå? 'adornment' [1]

Mk -<?eti> 'la? (-j) 'necklace' [2], -<qetsxiki> 'la? (-j) 'necklace' [2] (Gerzenstein 1999: 160, 309) || Ni -<fo> 'kålå (-s) 'ankle bracelet with white feathers'

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|| PCh **<kinú>* *'la?* ~ **<kenú>* *'la?* necklace [3] > Ijw *kinjú* *'lje?*; Mj *kinjú* *'la?* (Drayson 2009: 136; Carol 2018)

[1] The possible derivative **-pá'lā?* 'bracelet' is discussed in a separate entry.

[2] The presence of a preglottalized sonorant in Maká is inferred based on the Nivaclé and Chorote cognates; the form is not attested in our sources that distinguish between plain and preglottalized codas, whereas Gerzenstein (1999) gives simply *-ʔetila?*, *-qetsxikila?* (she does not otherwise distinguish between *l* and *ʔ*).

[3] Chorote unexpectedly shows PCh **a* instead of **ā* as the reflex of PM **ā*, as shown by the vowel raising in Iyojwa'aja'.

### **'lājX₂₃VnåX₁₃å* [1] 'Azara's night monkey'

Ni *klajxenåxå* (-*k*) (Seelwische 2016: 115) || PCh **'lēhjanåhå-ke?* > Ijw *<ʔa>* *'lēhjena-ki?* [2] 'Azara's capuchin'; I'w *lēhna-ki?* (-*ji*); Mj *'lēhnaa-ki?* (-*j*) (Drayson 2009: 95; Gerzenstein 1983: 147; Carol 2018)

[1] Regarding the reconstruction of the vowel of the second syllable, the Nivaclé reflex points to **e*, whereas the Iyojwa'aja' form points to **a* or **ā*.

[2] We have no explanation for the element *ʔa-* in Iyojwa'aja'.

Najlis 1984: 15, 52 (**laj-hnaq*, PL **lajhnaqs*)

### *-*'li²x*, *-*'lix-ájh* 'language, word'

Mk -*'lix<e?* (-*j*) [1] (Gerzenstein 1999: 243) || Ni -*'kliʃ*, -*'klif-aj* 'word' (Seelwische 2016: 376) || PCh *-*'lih*, *-*'lah-ájh* > Ijw -*'lēh*; I'w -*lēh* (-*aj*) [2]; Mj -*'léih*, -*'lah-ájh* 'language' (Drayson 2009: 127; Gerzenstein 1983: 147; Carol 2018)

[1] The glottalization in the stem-initial sonorant in Maká is attested in the New Testament (e.g. Matthew 2:23; Mark 4:14).

[2] The plain reflex of PCh **'l* in Iyo'awujwa' as attested by Gerzenstein (1983) must be a mistranscription, and the plural form in that variety is leveled based on the singular form.

### *(-)*la?*, *(-)*lá-ts* 'louse'

Mk -*<ij>le?* (-*ts*) [1] (Gerzenstein 1999: 193) || Ni -*la?* (-*s*) [2] (Seelwische 2016: 161) || PCh *-*hlá?* (*-*s*) > Ijw *-hlá?* (-*s*); I'w *<ʔi>hljé?* (-*s*); Mj -*hlá?* (-*s*) (Drayson 2009: 119; Gerzenstein 1983: 132; Carol 2018) || PW **la?* > LB *la?*; Vej *la*;

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¹Wk *la?* (Nercesian 2014: 50; Viñas Urquiza 1974: 64; Claesson 2016: 230)

[1] We have no explanation for the element *-ij-* in Maká.

[2] Campbell et al. (2020: 84) document the Nivaclé reflex as *-?la*, a form that we cannot explain at this time.

Najlis 1984: 28 (**hla*)

***[ji]há'm 'to defecate'**

Mk <*i>la'm* (Gerzenstein 1999: 199) || Ni *[ji]tå'm* (Seelwische 2016: 170) || PCh **[?i]hlá'm* > Ijw *[?i]hlá'm* / *-hlá'm*; Mj *[?i]hl(?)é'm* / *-hlé'm* (Drayson 2009: 99; Carol 2018) || PW **[t]<'a>la'm* [1] > LB *[t]<'a>tam*; 'Wk *[t]<'a>tá'm* (Braunstein 2009: 59; Claesson 2016: 431)

[1] The preglottalized coda in the Maká reflex is attested in the New Testament (*iña'm-kij* 'to have diarrhea' in Acts 28:8).

[2] The Wichí reflex is irregular: one would expect PW **[t]há'm* > LB **[t]atom*; 'Wk **[t]atá'm*.

***[ji]hán 'to light fire'**

Mk *[ni]tan-i?* 'to light fire', *[ni]tan-xi?* 'to smoke in' (Gerzenstein 1999: 248) || Ni *[ji]tán* (Seelwische 2016: 170) || PCh **[?i]hlán-e?e?* 'to fan the flame', **[ti]hláhn-an* 'to smoke (intr.)', **[?i]hláhn-ij?* 'to smoke (tr.)' > Ijw *[?i]hlán-e?e?* / *-hlán-e?e?* [1], *[ti]hláhn-a'n*, *[?i]hláhn-ij?* / *-hláhn-ij?* [1]; I'w *-hlán-ee*, *-hláhn-an*; Mj *[?i]hl(?)én-e?e?* / *-hlán-e?e?*, *[ti]hláhn-an*, *[?i]hl(?)éhn-ij?* / *-hláhn-ij?* (Drayson 2009: 98, 99, 150; Gerzenstein 1983: 174; Carol 2018) || PW **[ti]hán-APPL* > 'Wk *[?i]hán-APPL* (Claesson 2016: 229)

[1] Drayson (2009) mistranscribes Ijw *[?i]hlán-e?e?* / *-hlán-e?e?* and *[?i]hláhn-ij?* as *[?i]hlán-e?e* / *-hlán-e?e* and *[?i]hláhn-i*, respectively.

Obviously related to Proto-Qom **[j]alon* 'to light fire' and Kadiwéu *[j]elo(n)-APPL* 'to light fire'. Viegas Barros (2013b) does not list this cognate set, but one may reconstruct Proto-Guaicuruan **[j]alon* ~ **[j]elon*.

Gutiérrez 2015b: 254

***tet 'white snail' [1]**

Ni *tet* (Seelwische 2016: 169) || PW **tet* > LB / 'Wk *tet* (Nercesian 2014: 51; Claesson 2016: 235)

[1] Ijw *hléhl-impe* 'white monjita (*Xolmis irupero*)' (Drayson 2009: 130) is ultimately related to

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this root, but it is likely a partial calque from PW **téł-t-’åχ* ‘snail shell; white monjita (*Xolmis irupero*)’ > LB *teł-t-’ox*; ’Wk *teł-t-’åx* (Spagarino et al. 2013 [2011]; Claesson 2016: 235).

### *(-)ié(‘)t ‘firewood’

Mk *tit<u?>* [1] ‘half-burnt wood’ (Gerzenstein 1999: 254) || PCh *-<?a>*hléł* ~ *-<?å>*hlét* (*-is) [2] > Ijw *-ahlét* (-is); I’w *-ahlét* (-is) ‘burning firewood’; Mj *-ahlét* (-es ~ -is) (Drayson 2009: 154; Gerzenstein 1983: 123; Carol 2018) || PW *-*téł* > Vej *-tēt*; ’Wk *-iéł* (Viñas Urquiza 1974: 66; Claesson 2016: 74)

[1] We have no explanation for the element *-u?* in Maká.

[2] We have no explanation for the element *-?a- or *-?å- in Chorote.

Obviously related to Proto-Guaicuruan *-o⁷*let*fire (Viegas Barros 2013b, #439; cf. Viegas Barros 2013a: 311).

Viegas Barros 2013a: 311 (*-V⁷*let*V⁷)

### *-i⁷k ~ *-i⁷k, *-i⁷-j^h ‘thread’

Ni *-ti⁷tʃ*, *-ti⁷-j<is>* (Seelwische 2016: 169) || PCh *-*hlík*, *-*hlí-j^h* > I’w *-hlék*, *-hlé-j*; Mj *-hlík* (Gerzenstein 1983: 174; Carol 2018)

### *-i⁷u⁷k, *-i⁷u⁷-j^h ‘yica bag, load’

Mk *-tu⁷k* [1], *-tu⁷-j* (Gerzenstein 1999: 255) || Ni *-tu⁷k* (Seelwische 2016: 171) || PCh *-*hlúk*, *-*hlúj-*... > Ijw *-hlók*, *-hló-j<e?>*; Mj *-hlók* (Drayson 2009: 119; Carol 2018) || PW *-*łuk^w*, *-*łú-j<is>* ‘bag, load’ > LB *-łek^w*; Vej *-łuk* [2]; ’Wk *-łuk*, *-łú-j<is>* (Nercesian 2014: 418; Viñas Urquiza 1974: 66; Claesson 2016: 76)

[1] The presence of a preglottalized coda in the singular form in Maká is inferred based on the Nivačle cognate; it is not attested in our sources that distinguish between plain and preglottalized stops.

[2] The absence of labialization in the final consonant in the Vejoz reflex might be a mistranscription on Viñas Urquiza’s (1974) part.

### *i⁷um⁷a ‘day’

Ni *łum⁷a-fj* ‘tomorrow’; *łum⁷a-kfinuk* ~ *łum⁷å-kxinuk* (-its) [1] ‘east’ (Seelwische 2016: 171) || PCh **hlúma?* (*-s) > Ijw *hlóma* (-s) [1] ‘day, air, east’; I’w *hlóma* (-s) [1]; Mj *hlóma?* (-s) (Drayson 2009: 131; Gerzenstein 1983: 175;

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Carol 2018)

[1] The variant *tumå-kxinuk* is irregular.

[2] The absence of a final glottal stop in Drayson's (2009) and Gerzenstein's (1983) attestations of the Iyojwa'aja' and Iyo'awujwa' reflexes must be a mistranscription.

**Rejected:** Najlis (1984: 38, 51) includes the Wichí term for 'east' (cf. Vej *h^woma* in Viñas Urquiza 1974: 60) into the comparison. By contrast, Gutiérrez (2015b: 254) compares the Chorote noun with the reflexes of PM **nálu(h)*, *'nálu-ts* 'day, world'. Both proposals are untenable for phonological reasons.

Najlis 1984: 38, 51 (**hlɔwmahn*)

***tútsX₂₃a(?) (-jek) 'girl'**

Ni *tutsxa* (-jetʃ) (Seelwische 2016: 171) || PCh **hlúsa?* (*-jek) > Ijw *hlóxse* [1]; I'w *hlóxsa* ~ *lúxsa*, *lúxsa-ji* [2]; Mj (*?a*)*hlúxsa?*, *hlúxse-jik* (Drayson 2009: 132; Gerzenstein 1983: 147, 203; Carol 2018) || PW **tútsa?* (*-j^h) [3] > LB *tets^ha*; Vej *tuts^ha* (-j ~ *tutsa-j*); 'Wk *túts^ha?* (-*g*) (Nercesian 2014: 182; Gutiérrez & Osornio 2015: 51; Claesson 2016: 239)

[1] The expected Iyojwa'aja' form would be **hlóxse?* */*hlúsa/*, not *hlóxse* /*hlúsah/*.

[2] The variant with an *l*, given by Gerzenstein (1983), is irregular. The plural suffix *-ji* (as opposed to the expected *-jik*) could be a mistranscription.

[3] The plural form attested in Wichí does not match those seen in Nivaclé and Manjui.

Najlis 1984: 26 (**hlutsh-a*); Gutiérrez 2015b: 254

***ma 'interrogative particle (heads polar interrogatives)'**

Mk *me* (Gerzenstein 1994: 195) || PCh **ma* > Ijw *ma* / =*mi*; Mj *ma* (*mi* before *i*, *hi*) (Carol 2014b; Drayson 2009: 139; Carol 2018)

Viegas Barros (2013a: 318) compares the Mataguayan particle with Abipón *m-* 'polar question marker' (Najlis 1966: 103).

Hunt 1915: 241; Viegas Barros 2013a: 318 (**me*)

***[ji]må 'to sleep'**

Mk *[i]ma?* (Gerzenstein 1999: 260) || Ni *[ji]må?* (Seelwische 2016: 175) || PCh **[?i]må?* > Ijw *[?i]m^já?*; I'w *-må?a* 'to sleep'; Mj *[?i]m^(j)é?* / *-må?* 'to roam through the forest for game or honey hunting', *[?i]m^(j)é-2e?* / *-må-2a?* 'to sleep' (Drayson 2009: 102; Gerzenstein 1983: 148; Carol 2018) || PW **[?i]må*

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> LB [ʔi]mo; Vej [hi]må [1]; 'Wk [ʔi]må? (Nercesian 2014: 209; Gutiérrez & Osornio 2015: 34; Claesson 2016: 239)

[1] Viñas Urquiza (1974: 66) mistranscribes the root as *-ma*.

Viegas Barros (2013a: 306) notes the similarity with Proto-Guaicuruan *-oma ‘to lie (with)’ (Viegas Barros 2013b, #440), which could be spurious.

Najlis 1984: 10, 18, 41 (*må, 2 *hl-må); Viegas Barros 2013a: 306 (*-ma?)

### *måh ‘go!’

Mk *ma* (Gerzenstein 1999: 259) || Ni *må* (Seelwische 2016: 175) || PCh *må^h > Ijw *má(h)*; Mj *måh* [1] (Carol 2014a: 86; Drayson 2009: 139; Carol 2018) || PW *måh > LB *mo* ‘go ahead!’; Vej *mä(h)* [2]; 'Wk *måh* (Nercesian 2014: 284; Viñas Urquiza 1974: 66; Gutiérrez & Osornio 2015: 25; Claesson 2016: 239)

[1] The vowel o in Manjui is an irregular reflex of *å.

[2] Viñas Urquiza (1974: 66) mistranscribes the Vejoz form as *ma*.

Obviously related to Proto-Guaicuruan *mo ‘you go; go!’ (Viegas Barros 2013b, #385; cf. Viegas Barros 2013a: 305).

Viegas Barros 2013a: 305 (*må)

### *-må'k, *-mhå'-j^h ‘powder, flour’

Ni -må'k, -mxå'-j (Seelwische 2016: 175) || PCh *-måk > Ijw -måk; I'w wátso-hl-<a>måk [1]; Mj 3 hl-<a>måk [1] (Drayson 2009: 124; Gerzenstein 1983: 168; Carol 2018) || PW *-mók^w, *-mhó-j^h [2] > LB -muq [3]; Vej -mok' [4]; 'Wk -mók, -mó-ç (Nercesian 2014: 212; Viñas Urquiza 1974: 67; Claesson 2016: 76)

[1] The element -a- in Iyo'awujwa' and Manjui is plausibly the same root as PM *-å? ‘fruit’. The Chorote make use of two plant species, *Prosopis alba* and *Ziziphus mistol*, whose fruit are commonly ‘ground into flour and sometimes molded into dough to make small cakes or biscuits, which are then cooked’ (Arenas & Scarpa 2007: 77, 84, 85).

[2] PW *o is not a known regular reflex of PM *å.

[3] The final q instead of k^w in the Lower Bermejeno form could be a mistranscription on Nercesian's (2014) part.

[4] Final -k' in Viñas Urquiza's (1974) attestation of the Vejoz reflex could be a mistranscription

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for *-kʷ*.

Likely related to Proto-Guaicuruan *á'moqo 'powder' (Viegas Barros 2013b, #47; cf. Viegas Barros 2013a: 311). LB *?amuqu* 'manioc' (Nercesian 2014: 52) is clearly borrowed from an unidentified Guaicuruan language, with the semantic development *'powder' > *'(manioc) flour' > 'manioc'.

Najlis 1984: 21, 45 (**hmák*); Campbell & Grondona 2007: 15; Viegas Barros 2013a: 311 (*-*maq*)

***máxå ~ *máxå 'yellow'**

Mk *ma:xa*, *maxa-m* (Gerzenstein 1999: 259) || PCh **måhå?* ~ **måhå?* > Ijw *måha?* (Drayson 2009: 139)

***mät [1] 'hither; nearby'**

Mk *met* [1] 'nearby' (Gerzenstein 1999: 260) || PCh **mét* 'hither' > Ijw *mét*; I'w -*met*; Mj *mét* [2] (Drayson 2009: 139; Gerzenstein 1983: 121; Carol 2018)

[1] The absence of preglottalization in the coda in PM and in Maká is shown by the attestations of the Maká reflex in the New Testament (e.g. Matthew 14:18).

[2] The Manjui reflex is mistranscribed as *mít* in Carol (2018).

***me(?) ~ *mé(?) [1] 'otter'**

Mk *mi?(-l)* (Gerzenstein 1999: 261) || Ni *me?* (Seelwische 2016: 174) || PCh **mé?* > Ijw *mé?* (Drayson 2009: 139)

[1] The dubious status of the word-final glottal stop and of the prosodical properties of the root are due to the absence of a known cognate in Wichí.

***mijó (*-l) 'savannah hawk'**

Mk *mijo* (-l) (Gerzenstein 1999: 261) || Ni *mijo* (-*k*) 'black-collared hawk' (Seelwische 2016: 174) || PCh **mijó?* (*-l) > Ijw *mijó?*; Mj *'mijó?*, *'mijó-l* [1] (Drayson 2009: 139; Carol 2018) || PW **mijóh* > LB *miju*; Vej *mijo* 'eagle'; 'Wk *mijóh* 'bird sp.' (Spagarino et al. 2013 [2011]; Gutiérrez & Osornio 2015: 21; Claesson 2016: 250)

[1] The glottalized nasal *'m* in Manjui is irregular.

Possibly related to Proto-Pilagá-Toba **májo* 'large bird' (Viegas Barros 2013b, #114; cf. Viegas

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Barros 2013a: 310).

Viegas Barros 2013a: 310 (**mijo*)

### *-muk, *-mhu-j^h [1] 'feces'

Mk -<i>muk, -<i>mhu-j (Gerzenstein 1999: 201, 253) || Ni (-)<sa>muk, (-)<sa>mxu-j (Seelwische 2016: 230) || PCh *-<’já>muk > Ijw -’jémuk, -’jému-s [2]; I’w -jémuk [3]; Mj -’jémuk, -’jéhmoo-j [2 4] (Drayson 2009: 128; Gerzenstein 1983: 134; Carol 2018) || PW *-<’já>muk^w, *-<’já>mhu-j^h > Vej -jamok [3 4]; ’Wk -’jámuk, -’jámu-ç (Viñas Urquiza 1974: 83; Claesson 2016: 57)

[1] In all daughter languages, this root occurs in what looks like obscure, non-analyzable compounds, with the elements Mk -i-, Ni -sa-, and PCh/PW *-’já-.

[2] The plural forms in Iyojwa’aja’ and Manjui are non-etymological.

[3] The lack of glottalization in *j* in the Iyo’awuja’ and Vejoz reflexes could be a mistranscription on our sources’ part.

[4] The vowel *o*, attested in the Manjui (plural only) and Vejoz reflexes, may be attributed to contamination with reflexes of PM *-má’k, *-mhá-j^h ‘powder, flour’. The absence of labialization in the stem-final consonant in Vejoz is irregular.

Toba–Qom *jamok* ‘feces’ (Buckwalter & Buckwalter 2013: 187) lacks known cognates in other Guaicuruan languages and is thus likely to be a Wichí loan.

Campbell & Grondona 2007: 15

### *[?a]’mân ~ *[?a]’mán ‘to stay, to be alive’

Mk <a>man [1] ‘to stay, to stop’ (Gerzenstein 1999: 119–120) || Ni mân<’la> / -’mân<’la> [2] (Seelwische 2016: 175) || PCh *[?a]’mán<’hli> [2 3] > Ijw ’wán-hle-’e ‘to stay’ [4]; I’w -mánni-ji ‘to live’ [5]; Mj [?a]’mán-hi? ‘to be alive’, [?a]’mánhi-’i? ‘to stay’; CAUS *[?i]’mán-it > Ijw [?i]’mén-it/ -’mán-it ‘to defend, to cure’; Mj [?i]’m(j)én-it/ -’mán-it ‘to save’ (Drayson 2009: 163; Gerzenstein 1983: 148; Carol 2018) || PW *[?i]mâl<’l>-APPL ‘to stay’ [2] > LB [?i]mot-i ‘to be the last’; Vej -mat-e [6]; ’Wk [?i]mâl-APPL; CAUS *[?i]mâl-t-APPL > LB [?i]mot-t-’i ‘to leave, to extract’; ’Wk [?i]mâl-t-APPL (Nercesian 2014: 154, 203, 351; Viñas Urquiza 1974: 67; Claesson 2016: 240–243)

[1] The Maká reflex unexpectedly lacks preglottalization in the root-initial nasal, as attested in the New Testament (Hebrews 4:9; 2 Peter 2:6; John 7:37; John 8:44; 1 John 3:14; Revelations

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10:6).

[2] All languages except Maká (and Chorote, in the case of the causative) have fossilized a suffix or a sequence of suffixes starting with **l*.

[3] PCh **a* is not the regular reflex of PM **å*.

[4] Ijw **w* is not the regular reflex of PCh **m*.

[5] The Iyo'awujwa' form in Gerzenstein (1983: 148) is likely a mistranscription for -*mánhi-ij?*

[6] The vowel *a* in the Vejoz reflex is likely a mistranscription on Viñas Urquiza's (1974) part.

***[?]mók (*-its) 'creamy-bellied thrush (*Turdus amaurochalinus*)'**

Mk *mok* (-*its*) 'kind of *zorzal* (*Turdus sp.*)' [1] (Gerzenstein 1999: 261) || Ni *mok* (-*is*) (Seelwische 2016: 174) || PCh *[?]*mók* (*-*is*) > Mj **mók* (-*is*) 'kind of *zorzal* (*Turdus sp.*)' (Carol 2018)

[1] Mk *maq-itaχ*, *maq-ite-ts* 'creamy-bellied thrush (*Turdus amaurochalinus*)' (Gerzenstein 1999: 259) is obviously indirectly related to this root. It may have been borrowed from Ni *mok-itax*, *mok-ita-s* 'creamy-bellied thrush (*Turdus amaurochalinus*)', though the phonological adaptation pattern remains unaccounted for.

**Rejected:** Najlis (1984: 13) compares the Nivaâle reflex to Vej *woktak'ak* 'cochapoye bird' (Viñas Urquiza 1974: 81) and reconstructs PM **mɔk* ~ **wɔk*, which is problematic from a phonological point of view.

Compare Toba–Qom *mok* 'Podager *facunda*; *Nyctibius griseus*; *Turdus amaurochalinus*' (Cúneo & Porta 2009: 248), which does not reconstruct to Proto-Guaicuruan and is thus a probable loan from a Mataguayan language.

***-náj^h 'to bathe'**

Ni [βa]naj (Seelwische 2016: 184) || PCh *[?i]náj-APPL > Ijw [?i]n'éhj-i? / -náhj-i? [1]; I'w -náj-i-náhti?; Mj [?i]n'éhj-ij? / -náhj-ij? (Carol 2014a: 93; Gerzenstein 1983: 149; Carol 2018) || PW *[?i]náj^h > LB [?i]naj; Vej -naj; 'Wk [?i]náç (Nercesian 2014: 251; Viñas Urquiza 1974: 67; Claesson 2016: 259)

[1] Drayson (2009: 102) mistranscribes this form as [?i]n'éhj-i / -náhj-i.

Viegas Barros (2013a: 306) notes the similarity with Proto-Guaicuruan *-n-ij'ó 'to wash one-'

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**self**, which could be spurious.

Viegas Barros 2013a: 306 (*-naj)

### *náwa(?)j(-xi?) 'to boil'

Ni *naβaj-si* (Seelwische 2016: 183) || PCh *náwahj-ij? > Ijw náwahj-i?; Mj *náwohj-ij?* [1] (Drayson 2009: 140; Carol 2018) || PW *náwaj, *ná'waj-hi > LB *nawaç-i*; 'Wk *náwaj?*, *ná'waç-i?* (Nercesian 2014: 48; Claesson 2016: 259)

[1] The unstressed vowel rounding in Manjui is not known to be regular, though it does sometimes happen next to a *w*.

### *náwa(?)x 'cactus sp.'

Ni *naβaf* (-ik) 'cactus fruit (ca. 5 cm in diameter and height, its pulp is very good for killing one's thirst)' (Seelwische 2016: 183) || PW *náwaχ 'cactus (*Echinopsis rhodotricha*)' > Southeastern (Salta) *nawaχ*; 'Wk *náwax* (Suárez 2014: 234; Claesson 2016: 259)

### *-na'x ~ *-ná'x, *-nxá-ts 'nose' [1]

Mk -ne'x, -nex-its [1] / -nxε- (Gerzenstein 1999: 151; Braunstein 1987: 202) || Ni -na'ʃ, -nfa-s (Seelwische 2016: 177) || PCh *-hná<tVwoh> [2] > Ijw -hnátawo (-s); I'w -hnátowu ~ -hnátawo ~ -hnátowe- (-hnátowe-j); Mj -hnátowu (Carol 2014a: 98; Drayson 2009: 119; Gerzenstein 1983: 175, 210; Carol 2018) || PW *-nh<us> [1] > LB -n̥es (-ej); Vej -n̥us (-eɻ) [3]; 'Wk -n̥us, -n̥ús-eɻ (Nercesian 2014: 161; Gutiérrez & Osornio 2015: 60; Claesson 2016: 79)

[1] The Maká plural is non-etymological. The presence of a preglottalized coda in the singular form is inferred based on the Nivañe cognate; this form is otherwise not attested in our sources that distinguish between plain and preglottalized stops, such as Paraguay (2022) and the New Testament.

[2] The Chorote and Wichí words are obscure compounds involving PM *-nxá-.

[3] Viñas Urquiza (1974: 69) documents this root as -nus in Vejoz, which must be a mistranscription on her part.

### *-nå(?) ~ *-ná(?) (*-wot) 'father'

Mk (Lengua) <inå 'my father', <sanå 'father' (Peña 1898: 488) || Ni -nå-βot 'parents' (Seelwische 2016: 202) || PCh *-nå?, *-ná-wot > Ijw -ná?, -wot, -jis);

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I'w *-ná?* (–wot); Mj *-ná?* (Carol 2014a: 101; Drayson 2009: 124; Gerzenstein 1983: 149; Carol 2018)

***népo(?)k ‘wild manioc (*Marsdenia castillonii*)’ [1]**

Ni *noþok*, *noþxo-j* (Seelwische 2016: 198) || (?) PCh **n³wák* [2] > Ijw *níwák*, *-iwa*; (?) I'w *náwas'uk* ~ *náwis'uk*; (?) Mj *náwasuk* ~ *náwasek* ~ *náwosuk* (Drayson 2009: 141; Scarpa 2010: 189; Carol 2018) || PW **néwok^w* > LB *newuk^w*; Southeastern (Salta) *newuk*; Vej *newok*; 'Wk *néwok* (Spagarino 2008: 60; Suárez 2014: 189; Gutiérrez & Osornio 2015: 18; Claesson 2016: 265)

[1] Maká *jowek* ‘wild manioc’ (Braunstein 1987: 80) is hardly related.

[2] The Chorote forms are entirely irregular and are probably a result of horizontal transmission by the way of non-Mataguayan languages. The Proto-Chorote form is tentatively reconstructed here based on the Iyojwa’aja’ datum; the other two varieties point rather to **náwV(i)s-uk* ~ *-á-.

Viegas Barros (2013a: 300) notes the similarity with Proto-Guaicuruan **nawjék* ‘kind of tuber (similar to manioc)’ (Viegas Barros 2013b, #396) and attributes it to language contact.

Viegas Barros 2013a: 300

***(-)niják, *(-)níjhå-*j^h* ‘rope, cord’**

Mk (-)nijak, (-)níjha-*j* (Gerzenstein 1999: 275) || Ni *-niják*, *-nijxå-j* (Seelwische 2016: 198) || PCh **níják*, **níhjå-*j^h** > Ijw *néjak*, *néhja-?* ~ *néhja-?* [1]; (?) I'w *-jék*, *-hjé-*j** [2]; (?) Mj *-(?i)jík*, *-?ihjí-*jh** [2] (Drayson 2009: 141; Gerzenstein 1983: 133; Carol 2018) || PW **níják^w*, **níjhå-*j^h** > LB *nijok^w*, *niço-*j**; Vej *nijak*; 'Wk *níják*, *níçå-ç* (Nercesian 2014: 192; Viñas Urquiza 1974: 68; Claesson 2016: 273)

[1] The plural variant *néhja-?* *l*, attested in Drayson (2009: 141), is non-etymological. The word-final glottal stop in the variant *néhja-?* is likewise irregular, but there are other cases where the plural suffix *-*(a)j^h* yielded Iyojwa’aja’ -(a)? (e.g. in the participles).

[2] The Iyo’awujwa’ and Manjui forms are not the expected reflexes of PM *(-)niják, *(-)níjhå-*j*.

[3] The vowel *a* (as opposed to *å*) in Vejoz must be a mistranscription on Viñas Urquiza’s (1974) part.

Najlis 1984: 18 (**nejåwk*); Campbell & Grondona 2007: 15 (“diffused”), 21

***-nji[?]x ‘smell’**

Mk *-nji[?]x* [1], *-njix-its* (Gerzenstein 1999: 151) || Ni *-ni[?]f* (Seelwische 2016: 190) || PCh **-níh* > Ijw *-néh*; I'w *-né(-hes)*; Mj *-néih* (Carol 2014a: 71; Drayson 2009:

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124; Gerzenstein 1983: 150; Carol 2018) || PW *-niχ, *-nh-ís > LB -niχ; 'Wk -nix, -η-ís (Nercesian 2014: 202; Claesson 2016: 78)

[1] The presence of a preglottalized coda in the Maká singular form is inferred based on the Nivaclé cognate; the singular form is not attested in our sources that distinguish between plain and preglottalized stops.

Obviously related to Proto-Guaicuruan *-(*)nik* ‘smell; bad smell’ (Viegas Barros 2013b, #405; cf. Viegas Barros 2013a: 311).

Najlis 1984: 31 (*nehn); Viegas Barros 2002: 143 (**V*nix); Viegas Barros 2013a: 311 (*-(*a*)nih)

### *nk’á ‘new, recently’; *nk’á-jik, *nk’á-jh-its (fem. *nk’á-jk-e?) ‘new’

Mk *i’nk’á* ‘recently’; *i’nk’á-jik*, *i’nk’á-jh-its* (fem. *i’nk’á-jk-i?*, *i’nk’á-jk-i-j*) ‘new’ [1] (Gerzenstein 1999: 203–204) || Ni *nitʃ’á* (-*k*) ‘new’; *nitʃ’á-jik* ‘young, boy’ (fem. *nitʃ’á-jik-e?*, *nitʃ’á-jik-ej*) (Seelwische 2016: 188–189; Fabre 2014: 110) || PCh **ŋk’á?* > Ijw *?ink’é?* ‘new’; I’w *ink’é?* ‘new’; Mj (*?in*)*k’é?*; PCh **ŋk’á-jik*, **ŋk’á-hj-is* (fem. **ŋk’á-jk-e?*) > Ijw PL *?ink’é-hj-is*; Mj *?ink’é-jik*, *?ink’é-hj-is* (fem. *?ink’é-jf-i?*) (Drayson 2009: 109; Gerzenstein 1983: 131; Carol 2018) || PW **nek’á* / **nék’á* ~ **nek’á* / **nék’á* [2] ‘recently, just now’ > LB *netʃ’á* ~ *netʃ’á*; Vej *netʃ’á* [3] ‘already’; 'Wk *nek’á* / *nék’á* ‘new, recently, just now’; **nék’á-jik*, **nék’á-hj-is* ~ **nék’á-jik*, **nék’á-hj-is* [2] ‘new’ > LB *netʃ’á-jik*; Vej *netʃ’á-jek* [3] ‘new’; 'Wk *nék’á-jik*, *nék’á-ç-is* (Nercesian 2014: 297; Viñas Urquiza 1974: 68; Gutiérrez & Osornio 2015: 8; Claesson 2016: 263–264)

[1] Maká *a* is not the expected reflex of PM **a*. The preglottalization in *n* is attested in the New Testament (e.g. Galatians 6:15).

[2] The Wichí reflex shows an irregular reflex of the vowel of the initial syllable and an irregular dialectal variation in the second syllable (*a* ~ *e*).

[3] The plain *tʃ* in Viñas Urquiza’s (1974) attestation of the Vejoz root must be a mistranscription.

### *nnä’k / *-nnä’k ‘spoon’

Mk *nene’k* [1], *nenek-its* ‘spoon, bivalve’ (Gerzenstein 1999: 272) || PW *-<*l*>*nnek* [2] > LB *lanek*; Vej *lenek*; 'Wk *la(n)nek*, *la(n)nék-is*; *-<*qá*>*nnek* [3] > Vej *-kanek*; 'Wk *qannek*, *qanη-aç* / *-qá-nnek*, *-qá-nη-aç* (Nercesian 2014: 40; Viñas Urquiza 1974: 61; Gutiérrez & Osornio 2015: 51; Claesson 2016: 86,

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[1] The preglottalized coda in the Maká reflex is attested in Braunstein (1987: 69).

[2] PW *-&lt;ŋ&gt;nnek is a fossilized third-person form of the erstwhile relational stem (PM *-nnäk).

[3] PW -&lt;qá&gt;nnek is a fossilized alienized form of the erstwhile absolute stem (PM *-nnäk).

Viegas Barros (2013a: 301) claims that Abipón -enek ‘spoon’ (Najlis 1966: 65) is a Mataguayan loanword.

Viegas Barros 2013a: 301 (*-anek)

## *(-)nú(?) (*-ts) [1] ‘bone’

Mk -nu [2] (-ts) ‘bone, stalk’ (Gerzenstein 1999: 152, 250) || Ni -nu? (-s) [3] (Seelwische 2016: 203) || PW *nú(?) &gt; LB ne(?) Vej nu; ’Wk nú?(-lis) (Braunstein 2009: 52; Viñas Urquiza 1974: 69; Claesson 2016: 278)

[1] The plural form is reconstructed based on Maká -nu-ts and Nivaclé -nu-s; it is thus technically reconstructible only for Proto-Maká-Nivaclé (if one accepts the binary split hypothesis). The ’Weenhayek reflex does not match it.

[2] The absence of a final ? in the Maká singular form is unexpected.

[3] Campbell et al. (2020: 515) document absolute nu? and relational -β-nu? for Nivaclé.

Najlis 1984: 33 (*hnu ‘shoulderblade’)

## *nú?uh, *nú?u-ts ‘dog’

Ni nu?u(-s) ‘dog; black-winged stilt’ (Seelwische 2016: 205) || PCh *nú?uh (*-s) &gt; I’w nówu ~ nóo ~ núu (-s); Mj nó?u (-s) (Gerzenstein 1983: 151, 214; Carol 2018)

Rejected: Najlis (1984: 38) includes reflexes of Wichí *hó?oh ‘rooster’ (mistranscribed as ðo ~ ðu), which is impossible both for semantic and phonological reasons.

Najlis 1984: 18, 38 (*nu-o ~ *nɔo)

## *n-xáte? (*-l) ~ *n-xáti? [1] ‘dream, sleepiness’

Mk -nixati? (-l) ‘dream’; [ni]xati-ju? ‘to be sleepy’ (Gerzenstein 1999: 385) || Ni -nxáte (-k) ‘dream’ (Seelwische 2016: 191–192) || PCh *ʔihnatí? ‘dream’ &gt; Ijw ʔihnatí? [2]; I’w ihn’etí? (Drayson 2009: 98; Gerzenstein 1983: 133) || PW *naháti ‘dream; sleepiness’ &gt; Vej nahate, nehat’i-ʔilán ‘to be very sleepy’

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[3]; 'Wk *naháti?* (Viñas Urquiza 1974: 67; Gutiérrez & Osornio 2015: 38; Claeson 2016: 253)

[1] Maká and Nivaclé point to **n-xáte?* (*-l), Chorote and Wichí to **n-xáti?*. The stem-initial **n-* must have been a prefix; its reflex *ni-* is still segmentable in Maká.

[2] The absence of the stem-final glottal stop in Iyojwa'aja' is unexpected.

[3] The Vejoz reflex is attested as *nahate* by Viñas Urquiza (1974) and as *nehat^bi-ʔilán* by Gutiérrez & Osornio (2015). The expected form would be **nahati*.

Possibly related to Proto-Guaicuruan **-e?ot'ē* 'to sleep' (Viegas Barros 2013b, #256; cf. Viegas Barros 2013a: 305).

Viegas Barros 2013a: 305 (**-h_Ate?* ~ **-h_Ati?* 'to be sleepy')

### *[ji]nxi[?]wän 'to smell' [1]

Mk [ji]nxi[?]wen [2] (Gerzenstein 1999: 152) || PCh *[ʔi]hní[?]wen > Ijw [ʔi]hní[?]wi[?]n / -hné[?]wi[?]n; I'w -hnéwin-e; Mj [ʔi]hní[?]wen / -hnéi[?]wen (Drayson 2009: 98; Gerzenstein 1983: 175; Carol 2018)

[1] This verb is probably a compound of **-nji'x* 'smell' and [ji][?]wän 'to see'.

[2] The preglottalized in the onset of the root-final syllable in Maká is attested in the New Testament (e.g. 1 Corinthians 12:17).

### *-nX₂₃aqá[?] ~ *-nX₂₃aq'á[?]t [1] 'to snore' [2]

Ni [ta]nxakå[?]t (Campbell et al. 2020: 242) || PCh *[ʔi]hnåq'á[?]t [2] > Ijw [ʔi]hnák'at / -hnák'at; I'w -hnakát [1]; Mj [ʔi]n(?)éʔá[?]t / -naʔá[?]t [3] (Drayson 2009: 98; Gerzenstein 1983: 175; Carol 2018)

[1] Nivaclé points to PM **q* and Chorote to **q* (except for the Iyo'awujwa' form as attested by Gerzenstein 1983, but this must be a mistranscription).

[2] This etymon is obviously derived from PM **-na[?]x* / **-nxa-* 'nose'.

[3] The Manjui form in Carol (2018) is attested with a root-initial *n*- and not the expected **hn-*. This is also the case in Hunt's (1994) vocabulary). However, the expected form with *hn-* is found in early unpublished Carol's field notes.

### *-nX₂₃átå? 'nasal mucus' [1]

Ni -nxatå? (-j) (Seelwische 2016: 190) || PCh *-hnát<ijah-PL> [1] > Ijw -hnátihje-s; I'w -hnátiye-j; Mj -hnátiye-el (Drayson 2009: 119; Gerzenstein

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1983: 175; Carol 2018)

[1] This etymon is obviously derived from PM **-na²x / *-nxa-* ‘nose’.

[2] Chorote appears to have fossilized a nonproductive suffix here.

****²nálu(h), *²nálu-ts* ‘day, world’**

Mk *neļu* (-ts) (Gerzenstein 1999: 271) || Ni *naļu* (-s) (Seelwische 2016: 179) || PCh **²náhl<ekis>* ~ **²náhl<ekes>* ‘midday’ [1] > Ijw *’náhlikis*; Mj *’náhlekis* (Drayson 2009: 162; Carol 2018)

[1] Chorote appears to have fossilized a nonproductive suffix here.

**Rejected:** Gutiérrez (2015b: 254) includes Ijw/I’w *hlóma* into the comparison, which is better understood as a reflex of PM **lúm?*

Likely related to Proto-Guaicuruan **naló?* ‘natural light, day, sun’ (Viegas Barros 2013b, #388). Viegas Barros (2013a: 312) compares it to Proto-Guaicuruan **?al’éwa* ‘earth’ instead, which is hardly convincing.

Viegas Barros 2013a: 312 (**aļu*); Gutiérrez 2015b: 254

****(-)²náji²x, *(-)²nájx-aj^h* ‘path’**

Ni *nájif*, (-) *nájf-aj* / - *náji²f* (Fabre 2014: 318; Seelwische 2016: 202) || PCh **(-)²nájih*, **(-)²nájh-aj^h* > Ijw (-) *náji*, (-) *náhj-a(?)* [1]; I’w *náji*, *nahj-éh* [2]; Mj *’náji*, *’náhj-eej* [3] (Drayson 2009: 162; Gerzenstein 1983: 149; Carol 2018) || PW **(-)²nájix*, **(-)²nájh-aj^h* > LB (-) *nojiχ*; Vej *nájh* ~ *najih*, *nájhåj* ~ *najhaj* [4]; ’Wk (-) *nájix*, (-) *náç-aç* (Nercesian 2014: 40, 164; Viñas Urquiza 1974: 68; Gutiérrez & Osornio 2015: 43; Claesson 2016: 53, 55)

[1] The plural form *-náhj-a* is attested by Drayson (2009: 162), whereas in our data the irregular reflex *(-)²nájh-a?* is attested. There are other cases where the plural suffix **-(a)j^h* yielded Iyojwa’aja’ *-(a)?* (e.g. in the participles and in Ijw *néhja-?* ‘cords, ropes’).

[2] The plain *n* in Gerzenstein’s (1983) attestation of the Iyo’awujwa’ reflex must be a mistranscription. The stress on the suffix in the plural form does not match what is found in other Chorote varieties and ’Weenhayek.

[3] The plural suffix found in Manjui is irregular (one would expect **²nájh-ej*).

[4] The forms attested in Vejoz are somewhat unexpected. The regular reflex would be **²nájih*, **²nájh-aj*.

This root resembles Proto-Qom **<n>a²dig* ‘path’, whose initial consonant is claimed by Viegas Barros (2013b) to have been fossilized to the root after the split of Proto-Guaicuruan (com-

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pare Proto-Guaicuruan **-a'díko* 'path'; [Viegas Barros 2013b](#), #4). If PM **(-)nájix*, **(-)nájx-a^b* is related to the Guaicuruan root, it should be explained as a borrowing from Southern Guaicuruan; alternatively, PM **-n* could continue an erstwhile fossilized prefix (in this case, the Mataguayan and Guaicuruan material could be cognate).

[Najlis 1984](#): 10, 31, 48 (**najehn*); [Viegas Barros 2002](#): 143 (**nájix*)

### **njánxte?* 'chacoan mara (cavy), tapeti'

Mk *nijaxti?(-l)* ([Gerzenstein 1999](#): 278) || Ni *nånxate(-j)* 'chacoan cavy, tapeti, (?) guinea pig' ([Seelwische 2016](#): 200) || PCh **nåhåte?(*-wa?)* > Ijw *'nåhate, 'nåhati-wa?* [1]; I'w *nåate?(-j)*; Mj *'nåate?(-wa?)* ([Drayson 2009](#): 162; [Gerzenstein 1983](#): 149; [Carol 2018](#)) || PW **nåte* > LB *note*; Vej *nåte* ~ *inåte* ~ *hnåte* (-*lajis*); 'Wk *?inåte?* 'tapeti' ([Nercesian 2014](#): 48; [Viñas Urquiza 1974](#): 57; [Gutiérrez & Osornio 2015](#): 20, 22; [Claesson 2016](#): 31)

[1] The absence of a word-final glottal stop in Drayson's ([2009](#)) attestation of this noun must be a mistranscription.

### **-ó (*-l)* 'penis'

Ni *-o?(-k)* 'glans' ([Seelwische 2016](#): 206) || PCh **-ó?(*-l)* > Ijw *-ó?*; Mj *-ó?(-l)* 'penis' ([Drayson 2009](#): 132; [Carol 2018](#)) || PW **-l-ó?(*-l^h)* > LB *-l-u*; Vej *-l-o*; 'Wk *-l-ó?(-l)* ([Nercesian 2014](#): 213; [Viñas Urquiza 1974](#): 66; [Claesson 2016](#): 75)

### **-ó?(*-j^h)* 'seed' [1]

Mk 3 *l-o?(-j)* ([Gerzenstein 1999](#): 255) || PCh **-ó? > Ijw -ó?* ([Drayson 2009](#): 132) || PW **-l-ó?(*-j^h)* > LB *-l-u?*; Vej *-l-o-j*; 'Wk *-l-ó?(-ç)* ([Nercesian 2014](#): 212; [Viñas Urquiza 1974](#): 66; [Claesson 2016](#): 75, 236)

[1] In *Maká, Iyojwa'aja*, and in the 'Weenhayek compound *lútsex-l-o?(-ç)*, this stem also means 'bullet', which must be a postcolonial semantic extension.

[Campbell & Grondona 2007](#): 19

### **[t]pá?j* 'to be bitter'

Ni *[t'a]pá?j* ([Seelwische 2016](#): 284) || PCh **páhj-i?* / **-páj-* > Ijw *páhj-i?* (CAUS *?i-páhj-et-i?*); I'w *-páhj-i* [1] ([Drayson 2009](#): 109, 143; [Gerzenstein 1983](#): 154) || PW **[t]páj* [2] > LB *[ta]paj* 'bitter, sour'; Vej *-paj*; 'Wk *[t(a)]páj?* ([Nercesian 2014](#): 98; [Braunstein 2009](#): 56; [Viñas Urquiza 1974](#): 70; [Claesson 2016](#): 370)

[1] The absence of a final *?* in Gerzenstein's ([1983](#)) data of *Iyo'awujwa'* must be a mistranscription.

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tion.

[2]PW **a* is not a regular reflex of PM **å* (the reconstruction of **å* is unequivocally supported by the Nivačle reflex and by the Iyojwa’aja’ causative *[?i]p’áhj-eti* ‘makes bitter’, as opposed to **[?i]p’éhj-eti*; Drayson 2009: 109).

Najlis 1984: 17 (**på-åj*)

***-på’lå? ‘bracelet’ [1]**

Mk (-)pa’la?(-j) [2] (Gerzenstein 1999: 293) || Ni -på’klå (-s) (Seelwische 2016: 221) || PCh *-på’lå? > Ijw -på’la? [3]; I’w -på’la? (Drayson 2009: 124; Gerzenstein 1983: 154)

[1]This etymology has been first identified by Campbell (submitted). The stem is obviously derived from PM *-’lå? ~ *-’lå? ‘adornment’.

[2]The presence of a preglottalized sonorant in Maká is inferred based on the Nivačle and Iyojwa’aja’ cognates; the form is not attested in our sources that distinguish between plain and preglottalized codas, whereas Gerzenstein (1999) gives simply *pala?* (she does not otherwise distinguish between *l* and *’l*).

[3]Drayson (2009) actually gives the form *-på’la*, which we assume to be a mistranscription.

Campbell submitted (*-pa?la)

***pånhajex ~ *pånhájex ~ *pånhajéj [1] ‘neotropic cormorant’**

Mk *panhejax*, *panheji-ts* (Braunstein 1987: 54; Gerzenstein 1999: 294) || PCh *-pånhajah ~ *-pånhájah ~ *-pånhajáh [1] > Ijw *pahnaji* [1] (Drayson 2009: 124)

[1]The position of the stress in PM and PCh is unknown, since the Iyojwa’aja’ reflex is unattested in our data, and Drayson (2009) does not indicate the position of the stress.

***-på’s ~ *-påse’t [1] ‘lip’**

Mk -pa’s [2], -p(a)s-its (Gerzenstein 1999: 294) || Ni -påse’t, -påste-s ‘upper lip’ (Seelwische 2016: 222) || PCh *-påsat ~ *-påsåt ‘lip, beak’ > Ijw -påxsat, -påsta-∅; I’w -påxsat, -påxsat-ej ~ -påsta-j; Mj -påxsat (Drayson 2009: 124; Gerzenstein 1983: 155; Carol 2018) || PW *-påset, *-påste-j^h > LB -poset ‘lip, beak’; Vej -påset, -påste-j [3]; ’Wk -påset, -påste-ç (Nercesian 2014: 132; Guatiérrez & Osornio 2015: 61; Claesson 2016: 79)

[1]The original root must have been *-på’s (preserved only in Maká). PM *-påse’t is an opaque

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derivative reflected in all languages other than Maká.

[2] The preglottalized coda in the Maká reflex is attested in the New Testament in the form *ta-pa's* 'ship's bow' (Acts 27:30; Acts 27:41).

[3] Viñas Urquiza (1974: 70) mistranscribes the Vejoz reflex as *-paset*.

Campbell & Grondona 2007: 19

### ***-påt ~ *-påt 'to shuck'**

Ni [t]påt-xan, [n(i)]påt-a? (Seelwische 2016: 194, 279) || PCh *[ʔi]påt 'to shake off' > Ijw [ʔi]påt / -påt; Mj [ʔi]p(̩)ét / -påt; *[ʔi]påt-ʔe? 'to shuck' > Ijw [ʔi]påt-’e / -påt-’e; Mj [ʔi]p(̩)ét-’e? / -påt-’e? (Drayson 2009: 109, 110; Carol 2018)

Viegas Barros (2013a: 310) compares the Mataguayan term to Proto-South Guaicuruan *-petá 'grain, seed'. We find the comparison with Proto-Qom *[ʔi]pot 'to touch', with reflexes in Mocoví and Qom, more promising.

Viegas Barros 2013a: 310 (*-påta?)

### ***påtse(?)χ 'fast, quick'**

Ni påtsex, påtse-s (Seelwische 2016: 222) || PCh *(-)påsah > Ijw pánsa, páns-is [1]; I'w [a]páxsa; Mj [ʔa]páxsa (Drayson 2009: 143; Gerzenstein 1983: 78, 155; Carol 2018)

[1] The nasal consonant in the Iyo'jwa'a` reflex is entirely irregular.

### ***påtséχ [1] 'jabiru'**

Ni påtséx (-is) (Seelwische 2016: 222–223) || PCh *påtsáh [1] > Ijw pi(t)sáh ~ pasáh [1]; I'w pisáh (-as); Mj pisáh, pisá-as (Carol 2014a: 99; Drayson 2009: 143, 144; Gerzenstein 1983: 155; Carol 2018) || PW *påtsáχ > LB putsáχ [2]; 'Wk påtsáχ (Nercesian 2014: 41, 47; Spagarino et al. 2013 [2011] [2011]; Claesson 2016: 286)

[1] The cluster PM *tts > PCh *ts is reconstructed based on the Iyojwa'aja' subdialectal variant *pitsáh*. Note that Chorote has no affricate /ts/, suggesting that we are dealing here with a cluster composed of /t/ and /s/.

[2] The vowel of the first syllable is reflected irregularly in Lower Bermejeño Wichí as *u*, a

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development also seen in LB *pulaχ* ‘brown cachalote’.

Najlis 1984: 28, 49 (**pajtsha*); Viegas Barros 2002: 143 (**pajtsax*)

### *pätóχ ‘to be deep’

Ni [ʔa]patox (Seelwische 2016: 46) || PCh *-pítohw<ij?> > I'w -pétⁱof^{wi}?; Mj -péitihwí? (Gerzenstein 1983: 155; Carol 2018) || PW *pitóx^w > LB *pituf*^w [1]; Vej *pitoh* [1]; 'Wk *pitóx*^w (Nercesian 2014: 335; Viñas Urquiza 1974: 70; Claesson 2016: 293)

[1]The final consonant is documented as a non-labialized *χ* in Lower Bermejeño (Braunstein 2009: 54) and Vejoz (Viñas Urquiza 1974: 70), possibly as a result of mistranscription.

Najlis 1984: 19 (**pajtho*)

### *-pe(?), *-pé-l ‘fat, oil’

Ni -<a>pe?(-k) ‘oil’ (Seelwische 2016: 164) || PCh *-pé?(*-l) > Ijw -pé?; I'w -pé?; Mj -<i>pé?(-l) ‘fat, oil’ (Drayson 2009: 124; Gerzenstein 1983: 155; Carol 2018) || PW *-pe(?) > LB -pe(?); Vej <a>pe; 'Wk -pe? (Braunstein 2009: 54; Viñas Urquiza 1974: 51; Claesson 2016: 219)

Possibly related to Proto-Guaicuruan *-apijó ‘fat’ (Viegas Barros 2013b, #60; cf. Viegas Barros 2013a: 308). Fabre (2014: 307) compares the Nivaclé reflex to Enlhet/Enenlhet-Toba/Angaité/Enxet/Guaná *pełmok* ‘fat’ (Unruh & Kalisch 1997: 550; Unruh et al. 2003: 335; Wheeler 2020: 46; Elliott 2021: 193; Kalisch 2023: 51), but this is likely an accidental similarity.

Viegas Barros 2013a: 308 (*-ape?)

### *[ji]pé'j-a? (antipassive: *[t]pé'j-käj) ‘to hear, to understand’

Mk [j]<e>pi'j<e?> [1] (Gerzenstein 1999: 154) || Ni [ji]pe'j-a ([t]pe'j-tṣaj) (Seelwische 2016: 278, 349) || PCh *[ʔi]pé'j-a? (*[t]péj-kej?) > Ijw [ʔi]pi'j-a? / -pé'j-a? [2] ([ti]péj-tfi?); I'w -pé'j-e? ~ -péj-i? (-péj-si?); Mj [ʔi]pi'j-a? / -pé'j-a? ([ti]péj-si(j)?) (Drayson 2009: 110; Gerzenstein 1983: 155, 197; Carol 2018)

[1]The glottalized palatal approximant in the Maká reflex is attested in the New Testament (e.g. John 3:32).

[2]Mistranscribed as [ʔi]pi'j-a / -pé'j-a in Drayson (2009: 110).

### *pélaj(?)j, *pelaj-its [1] ‘rain’

Mk *pilej* (-its) (Gerzenstein 1999: 297) || PCh *pélaj? > Ijw *péhla?* ‘rain season’, *péhla* ‘rainstorm, rain’; I'w *péhlaj*<i> (-s); Mj *péhlj?* (Drayson 2009: 143;

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Gerzenstein 1983: 155; Carol 2018) || PW **péłaj^h* (*-is) [1] > LB *pelaj* (-is) ‘rain-storm’; Vej *pelaj*, *pelaj-ñ-is* ‘rainstorm, rain’; ’Wk *péłac* (-is ~ *péłaj-is*) (Nercesian 2014: 161, 343; Gutiérrez & Osornio 2015: 44; Claesson 2016: 292)

[1] PW *-aj^h, reconstructed based on the Vejoz and ’Weenhayek reflexes, does not correspond to PCh *-aj? (underlying: */-aj/). The root must have been remodeled based on the plural suffix *-j^h.

### *-pha^htl [’1] ‘to wrap, to bind, to tie’

Mk [ji]<xu>phe^htl ‘to wrap’, [j]<o>phe^htl / -<?o>phe^htl ‘to tie’ [2] (Gerzenstein 1999: 283, 394) || Ni [ji]<klā>pxat ‘to wrap up, to roll up’, [j]ako-pxat ‘to embrace with one’s legs around’, [ji]<ta>pxat ‘to hobble legs, to bind hands’, [ji]<tse>pxat ‘to sew’, [j]<etse>pxat ‘to hug’ (Seelwische 2016: 36, 120, 122, 257, 293; Campbell et al. 2020: 320) || PCh *[’ja]<qa>pah^h-APPL > Ijw [’ja]<qa>pahl-a-’ni ‘to wrap’, [’ja]<qa>pahl-at-k’i? ‘to wrap, to fold’, [’ja]<qa>pahl-e ‘to gather’ [3]

[1] This morpheme can be alternatively described a verbal root that requires an incorporated object or as a suffix with a highly lexical meaning. Campbell et al. (2020: 320) identify its reflex as a suffix that “appears to involve, loosely, a sense of ‘binding’”.

[2] The morpheme-final consonant in Maká is attested as preglottalized in the New Testament (Acts 1:16; Acts 5:6; Acts 21:33; Acts 25:14; Matthew 14:3; Matthew 18:30; Matthew 23:4; Matthew 27:2; John 18:12; Luke 3:20; 2 Corinthians 3:17).

[3] We are unsure which syllable in the Iyojwa’aja’ reflex is stressed. We cannot exclude at present that *pahlát* ‘all’ is related; the semantic link would be ‘to bind’ > ‘to gather’ > ‘together’ > ‘all’.

### *phå^hm ‘up’

Mk -phå^hm (Gerzenstein 1994: 118; Paraguay 2022: 7) || PCh *p^hå^hm > Ijw *pihjá*’m; I’w -én-<i>f^wóm ‘to hang’; Mj <?a>hú^hm / -<?á>hu^hm / hú^hm [1] (Drayson 2009: 144; Gerzenstein 1983: 127; Carol 2018; own field notes) || PW *-p^hå [2] > LB -p^ho; Vej -p^hå; ’Wk -p^hå?; *p^håm-łéle (*-j^h) ‘the one from upriver’ > LB *p^hom-łele-j*; ’Wk *p^håm-łéle?* (-ç) (Nercesian 2014: 27, 149; Gutiérrez & Osornio 2015: 34; Claesson 2016: 302)

[1] The Iyo’awujwa’ and Manjui reflexes are entirely irregular.

[2] The loss of *m in the Wichí directional suffix is irregular. It resurfaces in the derivative for

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‘the one from upriver’.

***[t]pil [1] ‘to return hither’**

Mk *[t(e)]pil* ‘to return from a specified place’ (Gerzenstein 1999: 296) || Ni ChL *[t(a)]pek* [1], ShL *[t(a)]pik* (Stell 1987: 498; Seelwische 2016: 178) || PW **[t]pil^h* > LB *[t(a)]pit* ‘to return to one’s destination’; Vej *-pil* ~ *-pit*; ‘Wk *[t(a)]pit* / *[t(a)]pil-APPL* / *[t(a)]pín-APPL* (Nercesian 2014: 289, 308; Viñas Urquiza 1974: 70; Gutiérrez & Osornio 2015: 39; Claesson 2016: 371)

[1] The Chishamnee Lhavos Nivaâle form with *e* is irregular. Shichaam Lhavos preserves the etymological vowel *i*.

[2] PM **[w]ápil* ‘to return thither’ is an obvious derivative of this root.

Obviously related to Proto-Guaicuruan *-*op’il* ‘to return’ (Viegas Barros 2013b, #443).

Campbell & Grondona 2007: 22; Gutiérrez 2015b: 253

***pínu? ‘kind of honey’ [1]**

Mk *pinu?(-l)* ‘small black bee, stings lightly, makes its nest inside tree trunks, produces small amounts of edible honey’; *le-qe-pinu?(-l)* ‘sugar, sugarcane’ (Gerzenstein 1999: 250, 297) || PW **pínu* > LB *pini* ‘*llana* bee, honey’ [2]; Vej *pinu* [2] ‘sugarcane’, *pinu* ‘wet-es’ ‘apiary; sugar mill’; ‘Wk *pínu?* (Nercesian 2014: 41, 178; Viñas Urquiza 1974: 70; Gutiérrez & Osornio 2015: 52; Claesson 2016: 292)

**Rejected:** Iyojwa’aja’ *pini?(-l)* ‘kind of insect’ (metaphorically also ‘spirit’, since the Chorote believe that the *pini?* gets inside humans and possesses them) does not regularly correspond to the reflexes of PM **pínu?*. From a phonological point of view, it could be a loan from Southeastern Wichí, but this is possibility is unlikely for geographic reasons, and the semantic discrepancy does not speak in favor of the loan etymology either.

[1] Both in Maká and Wichí, reflexes of PM **pínu?* or their derivatives are used to designate a kind of bee (or its honey) and sugarcane. Since sugarcane is not native to the Americas and therefore cannot have been known to the speakers of Proto-Mataguayan, we assume that

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Maká and Wichí have extended the name of a type of honey to sugar.

[2] Lower Bermejeño *i* is not the regular reflex of PW **e*; **pine* would be expected.

[3] Viñas Urquiza (1974: 70) mistranscribes the Vejoz reflex as *pinnu*.

Hunt 1915: 239

### **pí(t)sta?* ‘masked gnatcatcher’

Ni *pista?*(-*k*) [1] (Seelwische 2016: 219) || PCh **pístV-ke?* [2 3] > Ijw *péstjo-ki?* [3 4] (Drayson 2009: 143) || PW **písta* > LB *pista*; ’Wk *pista?* (Spagarino et al. 2013 [2011]; Claesson 2016: 293)

[1] The Nivaclé reflex is irregular in that deglottalization failed to apply to the stem-final *?*

[2] The Chorote form seems to contain a feminine suffix.

[3] The vowel *o* in Iyojwa’aja’ is not the regular reflex of PM **a*. It is unknown whether the irregular change occurred in the individual history of Iyojwa’aja’ or before the disintegration of Proto-Chorote.

[4] Drayson (2009) transcribes this as *pést’oki*; we assume that this is a mistranscription for *pést’oki?*.

### **pitéχ*, **pité-ts* ‘long’

Ni *pitex*, *pite-s* (Seelwische 2016: 219) || PW **pitáχ*, **pité-s* > LB *pitax*; ’Wk *pitáχ*, *pité-s* (Nercesian 2014: 312; Viñas Urquiza 1974: 70; Claesson 2016: 293)

### *[*t*]*pó?*, *[*t*]*pó?-ex* ‘to be full’

Mk [to]po?-ox, PL [to]po-l-ix (Gerzenstein 1999: 284) || Ni [ta]po?-x, [ta]po?-in; [ji]ka-po ‘to have one’s container full’ (Seelwische 2016: 257) || PCh *[t^o]pó?, *[t^o]pó-eh > Ijw [ti]pó-ji; Mj [ta]pó?, [ta]pów-e (Drayson 2009: 151; Carol 2018) || PW *[t]pó-jeχ > LB [ta]pu-jeχ; Vej -po-jeh; ’Wk [t(a)]pó-jex, PL [t(a)]pó-ke? (Braunstein 2009: 56; Nercesian 2014: 56; Viñas Urquiza 1974: 70; Claesson 2016: 372)

### *[*ji*]*pónit-ex* ‘to fill’ [1]

Mk [j]<o>pon-het-ix [2] (Gerzenstein 1999: 283–284) || Ni [ji]pont-eʃ [3] (Seelwische 2016: 103) || PCh *[ʔi]pónit-eh > Ijw [ʔi]pónit-i / -pónit-i; I’w -ta-pónit-i [4]; Mj [ʔi]t(í)e-pónit(í)-e / -ta-pónit^l-e [4 5] (Carol 2014a: 77; Drayson 2009:

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110; Gerzenstein 1983: 163; Carol 2018) || PW *[*i*]tá-ponit-ex ‘to fill with’ [4] > 'Wk [*i*]tá-ponit-ex (Claesson 2016: 372)

[1] This verb is obviously related to PM *[*t*]pó? ‘to be full’, but *-nit- is not known to have been a productive causative suffix in PM.

[2] We have no explanation for the element -o- in Maká. The causative suffix -het- has replaced the etymological sequence *-it-, which must have functioned as a part of the root in PM, due to a morphological change.

[3] The loss of the stem-medial vowel *i in Nivaclé is irregular.

[4] Iyo’awujwa’, Manjui, and Wichí have innovated in inserting the reflex of the prefix *t- by analogy with *[*t*]pó? ‘to be full’.

[5] The applicative suffix is unexpectedly reflected as -e and not *-it in Manjui.

### *pútäh ‘tapetí’

Ni *puta* (-k) (Seelwische 2016: 223) || PCh *púteh > I’w pó?tih, pótih-is [1]; Mj *púti* (-is) (Gerzenstein 1983: 156; Carol 2018)

[1] ? in Gerzenstein’s (1983) attestation of the Iyo’awujwa’ reflex must be a mistranscription.

### *-pxúseʔ(*-j^h) ‘beard’; *pxúse-naχ ‘bearded; gilded catfish’

Mk (-)<a>pxusiʔ(-j) ‘beard, moustache’ (Gerzenstein 1999: 124) || Ni -påse (-j) [1]; påse<nxa> (-j) [1 2] ‘gilded catfish’ (Seelwische 2016: 222, 350) || PCh *-púseʔ(*-j^h) > Ijw -póksiʔ, -póksi-ʔl; I’w -póksiʔ, -póxse-j; Mj -póxseʔ(-j); *púse<nah>, *púse<hna>-s ‘bearded’ > Mj púxsenā, púxsehnā-s (Carol 2014a: 76; Drayson 2009: 125; Gerzenstein 1983: 156; Carol 2018) || PW *-påse, *-påse-j^h [1] > LB -pose; Vej -påse (-j) ‘moustache’; 'Wk -påse-ç; *påsenax, *påsenha-s ‘gilded catfish’ [1] > Vej påsenah; 'Wk påsenax, påsenha-s (Nercesian 2014: 148; Gutiérrez & Osornio 2015: 22, 61; Claesson 2016: 79, 286)

[1] The Nivaclé and Wichí forms are entirely irregular: one would expect Ni *-pxuse, PW **-phúse. The stem has obviously suffered contamination with PM *-pás ‘lower lip’ in these languages. Wichí also has a similar root, PW *-púse(-)j^h ‘bodily hair’ > LB -pesej; 'Wk -púseç (Nercesian 2014: 406; Claesson 2016: 296), which could be related or unrelated to the PM etymon.

[2] The Nivaclé reflex could be a back-formation from the plural form (PM *påsenha-ts or

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*pásenha-^{j^b}).

### *[ji]p'o(?) ~ *[ji]p'ó(?) [1] ‘to cover’

Ni [ji]p'o (Seelwische 2016: 103) || PCh *[?i]p'ó-APPL > Ijw [?i]p'ó<n>-e / -p'ó<n>-e; I'w -pó-APPL [2]; Mj [?i]p(')ó-APPL / -p'ó-APPL (Carol 2014a: 77; Drayson 2009: 110; Gerzenstein 1983: 156; Carol 2018) || PW *[hi]p'ó-APPL > LB [hi]p'u-APPL; Vej -p'o(?)-pe; 'Wk [hi]p'ó-APPL (Nercesian 2014: 117; Viñas Urquiza 1974: 71; Gutiérrez & Osornio 2015: 39; Claesson 2016: 300)

[1] We reconstruct *p' rather than *φ, because the root is obviously related to PM *-p'o^t ‘lid’.

[2] The absence of glottalization in Gerzenstein’s (1983) attestation of the Iyo’awujwa’ reflex must be a mistranscription.

Likely related to Proto-Guaicuruan *-ap'o ‘to cover, to wear’ (Viegas Barros 2013b, #89; cf. Viegas Barros 2013a: 305).

Najlis 1984: 33 (*p'əhni ‘to lock up’); Viegas Barros 2013a: 305 (*-p'o(-hi) ‘to close’)

### *-p'o'k ~ *-φ'o'k ‘fence’

Ni -p'o'k, -pokl-is [1] ‘beehive marked as one’s own by its discoverer’ (Stell 1987: 125; Seelwische 2016: 225, 351) || PCh *-p'ók > Ijw -p'ók ‘fence for fishing’ (Drayson 2009: 125) || PW *-p'ok^w ‘fence, earthenware field bottle (*caramayola*)’ [2] > Vej -p'ok^w ‘earthenware field bottle’; 'Wk -p'ok, -p'óho-ç (Viñas Urquiza 1974: 71; Claesson 2016: 80; Alvarsson 2012a: 71–72)

[1] The Nivačle plural form must be non-etymological.

[2] The semantic relation between ‘fence’ and ‘earthenware field bottle’ is attributed to the circular shape of the bottle by (Alvarsson 2012a: 71–72).

**Rejected:** Najlis (1984: 38) compares the Wichí term for ‘earthenware field bottle’ with Niváčle (-)p'ok ‘arrow’ and reconstructs PM *p'əwk'. This is implausible for semantic reasons.

### *(-)p'o't, *(-)p'ot-ots [?] ~ *-p'ot-ets ‘lid’

Mk p'ot<o?> (-l) ‘recipient with a lid for storing objects’ (Gerzenstein 1999: 299) || Ni -p'o't, -p'ot-os (Seelwische 2016: 225) || PCh *-p'ót, *-p'ot-és > Ijw -p'ót (-is); I'w -pót (-es) [2]; Mj (-)p'ót, (-)p'at-és [3] (Drayson 2009: 125; Gerzenstein 1983: 156; Carol 2018) || PW *-p'ot, *-p'ót-és > 'Wk -p'ot, -p'ót-és

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(Claesson 2016: 85)

[1] The noun is obviously derived from PM **[ji]p'o*(?) ~ **[ji]p'ó*(?) 'to cover'.

[2] The absence of glottalization in the initial consonant in the Iyo'awujwa' reflex must be a mistranscription on Gerzenstein's (1983) part. The stress in the plural form appear to be an innovation.

[3] The unrounding and lowering of **o* in the Manjui plural form is irregular.

Viegas Barros 2013a: 304 (*-(*a*)*p'o-t*)

***qa 'in order to (*irrealis subordinator*)'**

Mk *qe* 'in order to, because' (Gerzenstein 1994: 210; Gerzenstein 1999: 305) || Ni *ka* (Fabre 2014: 275; Seelwische 2016: 53) || PCh **qa* > Ijw/I'w/Mj *ka* (Drayson 2009: 133; Gerzenstein 1983: 81; Carol 2018)

***[ji]qáku? 'to distrust'**

Mk *[je]qeku?* (Gerzenstein 1999: 155) || Ni *[ji]kaku* (Seelwische 2016: 55) || PCh **[?i]qáku?* > Ijw *[?i]kák'u?* [1]; Mj *[?i]k'ák'u?* / -kák'u? (Drayson 2009: 100; Carol 2018) || PW **[ji]qák'u-APPL* > 'Wk *[ja]qák'u-APPL* (Claesson 2016: 306)

[1] The Iyojwa'aja' reflex is mistranscribed as *[?i]kák'u* in Drayson (2009: 100).

***-qák-xi? ~ *-qak-xí? ~ *-qák-xij^h ~ *-qak-xíj^h [1] 'lap; calf'**

Mk *-qek-xi?* 'calf' (Gerzenstein 1999: 305) || PW *-qák-hih [2] > 'Wk *-qák-hih* 'lap' (Claesson 2016: 84)

[1] Maká points to a compound with *-xi? 'inside a recipient', and Wichí to a compound with *-xij^h 'recipient'.

[2] The PW reflex **kh* of PM **kX* may be regular, as Wichí does not otherwise have **kjh*.

***-qalå? (*-j^h) 'leg' [1]**

Ni *-kaklå?* (-j) (Seelwische 2016: 56) || PCh *-*qa'lå?* ~ *-*qå'lå?* (*-j^h) [2] > I'w *-kalå?* (-j) 'foot'; Mj *-ka'lå?* (-jh) (Gerzenstein 1983: 136; Carol 2018) || PW *-*qålå* (*-j^h) [3] > LB -(*t*-)qolo; Vej *-kåla* [4]; 'Wk *-qålå?*, 3 *ta-qålå?* (-ç) (Nercesian 2014: 55, fn. 17, 164–165; Viñas Urquiza 1974: 61; Claesson 2016: 82)

[1] The body part denoted by this term canonically encompasses one's shank and foot.

[2] The glottalization in PCh **l* appears to be irregular (the seemingly plain reflex in

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Iyo'awujwa' could be a mistranscription on Gerzenstein's part). It is impossible to determine whether the PCh form contained an **a* or an **å*, because this opposition is neutralized following a **k* (even in Iyojwa'aja', though a cognate in that variety is lacking anyway). One possible explanation for the occurrence of PCh **l* is contamination with PCh **?a lā?* 'tree', as if it were an derivation thereof containing the alienizer *-*qá-* (compare Maká *naxak* 'stick, (fire)wood' and -*qa-naxak* 'leg'; Gerzenstein 1994: 266, 302).

[3] The loss of PM **?* in Wichí is not known to be regular.

[4] The final vowel *a* in the Vejoz form as documented by Viñas Urquiza (1974) must be a mistranscription.

Possibly related to Proto-Guaicuruan **qo'ná* 'leg (lower part)' (Viegas Barros 2013b, #530).

Najlis 1984: 12, 18 (**qala*, PL **qala-j*); Campbell & Grondona 2007: 15; Gutiérrez 2015b: 253

### **qati'ts*, **qatits-él* 'star'

Ni *kati's* (Seelwische 2016: 112) || PCh **qatés***qates-él* [“] > Ijw *katés* (–*e'l*); I'w *katés* (–*éj*) [1]; Mj *katés*, *katas-éjh* ~ *katis-éjh* [1] (Carol 2014a: 77; Drayson 2009: 134; Gerzenstein 1983: 137; Carol 2018; Hunt 1994) || PW **qates*, **qatéts-el^h* > LB *qates*, *qatets-el*; Vej *kates*, *katets-el* ~ *katets-el*; 'Wk *qates*, *qatéts-el* (Nercesian 2014: 191; Viñas Urquiza 1974: 61; Gutiérrez & Osornio 2015: 43; Fernández Garay 2006–2007: 214; Claesson 2016: 316)

[1] Iyo'awujwa' and Manjui use a non-etymological plural suffix, having replaced *-*él* with *-*éjh*.

Possibly related to Proto-Guaicuruan **aqatí* 'star' (Viegas Barros 2013b, #99; cf. Viegas Barros 2013a: 311).

Najlis 1984: 18 (**qatéts*); Campbell & Grondona 2007: 16; Viegas Barros 2013a: 311 (**gate-ts*)

### *[*t*]*qáñhan* 'to fish with a hook'

Mk [ta]<*qa>qanhen* (Gerzenstein 1999: 302) || PCh *[*t^o*]*qáhnān* > Ijw [ta]*káhna'n*; *-*qáhna-t* 'fishhook' > Ijw -*káhnat* (-is); I'w -*káhnat* (-es) (Drayson 2009: 120, 148; Gerzenstein 1983: 138) || PW *[*t*]*qáñhan* > 'Wk [*t(a)*]*qáñan* (Claesson 2016: 373)

Possibly cognate with Proto-Qom *[*do*]*qojna-ban* 'to fish with a hook, to trap', itself a derivative of -*qojna* 'trap'.

### *-*q(Á)xlek*, *-*q(Á)xle-j^h* [1] 'liver'

Mk -<*qa>qlik*, -<*qa>qli-j* [2] (Gerzenstein 1999: 127; Braunstein 1987: 202) ||

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Ni -(*<?a>*)*kåxtåk* (-is) [1 2 3] (Seelwische 2016: 36) || PCh *-qÁhlek, *-qÁhle-^h > Ijw -káhlik, káhle-?; I'w -káhlik, -káhle-j; Mj (-)káhlek, káhle-j (Carol 2014b; Drayson 2009: 120; Gerzenstein 1983: 138; Carol 2018) || PW *-'qáłeq > 'Wk -qáłek 'stomach' (Claesson 2016: 86)

[1] Maká points to PM *-...q(x)łek; Nivaçle to *-...qáxłák; Chorote to *-qáxłek or *-qáxłek; Wichí to *-qáłek.

[2] We have no explanation for the elements Mk/Ni -?a-. The stem-initial glottal stop is attested only in Braunstein (1987: 202), who gives the form *wit'-oqtlík* with the unexpected vowel *o*, but is left untranscribed by Gerzenstein (1999).

[3] The vowel in the final syllable in Nivaçle must be a product of progressive vowel harmonization, and the plural form is non-etymological in that language.

Campbell & Grondona 2007: 15

***-qéj (*-its) 'costume' [1]**

Ni -kej (-is) (Seelwische 2016: 226) || PCh *-qéj? (*-is) > Ijw -ké? (-jis); Mj -kéj?(-is) (Carol 2014a: 76; Drayson 2009: 121; Carol 2018) || PW *-qéj(-is) > LB -qe(j)-is); Vej -kej; 'Wk -qéj?(-is) (Nercesian 2014: 191; Viñas Urquiza 1974: 62; Claesson 2016: 88)

[1] Possibly from PM *-qá- (alienable possession) + *-ej 'name'.

***sát-u'k, *sát-ku-j^h 'lecherón tree (*Sapium haematospermum*)'**

Mk *setu'k* [1], *setkw-i* (Gerzenstein 1999: 324) || PCh *sátuk > Ijw/I'w sát(j)uk; Mj sátuk (Drayson 2009: 145; Scarpa 2010: 187; Carol 2018) || PW *sátuk^w > Southeastern (Salta) *satek*^w; 'Wk sátuk (Suárez 2014: 263; Claesson 2016: 326)

[1] The presence of a preglottalized coda in Maká is presumed based on the fact that the suffix -u'k is otherwise attested with 'k. The Maká datum is not attested in our sources that distinguish between plain and preglottalized codas.

***sát'a'-(t)s 'parakeet sp.'**

Ni sát'as 'white-eyed parakeet' (Seelwische 2016: 231) || PCh *sát'as 'blue-crowned parakeet' > Ijw sát'as; I'w sá'tas (-is); Mj sát'as (Drayson 2009: 145; Gerzenstein 1983: 157; Carol 2018) || PW *sát'as > LB *sat'as* 'blue-crowned parakeet'; Vej *sat'as*; 'Wk *sát'is* [1] (Nercesian 2014: 157; Viñas Urquiza 1974:

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72; Gutiérrez & Osornio 2015: 22; Claesson 2016: 327)

[1] The vowel *i* in the 'Wéenhayek reflex is not the expected outcome of PW **a*.

### *-sák'ål^h, *-sák'ål-its 'soul, spirit'

(?) Mk -si[?]nq'ål (-its) [1] (Gerzenstein 1999: 326) || Ni -sák'ål-*it*, -sák'ål-*ti*-s (Seelwische 2016: 358) || PCh *-sák'ål^h, *-sák'ål-is > Ijw -sák'ål, -sák'ål-is; I'w -sákal [2] (Drayson 2009: 125; Gerzenstein 1983: 157)

[1] The Maká form is attested in the New Testament (e.g. Luke 20:24); Gerzenstein (1999: 326) actually mistranscribes it as -singal (-its). The Maká word is tentatively included under this etymology, but the sound correspondences are entirely irregular: one would expect Maká *-saq'ål (-its).

[2] The plain *k* in Gerzenstein's (1983) attestation of the Iyo'awujwa' reflex must be a mistranscription.

**Rejected:** Najlis (1984: 47) lists reflexes of PW *-húsek, *-húse-*j*^h 'temperance, soul' under this etymology.

Najlis 1984: 47 (*sakål); Gutiérrez 2015b: 253

### *-så't 'vein, tendon'

Mk -<?a>sa't, -<?a>sta-j [1] (Gerzenstein 1999: 129) || Ni -så't, -såt-åj (Seelwische 2016: 383) || PCh *-såt-å... > Ijw -såt<aki>; I'w -sat<ájik>, sat<áje>-j; Mj -sat<ájik>, sat<áje>-ej 'vein' (Drayson 2009: 125; Gerzenstein 1983: 157; Carol 2018) || PW *-såt 'tendon, heel' > Vej -såt 'muscle, tendon'; 'Wk -såt, -såt-aç 'tendon, heel' [2] (Viñas Urquiza 1974: 72; Claesson 2016: 90)

[1] The element ?a- in Maká has no parallels in other Mataguayan languages and is probably a fossilized morpheme. The presence of a preglottalized coda in Maká is inferred based on the Nivaclé cognate; the singular form is not attested in our sources that distinguish between plain and preglottalized codas. The plural form is attested in the New Testament (Colossians 2:19), but it is not revealing.

[2] Wéenhayek shows contamination of PW *-sat 'heel' and *-såt 'tendon', which has resulted in a polysemic noun -såt 'tendon, heel'.

Campbell & Grondona 2007: 20

### *[j]selán 'to spank' [1]

Mk [j]<eq>silan [2] 'to spank with something flexible' (Gerzenstein 1999: 157) || PCh *[?i]selán 'to prepare' [1] > Ijw [?i]lísá'n / -léxsa'n [3]; Mj [?i]filén 'to

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store'; *[ʔi]selán-eh 'to make, to prepare' [1] > Ijw [ʔi]lísan-e / -léxsan-e [3]; I'w -silén-; Mj [ʔi]filjén-e (Drayson 2009: 102; Gerzenstein 1983: 158; Carol 2018)

[1]Despite the semantic discrepancy between the Maká and Chorote verbs, we believe them to be cognate. Spanking cháguar (raw caraguatá fiber) against one's leg is a very important part of making it ready for textile production among the peoples of Chaco.

[2]We have no explanation for the element *-eq-* in Maká.

[3]Iyojwa'aja' shows an irregular metathesis of PCh *s and *l and a regular stress retraction.

*-seʔ, *-sé-j^h 'bodily hair' → *-pxúseʔ 'beard', *-t(á)ko-seʔ 'eyebrow', (?) *-tátseʔ 'eyelash'

*(-)skä^ht 'mesh'

Ni -stfa^ht, -stfat-is (Seelwische 2016: 232) || PW *sik^het 'mesh purse' > LB *sitset*; 'Wk *sik^het* (Nercesian 2014: 418; Claesson 2016: 329)

Najlis 1984: 41, 47 (*s-cet')

*sláqha(')j, *sláqhaj-its 'wild cat'

Ni *sklåkxaj* ~ *sklåkxaj* (-is) [1] (Stell 1987: 498, 535; Gutiérrez 2015b: 231; Seelwische 2016: 239; Campbell et al. 2020: 95) || PCh *s^hlåhqaj? ~ *s^hlåhqåj? (*-is) [2] > Ijw *sil'áka?*; I'w *siláhkaj* (-is); Mj *siláhkaj?* (-is) (Carol 2014a: 91; Drayson 2009: 145; Gerzenstein 1983: 153; Carol 2018) || PW *siláqhåj > Vej *silákaj* [3]; 'Wk *siláq^hå?* [4] (Gutiérrez & Osornio 2015: 22; Claesson 2016: 329)

[1]The form *sklåkxaj* is attested as a variant alongside *flåkxaj* in Stell (1987:498, 535) and Gutiérrez (2015b: 231). In her discussion of the variation of the type *sC-* ~ *fC-*, Stell (1987: 534–535) observes that *sC-* is found in the speech of her consultant from Las Vertientes (speaker of Chishamnee Lhavos) and – in variation with *fC-* – of one consultant from the Mission of San Leonardo/Fischat (speaker of Shichaam Lhavos), whereas her other consultants from San Leonardo/Fischat and San José de Esteros use exclusively *fC-*. Only the form *flåkxaj* is attested in Campbell et al. (2020: 95), who deal with the Chishamnee Lhavos dialect, and in Seelwische (2016: 239).

[2]It is impossible to determine whether the PCh form contained an *a or an *å in the last syllable; other Mataguayan languages offer conflicting evidence.

[3]The loss of the aspiration of PW *qh in Vejoz is irregular. Viñas Urquiza (1974: 72) gives

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*silokaj*, which must be a mistranscription.

[4] The expected reflex in 'Weenhayek would in fact be PW **silāqhāj* > 'Wk **silāq^bāj?*.

**Rejected:** despite a superficial similarity to the aforementioned forms, Maká *xunkhaj* (-its) 'wild cat' (Gerzenstein 1999: 393) shows no regular correspondence with PM **slāqhaj* (*-its). It must be a borrowing from Nivaclé instead, whose form was probably influenced by that of Mk *xunkhaj* 'fog', another likely loan from Nivaclé (Ni *fnakxaj*). Braunstein (1987: 48) documents the Maká form as *xunqaj*.

Najlis 1984: 11, 37 (**slāqaj*); Campbell & Grondona 2007: 16

### *sóp'wa(-ta)-ju'k, *sóp'wa(-ta)-jku-j^h 'caspi zapallo (*Pisonia zapallo*)'

Ni *sop'a-ta<tf>*, *sop'a-ta<ku>-j* (Seelwische 2016: 235) || PCh **sóp'wa-juk* > Ijw *sóp'ajik* ~ *sóp'uwa-jik*; I'w *sóp'(w)a-jik*; Mj *sóp'a-jik* (-ij) (Drayson 2009: 147; Scarpa 2010: 187; Carol 2018) || PW **sop'wa-juk^w* > LB *supf^wa-jek^w*; South-eastern (Salta) *sup'wajuk* ~ *so-* ~ *-pf^w-* (Spagarino 2008: 59; Suárez 2014: 313)

### *sténi(?) (fruit); *stén-u'k (tree) 'white quebracho (*Aspidosperma quebracho-blanco*)'

Mk *sitin-u'k* [1], *sitin-kw-i* (Gerzenstein 1999: 327) || PCh **?sténi?*; **?sténi-k* > Ijw *?istíni-k*; *?istín-k'et*; I'w *isténi-k*; Mj *?isténi?*, *?isténi-wal* ~ *?istín'e?*, *?istín'e-l* (Drayson 2009: 112; Gerzenstein 1983: 132; Carol 2018) || PW **?isté'nih* > South-eastern (Salta) *?iste'ni* [2]; Vej *iste'ni*; 'Wk *?isté'nih* (Suárez 2014: 184; Viñas Urquiza 1974: 61; Gutiérrez & Osornio 2015: 18; Claesson 2016: 37)

[1] The preglottalized coda in the Maká suffix for tree names is attested elsewhere (Paraguay 2022: 7).

[2] Suárez (2014: 184) actually gives *isteni*, but note that she consistently fails to transcribed glottalized consonants as such. Spagarino (2008: 59) gives the unexpected form *siteni*.

Najlis 1984: 39 (**s-teni*); Campbell & Grondona 2007: 20

### *stwú'n, *stwún-its 'king vulture'

Ni *staβu'n*, *staβun-is* 'king vulture; Milky Way' (Seelwische 2016: 236) || PCh **?stúu'n*, **?stúun-is* > I'w *?istó'n*; Mj *?istúu'n*, *?istúun-is* ~ *-st-* (own field notes; Carol 2018) || PW **?istíwin* [1] > LB *?istiwin*; Vej *istiwiŋ<i>-tah* [2]; 'Wk *?itsíwin-tax* ~ *stíwin-tax* (Spagarino et al. 2013 [2011]; Gutiérrez &

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Osornio 2015: 21; Claesson 2016: 40, 334)

[1] The Wichí reflex is entirely irregular.

[2] The Vejoz reflex is mistranscribed as *istiwin<i>-tah* in Viñas Urquiza (1974: 61).

***-su(?) ( *-l) ‘vagina’**

Mk -su? (-l) (Gerzenstein 1999: 328) || Ni -su? (-k) (Seelwische 2016: 236) || PCh *-<i>su? ( *-l) [1] > Ijw -<é>s^lu (-l) [2]; I'w -<é>s^lu?; Mj -<éi>su? (-l) (Drayson 2009: 131; Gerzenstein 1983: 127; Carol 2018) || PW *-su(?) > Vej -su; 'Wk -su? (Viñas Urquiza 1974: 73; Claesson 2016: 221)

[1] The Chorote reflex contains an extra vowel (PCh *i) before the root, which appears to continue a fossilized unidentified morpheme.

[2] The absence of a final ? in the Iyojwa'aja' form is unexpected. The regular outcome of PCh *-isu? in this variety would be *-és^lu? */-isu?/ rather than the attested -és^lu /-isu/.

Najlis 1984: 26, 28 (*ahs-u ~ *achu)

***s[?]wúla(?)χ, *s[?]wúla-ts ‘anteater’**

Ni s[?]βuklax, s[?]βukla-s [1] ‘anteater; rayfish’ (Gutiérrez 2015b: 53; Seelwische 2016: 237; Campbell et al. 2020: 80) || PCh *s[?]ʔúlah, *s[?]ʔúla-s [2] > Ijw soʔól'e (-s); I'w swʔúla ~ soólah, soóla-s; Mj saʔúla (-s) (Carol 2014a: 76, fn. 2, 91; Drayson 2009: 147; Gerzenstein 1983: 161; Carol 2018) || PW *súlax > LB selax; Vej sulah (-tajis); 'Wk súlax (Nercesian 2014: 213; Viñas Urquiza 1974: 73; Gutiérrez & Osornio 2015: 22; Claesson 2016: 332)

[1] The glottalization in Nivaclé s[?]β is attested only in Campbell et al. (2020: 80), who also report that the speakers of Chishamnee Lhavos from Central Paraguay lose the β and produce sʔ- instead (Campbell et al. 2020: 83).

[2] The correspondence between the vowels of the first syllable in Iyojwa'aja'/Iyo'awujwa' and Manjui is irregular.

Najlis 1984: 50 (*sewhla); Viegas Barros 2002: 144 (*seulaχ)

***[ji]s[?]wun ~ *[ji]s[?]wún ‘to like, to love’**

Mk [ji]su?un (Gerzenstein 1999: 329) || Ni [ji]s[?]βun [1] (Seelwische 2016: 237) || PCh *[?i]s[?]ʔún > Mj [?i]ʃəʔvén / -saʔvén ~ [?i]ʃvəʔvén / -svəʔvén (Carol 2018)

[1] In the Chishamnee Lhavos dialect, the verb [jen] is used instead of [ji]s[?]βun (Campbell et al.

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2020: 9).

### *s'ám (*-its) ‘frog sp.’

Mk s'am-s'am (-its)frog sp. (*Leptodactylus macrosternum*) (Gerzenstein 1999: 329; Braunstein 1987: 70) || PCh *ts'ám (*-its) > Mj ts'ám (-is) ‘ju'i frog (*Pseudis platensis*)’ (Carol 2018)

### *táxχan ‘to thunder’

Mk texen (Gerzenstein 1999: 336) || Ni tafxen [1] (Seelwische 2016: 258) || PW *t'áχan [2] > 'Wk t'áxan [2] (Claesson 2016: 431)

[1] In Nivaclé, *e* is not the expected reflex of PM *a.

[2] The glottalization of the initial consonant in the Wichí reflex is irregular.

[3] Concerning the final consonant, Claesson (2016: 431) explicitly notes that it is uncertain whether it is glottalized (*t'áxa'n*) or voiceless (*t'áxan*); only the voiceless one matches the Nivaclé cognate.

### *[ni]tåfää(‘)l-APPL ‘to know, to be acquainted’ [1]

Ni [ni]tåfakl-APPL (Seelwische 2016: 274) || PCh *[ʔi]tåhwel-APPL > I'w [i]t'éf'el-e? / -tåf'el-e? ‘to know, to know how to’ [2]; Mj [ʔi]t(i)éhwel-e / -tåhwel-e (Gerzenstein 1983: 42, 162; Carol 2018) || PW *-tåx'el-APPL / *-tåx'nh-APPL > LB -tof'el-eχ / -tof'η-...-eχ; Vej -tah'el-eh [3]; 'Wk [ni]tåx'el-APPL / [ni]tåx'η-APPL (Nercesian 2014: 342; Viñas Urquiza 1974: 74; Claesson 2016: 337–339)

[1] This could be an ancient compound involving a root for ‘eye, sight’ (as Ni tå- in [ji]tå<phi> ‘to get something in one’s eye’, tå-’mat ‘to have bad sight’, tå<sex> ‘eye, seed’) and ‘to tell’ (PM *[ji]fää). Compare Maká [n]ikfe'l-APPL ‘to know, to be acquainted’ (Gerzenstein 1999: 195), whose element -fe'l- might be cognate with PM *-fää(‘)l- in *[ni]tåfää(‘)l-APPL.

[2] Gerzenstein (1983: 191) also documents the irregular forms -tåwel-e? and -tåf'e?, which could result from mistranscription.

[3] The vowel *a* (as opposed to å) in Vejoz must be a mistranscription on Viñas Urquiza’s (1974) part.

Fabre (2014: 308) compares the Mataguayan verb with the Enlhet–Enelhet verb with the same meaning – Enlhet/Enenlhet-Toba -jekpelk-, Enxet -jekpelʃ-, Sanapaná -jepet-, Guaná -jekpelk- (Unruh & Kalisch 1997: 459; Unruh et al. 2003: 323; Gomes 2012: 349; Elliott 2021: 618; Kalisch

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2023: 164) – but this could be spurious.

Fabre 2014: 308

***tā́t̪ ‘to sprout, to come out’**

Mk *tát̪* [1] (Gerzenstein 1999: 331) || Ni *tā́t̪* (Seelwische 2016: 276) || PCh *tā́t̪ > Ijw *tat̪*; I’w -tál; Mj *tátl* (Carol 2014a: 87; Drayson 2009: 149; Gerzenstein 1983: 162; Carol 2018) || PW *tā́t̪ > LB *toł-APPL* ‘to come from’; Vej -tā́t̪-e ‘sprout, descendant’; Wk *tat̪* (Nercesian 2014: 230, 263; Viñas Urquiza 1974: 75; Claeson 2016: 339)

[1] The preglottalized coda in the Maká reflex is attested in the New Testament (e.g. John 17:7).

***-tā́mteʔ ‘daughter-in-law’; *-tā́mte-ts ‘children-in-law’ [1]**

Ni -tā́mit̪-a, -tā́mte-s ‘son-in-law’; -tā́mte-*ʔe* (-j) ‘daughter-in-law’; -tā́mkłā́ji (-k) ‘child-in-law responsible for a funerary ritual’ (Seelwische 2016: 276) || PCh *-tā́mteʔ; *-tā́mte-ts > Mj -tā́met ‘son-in-law’; -tā́mteʔ ‘daughter-in-law’; -tā́mte-s ‘children-in-law’ (Carol 2018)

[1] It is possible to reconstruct the root *-tā́m- ‘child-in-law’, but other derivatives cannot be reconstructed at this time.

Najlis 1984: 47 (**temet* ‘son-in-law’)

***-tā́t̪seʔ (*-j^h) ‘eyelash’**

Mk -tetsiʔ(-j) [1] (Gerzenstein 1999: 336) || Ni -tā́t̪se (-j) (Seelwische 2016: 384) || PCh *-tā́seʔ (*-j^h) > Ijw -tā́xseʔ(-l) [2]; I’w/Mj -tā́xseʔ(-j) (Carol 2014a: 93; Drayson 2009: 125; Gerzenstein 1983: 162; Carol 2018)

[1] The vowel *e* in the Maká word is unexpected and does not match either Ni å or Chorote *å (it is certain that PCh had *å and not *a in this word, cf. Iyojwa’aja’ *hit’áseʔ* /hl-tā́se/ ‘his/her eyelash’, *ʔit’áseʔ* /j-tā́se/ ‘my eyelash’).

[2] The Iyojwa’aja’ plural form, as attested by Drayson (2009), is non-etymological.

Viegas Barros (2013a: 308) suggests that this is a compound (with its first element meaning ‘eye’) and compares the second element with Proto-Guaicuruan *-ad’e ‘eyelash’.

Viegas Barros 2013a: 308 (*-ta-*tsiʔ*)

***-tā́wā́x, *-tā́wxä-ts [1] ‘cavity, abdominal cavity’ [2]**

Mk -tawe’x [3], -tawxe-ts (Gerzenstein 1999: 333) || Ni -tā́βa(’ʃ), -tā́βxa-s (Seelwische 2016: 277) || PCh *-tóweh [4] > Ijw -tówe, -tówa’l; I’w -tówe (-j) [1];

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Mj *-tówe* (Drayson 2009: 126; Gerzenstein 1983: 166; Carol 2018) || PW **towex*, **towhá-j^h* [1 4 5] ‘vessel’ > LB *tuweχ*, *tuma-j*; Vej *toweh*; ’Wk *towex*, *tomá-ç*; *-*towex*, *-*tówha-j^h* [1 4] ‘opening’ > Vej *toweh*; ’Wk *-tówex*, *-tómá-ç* (Nercean 2014: 58; Viñas Urquiza 1974: 77; Gutiérrez & Osornio 2015: 52; Claesson 2016: 94, 420)

[1] The plural form is reconstructed based on the evidence of Maká and Nivaclé. Chorote and Wichí show noncognate plural forms.

[2] This term is likely an obscure compound, with PM *-*wáx* as its second part.

[3] The preglottalized coda in the Maká reflex is attested in the New Testament (e.g. Luke 1:46).

[4] The raising of PM *-å to PCh/PW *o is not known to be regular.

[5] The absolute form is only documented in Wichí and might not be reconstructable all the way to PM.

Najlis 1984: 27, 56 (**thowehn* ~ **tåwehn* ‘opening’); Viegas Barros 2002: 143 (**towex*) ‘hole’; Viegas Barros 2013a: 311 (*-*to-weh*)

### **tänuk* (*-its) ‘feline’ (‘cat’ in the contemporary languages) [1]

Mk *tenuk* (-its) (Gerzenstein 1999: 335) || Ni *tanuk* (-is) (Seelwische 2016: 255) || PCh **tinuk* (*-is) > Ijw/I’w *tin^júk* (-is); Mj *tin^júk* (-is) (Drayson 2009: 151; Gerzenstein 1983: 165; Carol 2018)

[1] The reflexes of this term in the contemporary varieties designate *Felis catus* (the domestic cat). In the protolanguage, the root in question must have designated an unidentified feline species native to South America, possibly the jaguarundi (*Herpailurus yagouaroundi*), still designated by a derivative of the same root in Manjui (*tin^(j)úk-ite*, literally ‘similar to a *tin^(j)úk*’).

Fabre (2014: 308) observes that this root is obviously related via borrowing to an Enlhett-Enenlhett term with the same meaning, Enenlhett-Toba/Sanapaná/Guaná *tenok* ‘cat’ (Unruh et al. 2003: 337; Gomes 2012: 149; Kalisch 2023: 188).

Najlis 1984: 12, 49 (**tajn-(j)úk*); Campbell & Grondona 2007: 15; Fabre 2014: 308

### *-*tä(’)*ts, *-*täts-él* [1] ‘trunk; base; origin, fault’; *-*täts-u’k*, *-*täts-ku-j^h* ‘trunk’

Ni *-tats-uk*, *-tas-ku-j* (Seelwische 2016: 259) || PCh *-*tés*, *-*tes-él*; *-*(-)tés-uk*, *-*tés-ku-j^h* > Ijw 3 *hi-tís* (-e^l) ‘root; procedence; fault’; 3 *hi-tís^j-uk*, *hi-tís-k^ju-’l* [1] ‘trunk’; I’w *tés^j-uk*, *-tés-ki-?*; Mj 3 *hi-tés-uk* ~ *hi-tés-ki?*, *hi-tés-ki-j* ‘stump’ (Drayson 2009: 126; Gerzenstein 1983: 164; Carol 2018) || PW *-*tes*, *-téts-él^h* >

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LB *-tes*, *-tets-et*; Vej *-tes* ‘fault, debt’; ’Wk *-tes*, *-téts-et* (Nercesian 2014: 114, 154, 215; Braunstein 2009: 49; Viñas Urquiza 1974: 75; Gutiérrez & Osornio 2015: 57; Claesson 2016: 93, 221)

[1]The plural form *hi-tis-k^hu-ł* attested in Iyojwa’aja’ is non-etymological.

Campbell & Grondona 2007: 16

***-te?** (***-té-j^h**) ‘eye’

Mk *-t<o?>(-j)* [1] (Gerzenstein 1999: 343) || PCh ***-ta-té?** (***-j^h**) > Ijw *-tá-te?* (-'l) [2]; I’w *-ta-té?* (-j); Mj *-ta-té?* (-jh) (Carol 2014a: 87; Drayson 2009: 126; Gerzenstein 1983: 163; Carol 2018) || PW ***-t(a)-te?** (***-j^h**) > LB *-t-te-j* ‘face’, *-t-te-łu* ‘eye’ [3]; Vej *-te* (-j), *-te-ło*; ’Wk *-t(a)-te?* (-t(a)-té-ç) (Nercesian 2014: 161, 165; Viñas Urquiza 1974: 75; Fernández Garay 2006–2007: 219; Claesson 2016: 99)

[1]The Maká word is apparently an ancient compound of ***-te?** ‘eye’ and ***-o?** (***-j^h**) ‘seed’.

[2]The plural form attested in Iyojwa’aja’ does not match the one found in Manjui and Wichí and is thus non-etymological.

[3]In Lower Bermejeño Wichí, the erstwhile plural form of ‘eye’ is now used in the meaning ‘face’; a compound (‘eye’ + ‘seed’) is now used for the meaning ‘eye’ (compare ‘Weenhayek *-t(a)-té-ło?* (-ç) ‘eye globe’, attested in Claesson 2016: 100). Note, however, that Braunstein (2009: 57) documents LB *-te?* ‘eye’.

Viegas Barros 2013a: 308, fn. 20 (***-ta?**)

***téwo(?)k** [?] ***téwå(?)k** [1] ‘river’

Ni *toβok*, *toβxo-j*; ChL/ShL *toβåk*, *toβxå-j*; YL *toβak* (Gutiérrez 2015b: 38; Seelwische 2016: 274; Campbell et al. 2020: 99) || PCh ***téwok** ~ ***téwåk** [1] > Ijw *téwuk* (-is); I’w *téwak*; Mj *téwak* (Carol 2014a: 90; Drayson 2009: 150; Gerzenstein 1983: 164; Carol 2018) || PW ***téwok^w** > LB *tewuk^w*; Vej *tek-tah* ‘river’, *tewok^w-tah* ‘Pilcomayo River’; ’Wk *téwok* (-is ~ -lis ~ -łajis) (Nercesian 2014: 161; Viñas Urquiza 1974: 75; Gutiérrez & Osornio 2015: 44; Claesson 2016: 397)

[1]The variant ***téwok** is suggested by the reflexes in Iyojwa’aja’, Wichí, and by the Nivaclé reflex *toβok*, attested in Fabre (2014) and Seelwische (2016). The latter is likely a dialectal reflex, though our sources do not specify the dialect to which it belongs. The variant ***téwåk** is suggested by the reflexes in Iyo’awujwa’, Manjui, and all major varieties of Nivaclé, such as Chishamnee Lhavos (Campbell et al. 2020), Shichaam Lhavos (Gutiérrez 2015b), and Yita’

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**Lhavos** (Gutiérrez 2015b). It is unclear which variant is more conservative.

Campbell & Grondona 2007: 15, 21

### **tiɸ* ~ **tíɸ* ‘to spend’

Ni *tiɸ* (Seelwische 2016: 268) || PCh *[ʔi]tíℳ [1] > Ijw [ʔi]tíℳ / -téℳ; Mj [ʔi]tíℳ / -téℳ (Drayson 2009: 113; Carol 2018)

[1]In Chorote, this verb now receives a non-etymological third-person prefix *ʔi-* (rather than zero).

### **ti'ɸ* ‘to suck breast’

Mk *tu'f* / -*tu'f* [1] (Gerzenstein 1999: 343) || Ni *ti'ɸ* (Seelwische 2016: 268) || PCh *[ʔi]tíℳ [2] > Mj [ʔi]tíℳ / -téℳ (Carol 2018) || PW **tip* [3] > Vej -*tip-eh*; 'Wk *tip* (Viñas Urquiza 1974: 76; Gutiérrez & Osornio 2015: 36; Claesson 2016: 407)

[1]The rounded vowel in the Maká reflex is unexpected. The preglottalized coda is attested in the New Testament (e.g. Matthew 21:16).

[2]In Chorote, this verb now receives a non-etymological third-person prefix *ʔi-* (rather than zero).

[3]It is unclear whether the development PM **ɸ* > PW **p* is regular, as not supporting examples are known. Compare the causative PW *[ʔi]tíx-qat ‘to breastfeed’ > Vej -*tih-kat*; 'Wk [ʔi]tíx-qat (Viñas Urquiza 1974: 76; Claesson 2016: 400).

Possibly related to Proto-Guaicuruan *-*lip* ‘to suck’ (Viegas Barros 2013b, #376).

### **tijåχ* ‘to shoot, to throw’

Mk *tijaχ* / -*tijaχ* (Gerzenstein 1999: 340) || Ni *tijåχ* (ShL *tijoχ*) (Stell 1987: 504; Seelwische 2016: 270) || PCh *[ʔi]tíjåh [1] > Ijw [ʔi]tíja / -téja; Mj [ʔi]tíje / -téje (Drayson 2009: 114; Carol 2018) || PW **tijåχ* > LB *tijoχ*; 'Wk *tijåχ* (Nercean 2014: 145; Claesson 2016: 409)

[1]The presence of a preglottalized coda in Maká is inferred based on the Nivaclé cognate; the verb is not attested in our sources that distinguish between plain and preglottalized stops.

[2]In Chorote, this verb now receives a non-etymological third-person prefix *ʔi-* (rather than zero).

### **tilVχ* ~ **tílVχ* ~ **tillVχ* [1] ‘white woodpecker’

Mk *tilaχ* (Braunstein 1987: 62) || || PW **tiliχ* ~ **tíliχ* ~ **tilíχ* > LB *tiliχ* (Spa-

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garino et al. 2013 [2011])

[1] The vowel of the second syllable cannot be reconstructed with certainty: Maká points to PM *ā, *a, or *e, whereas Lower Bermejeño Wichí points to *i.

***-ti'ɬ 'to spin a thread, to sew'**

Mk [ji]tiɬ [1] 'to sew' (Gerzenstein 1999: 337) || Ni ti'ɬ (Seelwische 2016: 269) || PCh *[j]<á>tiɬ 'to sew' > Ijw [j]étiɬ / -átiɬ; I'w -átel-ji?; Mj [j]étiɬ / -átiɬ; *[?i]tíl-k'j'e? 'to spin a thread' > Ijw [?i]tíl-k'i / -tél-k'i; Mj [?i]tíl-?i? / -téil-?i? (Drayson 2009: 113, 159; Gerzenstein 1983: 122; Carol 2018)

[1] The Maká reflex unexpectedly lacks preglottalization in the coda, as attested in the New Testament (Mark 1:19; Matthew 4:21).

***tiɬá'x 'to carry on one's shoulders'**

Mk tiɬo'x / -tiɬo'x [1] (Gerzenstein 1999: 337) || Ni tiɬá'x (Seelwische 2016: 269) || PCh *[?i]tíhláh [2] > Ijw [?i]tíhl'a / -téhl'a; I'w -té(h)li ~ -téjhli; Mj [?i]tíhl'e / -téihl'e (Drayson 2009: 113; Gerzenstein 1983: 164, 189; Carol 2018) || PW *tiɬåx > LB tiɬoχ; Vej tiɬåh; 'Wk tiɬåx (Nercesian 2014: 145; Viñas Urquiza 1974: 76; Claesson 2016: 404)

[1] The vowel o in the Maká reflex is entirely unexpected. The presence of a preglottalized coda in Maká is inferred based on the Nivaclé cognate; the verb is not attested in our sources that distinguish between plain and preglottalized stops.

[2] In Chorote, this verb now receives a non-etymological third-person prefix ?i- (rather than zero).

Possibly related to Proto-Guaicuruan *-i(')lak 'shoulder', whence Mbayá <-ilacate> 'to carry on one's shoulders' (Viegas Barros 2013b, #276). Viegas Barros (2013a: 309) compares it to Proto-Guaicuruan *-i'laqa 'back (of body)' instead.

Viegas Barros 2002: 144 (*-tiɬåχ, misglossed as 'to dig'); Viegas Barros 2013a: 309 (*-t-iɬåh)

***tim 'to swallow'**

Mk tim-xu? / -tim-xu? (Gerzenstein 1999: 338) || Ni tim (Seelwische 2016: 269) || PCh *[?i]tím [1] > Ijw [?i]tí'm / -té'm; I'w -té'm; Mj [?i]tím / -téim (Drayson 2009: 114; Gerzenstein 1983: 164; Carol 2018) || PW *tim > LB/Vej tim; 'Wk tim (Nercesian 2014: 349; Viñas Urquiza 1974: 76; Claesson 2016: 407)

[1] In Chorote, this verb now receives a non-etymological third-person prefix ?i- (rather than

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zero).

### *tis ‘to invite, to pay’

Mk *tis-ix* / *-tis-ix* ‘to give’ (Gerzenstein 1999: 339) || Ni *tis* (Seelwische 2016: 270) || PCh *[*?i*]tís [1] > Ijw [*?i*]tís / -tés; I’w -tés; Mj [*?i*]tís / -téis (Drayson 2009: 114; Gerzenstein 1983: 164; Carol 2018) || PW **tis* > Vej/Wk *tis* (Viñas Urquiza 1974: 76; Claesson 2016: 408)

[1]In Chorote, this verb now receives a non-etymological third-person prefix *?i-* (rather than zero).

### *títe(’)k, *títhe-*j^h* ‘plate’

Ni (-)titetʃ, (-)titxe-*j* (Seelwische 2016: 270) || PCh **títek*, **tíhte-j^h* > Ijw *tétik*, *téti-’l* [1] ‘recipient for food’; I’w *téitik*, *téti-ji* [1]; Mj *téitik*, *téihti-j* (Drayson 2009: 150; Gerzenstein 1983: 163; Carol 2018)

[1]The plural forms in Iyojwa’aja’ and Iyo’awujwa’ are non-etymological.

Campbell & Grondona 2007: 16, 22; Gutiérrez 2015b: 64

### *ti’x ‘to dig’ [1]

Mk *ti(’)x-APPL* / *-ti(’)x-APPL* [2] (Gerzenstein 1999: 339) || Ni *tiʃ* (Seelwische 2016: 269) || PCh *[*?i*]tih-*ij?* [3] > Ijw [*?i*]tih-*i?* / -téh-*e?*; I’w -téh-*i?*; Mj [*?i*]tih-*ij?* / -tih-*ij?* (Carol 2014a: 90; Drayson 2009: 113; Gerzenstein 1983: 165; Carol 2018) || PW **tiχ* > LB *tif-i hohnat* (lit. ‘to dig-APPL earth’); Vej *tih-APPL*; Wk *tix* (Braunstein 2009: 57; Viñas Urquiza 1974: 76; Claesson 2016: 399)

[1]The underived verb is intransitive. Applicative derivations are used for expressing an object.

[2]The root-final consonant in Maká is attested as preglottalized in the New Testament in the forms *ti’x-ik’wi* ‘to bury, to dig’ (Acts 5:6; Acts 5:9; Acts 8:2; Luke 6:48; Mark 6:29; Matthew 25:18), *ti’x-ifi?* ‘to row’ (John 6:19; Mark 6:48). However, the forms *tix-xu?* ‘to dig’ (Matthew 21:33; Mark 12:1) and *wi-tix-ki?* ‘well’ (e.g. Revelations 9:2) are attested with a plain coda.

[3]In Chorote, this verb now receives a non-etymological third-person prefix *?i-* (rather than zero).

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zero).

Viegas Barros 2002: 143 (**tix*; glossed as Spanish ‘lavar’, a typo for ‘cavar’)

***-t(á)ko? (*-l) ‘face’; *-t(á)ko-se? (*-j^h) ‘eyebrow’ [1]**

Mk *-tko<jek>*, *-tko<jeh>-ej*; *-tko-si?* (-j) (Gerzenstein 1999: 286) || Ni *-tako?* (-l) (Seelwische 2016: 246) || PCh **-tóko?* (*-l) > Ijw *-tɔ́k̥j̥o?* (-l); I’w *-tók̥j̥o?* (-l); Mj *-tɔ́k̥j̥o?*; **-tóko-se?* (*-j^h) > Ijw *-tɔ́k̥j̥o-se?*; I’w *-tók̥j̥o-se?* (-j); Mj PL *-tɔ́k̥j̥o-se?* (Drayson 2009: 126; Gerzenstein 1983: 166; Carol 2018) || PW **-ták̥j̥o?* (*-l^h) ‘forehead’ > Vej *-tatſo* (-t); ’Wk *-ták̥j̥o?*; **-ták̥j̥o-se?* (*-j^h) > LB PL *-tatſu-se-j*; ’Wk *-ták̥j̥o-se?* (-ç) (Braunstein 2009: 56; Viñas Urquiza 1974: 73; Gutiérrez & Osornio 2015: 61; Claesson 2016: 92)

[1]It is unclear whether a consonant cluster should be reconstructed in this case (assuming vowel insertion in Nivañe, Chorote, and Wichí) or whether the vowel was already there in Proto-Mataguayan (assuming an irregular syncope in Maká).

Najlis 1984: 22 (**tāç̥* ‘face’); Viegas Barros 2013a: 308, fn. 21 (**-tak̥o?* ‘forehead’, **-tak̥o-si?* ‘eyebrow’); Campbell & Grondona 2007: 16 (‘forehead’)

***tlú’k ‘blind’**

Ni *taklú’k*, *takläx-uj* ‘blind; greater pichiciego’ (Seelwische 2016: 248) || PCh **tɔ́lúk* > I’w *talók* (Gerzenstein 1983: 162) || PW **tilúk^w* > ’Wk *tilúk* (-is) (Claesson 2016: 404)

Najlis 1984: 24 (PL **taluk-j*); Campbell & Grondona 2007: 15; Gutiérrez 2015b: 253

***tós (*-its) ‘snake’**

Ni *tos* (-is) (Campbell et al. 2020: 95) || PCh **tós* (*-is) > I’w *tóxs* (-is); Mj *tós*, *tóxf-is* (Gerzenstein 1983: 166; Carol 2018)

***tóχ-ej^h, *tó-ts-ej^h; *tóχ-APPL, *tó-ts-APPL ‘far’**

Mk *toχ-ij*, *to-ts-ij* (Gerzenstein 1999: 342) || Ni *tox-ej*, *tox-APPL* (Seelwische 2016: 273) || PCh **tóhw-ej^h*, **tó-ts-ej^h*; **tóh-APPL*, **tó-ts-APPL* > Ijw *tɔ́hw-e*, *tó-s-e*; *tóhw-APPL*, *tɔ́s-APPL*; I’w *tóf^w-en*; Mj *[?a]tɔ́hw-ej*; *[?a]tɔ́h-APPL* (Drayson 2009: 152; Gerzenstein 1983: 165; Carol 2018) || PW **tóx^w-ej^h* > LB *tuf^w-ej*; Vej *toh^w-ej* [1]; ’Wk *-<?a>tóx^w-e?* [1] (Nercesian 2014: 327; Fernández Garay 2006–2007: 215; Claesson 2016: 16)

[1]The loss of the word-final *-j^h in ‘Weenhayek is irregular. A j-less form is also attested for

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Vejoz by Viñas Urquiza (1974:108, *toh*^w-e), which could be a mistranscription.

Hunt 1915: 240; Viegas Barros 2002: 145 (no reconstruction)

### **tuku*(')(t)s ‘ant’

Ni *tukus* ‘ant; Bolivian’ (Seelwische 2016: 279) || PCh **túkus* > Ijw *tókis* ‘ant; soldier’; I’w *tókis*; Mj *tókis* ‘ant; soldier’ (Carol 2014a: 94, fn. 25; Drayson 2009: 152; Gerzenstein 1983: 165; Carol 2018)

Najlis 1984: 42, 43 (**thus*); Campbell & Grondona 2007: 15

### **tusu*(')(t)s ‘lesser yellowlegs’

Ni *tusus* ‘lesser yellowlegs; solitary sandpiper’ (Seelwische 2016: 281) || PCh **túsus* > Ijw *tóxsus* (Drayson 2009: 153) || PW **túsus* > LB *teses*; ’Wk *túsus* ‘kind of bird (small, white)’ (Spagarino et al. 2013 [2011]; Claesson 2016: 426)

### **tux* ‘to eat (vt.)’

Mk *tux* / -*lux* (Gerzenstein 1999: 344) || Ni *tux* (Seelwische 2016: 280) || PCh *[*?*i]*túm* > Ijw [*?*i]*t^júm* / -*tóm*; I’w [*i*]*t^júh* / -*tóh*; Mj [*?*i]*t^júm* / -*tóm* [1] (Carol 2014a: 87; Drayson 2009: 114; Gerzenstein 1983: 42, 166; Carol 2018) || PW **tux*^w > LB *tef*^w; Vej *tuh*^w; ’Wk *tux*^w (Nercesian 2014: 237; Viñas Urquiza 1974: 77; Claesson 2016: 420)

[1]In Chorote, this verb now receives a non-etymological third-person prefix *?*i- (rather than zero).

Possibly related to Proto-Guaicuruan *-*e’liko* ‘to eat’ (Viegas Barros 2013b, #214).

Najlis 1984: 39 (**thu*); Viegas Barros 2002: 143 (*-*tux*)

### *-*txo’k* ~ *-*txó’k*, *-*txók-owot* ‘uncle’

Mk -*txo’k* [1], -*txok-its* [2] (Gerzenstein 1999: 287) || Ni -*txo’k*, -*txok-oβot* [3 4] (Seelwische 2016: 271) || PCh *-<*i*>*tók*, *-<*i*>*tók-owot* [5] > Ijw -*t^jók*, -*t^jók^j-owot* [6]; Mj -<*i*>*t^jók*, -*t^jók^j-oj* [2 7] (Drayson 2009: 126; Carol 2018) || PW *-<*wi*>*thok*^w [5] > LB -<*wi*>*t^juq* [8]; ’Wk -<*wi*>*t^jok* (Nercesian 2014: 194; Claesson 2016: 102)

[1]The presence of a preglottalized coda in the Maká reflex is inferred based on the Nivaclé cognate; it is not attested in our sources that distinguish between plain and preglottalized

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codas.

[2] The plural forms attested in Maká and Manjui are non-etymological.

[3] In the Chishamnee Lhavos dialect, *x* is lost: *-to'k*.

[4] The onset of the Nivaclé nouns carries the feature [+constricted glottis], as it induces glottalization in the preceding vowel (Gutiérrez 2015b: 193).

[5] The origin of the elements *-<*i*>- in Chorote and *-<*wi*>- in Wichí is unclear.

[6] Drayson (2009: 126) claims the *Iyojwa'aja'* form to be a *Iyo'awujwa'* loan, but it is not clear on what grounds.

[7] The Manjui plural form is non-etymological.

[8] Lower Bermejeño Wichí appears to have irregularly lost labialization of the final consonant. Alternatively, it could be a mistranscription or a typo on Nercesian's (2014) part, as only one attestation of this word is available.

Compare Proto-Qom *-tesóqo? 'uncle' (cf. Viegas Barros 2013b, #567).

Najlis 1984: 10, 25 (**ithóuk*); Campbell & Grondona 2007: 16

### *-*t'ē-l* [1] 'tears' (*pluralia tantum*)

Mk *-t'i-l* (Gerzenstein 1999: 345) || Ni *-t'e<kl>-is* (Seelwische 2016: 286) || PCh *-*t'ē<l>-is* [1] > Ijw *-t'él-is* (Drayson 2009: 126)

[1] This word appears to be an ancient compound of PM *-*te?* 'eye' and *-*ʔi* (*-*l*) 'liquid'. Chorote and Wichí also use a more transparent compound of the reflexes of these roots, cf. *Iyojwa'aja'* *-tá-te t'ē?(-l)*, 'Weenhayek *-t-té-t'i?(-l)*' (lit. 'liquid of the eye'; Drayson 2009: 155; Claesson 2016: 100). Note that these compounds go back to PChW *-*t(a)-te t'-i?(*-l)* and thus cannot reflect PM *-*t'ē-l* ~ *-*t'ē-l*.

[2] Nivaclé and Chorote have fossilized the erstwhile plural suffix *-*l* > Ni *-kl*, Ijw *-l* as a part of the stem.

Possibly related to Proto-Guaicuruan *-áti*i?*tear (Viegas Barros 2013b, #128), if only the Proto-Guaicuruan reconstruction is correct. However, there is evidence that the Proto-Guaicuruan form should be reconstructed as *-áti*it* instead. The stem-final stop would account for *di* in the Kadiwéu reflex *-at:idi* and for the stem-final consonant in Mocoví, seen in the 2SG form *r-atſit-i?* and in the 2PL form *r-atſir-i*.

Gutiérrez 2015b: 253

### *-*Ct'ēh* 'grandmother' / *-*qá-Ct'ēh* 'mother-in-law'; *-*Ct'ē'k* 'grandfather' /

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***-qá-Ct' e'k 'father-in-law' [1 2]**

Ni *-kt'e* (-j) / *-ka-kt'e* (-j); *-kt'e* *ts*, *-ktse-βot* / *-ka-kt'etf*, *-ka-ktse-βot* (Campbell et al. 2020: 90, 182, 495) || PCh **-nt'éh*, **-nt'é-ewot* / **-qá-nt'eh*; **-nt'ék* (*-awot) / **-qá-nt'ek* > Ijw *-nt'éh*, *-nt'é-wot* / *-ká-nt'e*; *-nt'ék*, *-nt'ék-j-awot* / *-ká-nt'ek*; Mj *-(i)nt'é?*, *-(i)nt'é-(e)wat* / *-ká-nt'e?* (-wot ~ -wat); *-(i)nt'ék*, *-(i)nt'ék-j-ewat* ~ *-(i)nt'ék-j-owat* / *-ká-nt'ek*, *-ká-nt'ek-j-ewot* ~ *-ká-nt'ek-j-ewat* (Carol 2014b; Carol 2018)

[1] The root-initial consonant cannot be reconstructed at present: Nivačle points to **l*, **k*, or **q*, whereas Chorote points to **n*. In Chorote, this is the only relational noun that starts with a consonant cluster, suggesting that it may have undergone a unique sound change due to the position being unparalleled.

[2] Maká and Wichí have similar but obviously unrelated roots: Mk *-wket* (-its) 'grandfather' / *-qe-wket* (-its) 'father-in-law', *-wket-i?* (-j) 'grandmother' / *-qe-wket-i?* (-j) 'mother-in-law' (Gerzenstein 1999: 165, 310); PW **-k'átih* 'grandfather' / *-qá-k'átih* 'father-in-law' > LB *-tfoti* 'grandfather, father-in-law'; Wk *-k'átih* / *-qá-k'átih* (Nercesian 2014: 194; Claesson 2016: 63, 84). It is possible that the Maká and Wichí forms are partial cognates between themselves, but the vowels do not match.

Najlis 1984: 23 (**theuk*); Campbell & Grondona 2007: 15

***-t'íle?(*-j^h) 'rheum' [1]**

Mk *-t'ili?* (-j) (Gerzenstein 1999: 345) || Ni *-t'iklē* (-j) (Seelwische 2016: 287) || PCh **-t'íle-* > Ijw *-t'élj-ak* (-is) [2]; I'w *-téli-jes*; Mj *-t'íli-jees* (Drayson 2009: 126; Gerzenstein 1983: 164; Carol 2018)

[1] This is likely a compound of the root **-t'i-* ~ **-t'i-* 'eye (in compounds)', preserved in Nivačle *-t'i-páklā* (-s) 'eyebrow', *-t'i-βaf*, *-t'i-βfa-s* 'inner corner of the eye' (Seelwische 2016: 287, 288).

[2] The Iyo'jwa'aja' reflex seems to have been influenced by *-?il'ák* 'pus'.

***-t'ij ~ *-t'ij [1] 'to move (vi.), to infect' (causative: *[ji]t'ij-hat)**

Ni *[βa]t'ij* ([ji]t'ij-xat) (Seelwische 2016: 288) || PCh **[?i]t'ij?* (*[?i]t'ihj-at) > I'w *-téj* [2]; Mj *[?i]t'ij?* / *-t'ei?* ([?i]t'ihj-et / *-t'ehj-et*) (Gerzenstein 1983: 163; Carol 2018)

[1] The correspondence Ni *t'* ~ PCh **t'* could in principle also go back to PM **t'*. We reconstruct PM **t'* because PM **t'* is not known to have occurred tautomorphemically

[2] The plain stop in the Iyo'awuja' form attested by Gerzenstein (1983) must be a mistran-

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scription.

***t'iså? ~ *t'iså?(-l) 'cream-backed woodpecker (*Campephilus leucopogon*)'**

Mk *t'isa?*(-l) (Gerzenstein 1999: 345) || Ni *t'iså?*(-k) 'woodpecker sp.' (Seelwische 2016: 287) || PCh **t'iså?*(-l) > Ijw *t'iså?*(-l) (Drayson 2009: 155)

***-t'ox ~ *t'óx [1] 'aunt'**

Ni *-t'ox*, *-t'ox-oβot* (Seelwische 2016: 288) || PCh *-<i>*t'óh* [2] > Mj -(*<i>t(j)óh*) (Carol 2018) || PW *-<wi>*t'ox* [2] > LB -<wi>*t'uχ*; Vej -<wi>*t'oh*(^w), -<wi>*t'oh-łajis*; 'Wk -<wi>*t'ox*^w (Nercesian 2014: 194; Viñas Urquiza 1974: 81; Gutiérrez & Osornio 2015: 69; Claesson 2016: 102)

[1] The correspondence Ni *t'* ~ PCh/PW **t'* could in principle also go back to PM **t'*. We reconstruct PM **t'* because the root is evidently related to PM *-*txo'k* ~ *-*txó'k* 'uncle' and because PM **t'* is not known to have occurred tautomorphemically.

[2] The origin of the elements *-<i>- in Chorote and *-<wi>- in Wichí is unclear.

Najlis 1984: 10, 40 (**ithó*)

***t'ún 'hard'**

Mk *t'un* (-its) (Gerzenstein 1999: 346) || Ni *t'un* 'hard; cookie' (Seelwische 2016: 290) || PCh **t'ún* > Ijw *t'ó'n* (Drayson 2009: 156) || PW **t'ún* > LB *t'en*; Vej *t'un*; 'Wk *t'úη* (Nercesian 2014: 178; Viñas Urquiza 1974: 78; Claesson 2016: 450)

***tsåhåq [1] (*-its) 'chajá bird'**

Mk *tsahaq* [1] (-its) (Gerzenstein 1999: 347) || PCh **såhåk*, **såhåq-es* ? **såhåq-is* > Ijw *sahák*; I'w *sahák* (-is); Mj *sahák* (-es ~ -is) (Drayson 2009: 144; Gerzenstein 1983: 157; Carol 2018) || PW **tsåhåq* > LB *tsohoq*; 'Wk *tsåhåq* (Nercesian 2014: 50; Claesson 2016: 463)

[1] The reconstruction **tsåhåq*(?) is ruled out because the Maká reflex is attested with a plain coda in Braunstein (1987: 55).

Likely related to Proto-Guaicuruan **t'aqaqa* 'chajá bird' (Viegas Barros 2013b, #553), whence Toba-Qom *taqaq* 'id.' (Cúneo & Porta 2009: 251).

Viegas Barros 2002: 144 (**tsåχaq*)

***tsänu'k 'duraznillo (*Ruprechtia triflora*)'**

Ni *tsanu'k*, *tsanku-j* (Seelwische 2016: 292) || PCh **sinúk* > Ijw *sinjúk* 'a tree

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similar to *Ziziphus mistol* but thinner'; Mj *sim'úk* (-ij) (Drayson 2009: 145; Carol 2018) || PW **tsinúk*^w > LB *tsinek*^w; Southeastern (Salta) *tſinek*^w [1]; Vej *tsinuk*; Wk *tsinúk* (Spagarino 2008: 59; Suárez 2014: 320; Viñas Urquiza 1974: 55; Gutiérrez & Osornio 2015: 19; Claesson 2016: 465)

[1] The affricate *tʃ* in Southeastern Wichí, as attested by Suárez (2014: 320), is irregular.

Najlis 1984: 14, 49 (**tsajn-úk*); Campbell & Grondona 2007: 21

***-tséwte(?) (*-j^h) ‘tooth’**

Ni *tseβte* (-j) (Seelwische 2016: 294) || PW *-tsóte (*-j^h) > LB *-tsute*; Vej *-tsote*; Wk *-tsóte?* (-ç) (Braunstein 2009: 39; Viñas Urquiza 1974: 55; Claesson 2016: 100)

***tséχ-APPL ‘full (e.g. a river)’**

Ni *tsex-APPL* ‘full, abundant’ (Seelwische 2016: 293) || PCh *-sáh [1] ‘to rise (of water)’ > Ijw [ʔi]s'éh / -sáh; Mj [ʔa]sáh (Drayson 2009: 111; Carol 2018) || PW **tsáχ-APPL* > Wk *tsáx-APPL* ‘voluminous’ (Claesson 2016: 63)

[1] In Chorote, this verb now receives non-etymological third-person prefixes *ʔi-* or *ʔa-* (rather than zero).

***tsijá? [?] *ts'ijá? [1] ‘caracara (*Milvago* sp.)’**

Mk *tsije?* ‘chimango caracara (*Milvago chimango*); yellow-headed caracara (*Milvago chimachima*); black-collared hawk (*Busarellus nigricollis*)’ (Braunstein 1987: 58) || PW **ts'ijá?* ‘chimango caracara (*Milvago chimango*)’ > LB *ts'ija* [2]; LB *ts'ijá?* (Nercesian 2014: 157; Spagarino et al. 2013 [2011]; Claesson 2016: 470)

[1] The Maká reflex points to PM **tsijá?*, the Wichí one to **ts'ijá?*.

[2] The Lower Bermejeño Wichí reflex unexpectedly lacks the root-final glottal stop.

***tsiwáɬqoɬ ‘little nightjar (*Setopagis parvula*)’**

Mk *tsiwoɬqoɬ* (Braunstein 1987: 61) || PW **tsiwáɬqoɬ* > LB *tsiwaɬkʷuɬ* [1]; Wk *siwáɬqoɬ* [2] (Spagarino et al. 2013 [2011]; Claesson 2016: 330)

[1] The Lower Bermejeño Wichí reflex, as attested by Spagarino et al. (2013 [2011]), unexpectedly shows *k^w* instead of *q*.

[2] The root-initial fricative in the ‘Weenhayek reflex is irregular. It is also seen in the dialectal

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reflexes attested in Lunt (2016: 79, 80), *siwałkol* ~ *suwałkol*; it is unknown whether these forms are representative of Guisnay or Vejoz.

***tsópha** (fruit) ‘*Maytenus vitis-idaea*’; *tsópha-tax (fruit); *tsópha-ta-(ju)’k (tree) ‘*Lycium americanum*’

Mk *tsofe-tax*; *tsofe-te-’k* (-et) (Gerzenstein 1999: 349) || Ni *tsoφ-tax*, *tsoφ-ta-s*; *tsoφ-ta-juk*, *tsoφta-ku-j* [2] ‘bush sp.’ (Seelwische 2016: 297) || PCh *sóh-wa? ‘*Maytenus vitis-idaea*’ > Ijw *sóhwa?*; I’w *sóhwa?*; Mj *sóhwa?* ~ *sóhwo?* (Drayson 2009: 147; Scarpa 2010: 187; Carol 2018) || PW *tsóxʷa; *tsóxʷa-t-ukʷ ‘*Lycium nodosum*’ > Southeastern (Salta) *tsufʷa*; Vej *tsohʷa* (no gloss); ’Wk *tsóxʷa?*; *tsóxʷa-t-uk* (Suárez 2014: 343; Gutiérrez & Osornio 2015: 74; Claesson 2016: 466)

[1] The preglottalized coda in the Maká suffix for tree names is attested elsewhere (Paraguay 2022: 7).

[2] The syncope of the vowel of the medial syllable is irregular in Nivaclé.

***tso’m ~ *tsó’m** ‘plush-crested jay (*Cyanocorax chrysops*)’ [1]

Mk *tso’m*, *tsom-its* (Gerzenstein 1999: 349; Braunstein 1987: 64) || PCh *só’m > Mj *só’m* (Carol 2018)

[1] Ni *tsum* ‘plush-crested jay (*Cyanocorax chrysops*)’ Campbell et al. (2020: 506) is similar to these forms, but its initial consonant is the only segment that shows a regular correspondence with the Maká and Manjui forms.

***(-)tsútsuh** ‘grandfather’

Ni *tsutsu* ‘grandfather, old man (possibly vocative)’ (Campbell et al. 2020: 495) || PCh *-súsuh > Mj *-sósu* [2] (Carol 2018)

[1] There is also a similar form Ni *tsutſu*, used in the children’s language Campbell et al. (2020: 493).

[2] There is also an absolute form Mj *tót’u* ~ *tút’u*, possibly associated with the children’s language.

***ts’áts’ih, *ts’áts’i-l** ‘rufous hornero’

Mk *ts’its’i* (-l) [2] (Gerzenstein 1999: 351) || Ni *ts’ats’i* (-k) (Seelwische 2016: 301) || PCh *sát’ih [3] > Ijw *sát’i* (-his); Mj *sát’i* (-wa?) (Carol 2014a: 90; Drayson 2009: 145; Carol 2018) || PW *tats’i [4] > LB/Vej *tats’i* [5]; ’Wk *táts’i?*

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(Nercesian 2014: 50; Viñas Urquiza 1974: 77; Gutiérrez & Osornio 2015: 22; Claesson 2016: 386)

[1] The plural form is reconstructed based on the evidence of Maká and Nivaclé. It is thus technically reconstructible only for Proto-Maká–Nivaclé.

[2] The expected reflex in Maká would be **ts'ets'i*.

[3] The Chorote reflex shows an irregular dissimilation: **ts'...ts' > *ts...ts' > *s...t'*.

[4] The Wichí reflex shows an irregular dissimilation: **ts'...ts' > *ts...ts' > *t...ts'*.

[5] Viñas Urquiza (1974: 77) attests *Vej t'ats'i*, whose initial glottalized consonant may be a mistranscription.

### ****(t)s'ó'ts* ‘milk’**

Ni (-)ts'o's, (-)ts'os-ik [1]; *ts'ots-i* ‘to have milk’ (Seelwische 2016: 303) || PCh **-qá <i>t'ós* [2 3] > Ijw -ká-*t'ós*; Mj *-ká-it'ós, -ká-it'ósis* (Drayson 2009: 121; Carol 2018) || PW **ts'ós* > Guisnay *t'os* [2]; Wk *ts'ós* (Lunt 2016: 94, 100; Claesson 2016: 470)

[1] The Nivaclé plural form is non-etymological, since it does not preserve the root-final /ts/, seen in the verb *ts'ots-i* ‘to have milk’.

[2] The Chorote and Guisnay reflexes show an irregular dissimilation: **ts'...ts > *t'...ts > *t'...s*.

[3] We have no explanation for the element **i* in the Chorote reflex.

### ****[j]úłå(?)χ* ‘to be tired’**

Mk *-ułā(?)χ* [1], *-ułax-its* ‘breath’ (Gerzenstein 1999: 354) || Ni *[j]ułåx* (Seelwische 2016: 306) || PCh **[j]úhläh* > I'w -óhula / -ó(h)la-; Mj *[j]úhla* (Gerzenstein 1983: 154, 188; Carol 2018)

[1] The uncertainty regarding the coda in Maká is due to the fact that the singular form is not attested in our sources that distinguish between plain and preglottalized codas. The plural form is attested in the New Testament (Acts 17:25), but it is not revealing.

**Rejected:** Viegas Barros (2013a: 307) compares the Nivaclé and Chorote terms to Maká *walχal* ‘idler’ (Gerzenstein 1999: 360) and the Wichí term for ‘slow’ (PW **[j]íwał* > LB *[j]iwat*, ‘Wk *[j]íwał-APPL* ‘slow’; cf. Braunstein 2009: 63; Claesson 2016: 549). This is untenable both phonologically and semantically.

Viegas Barros (2013a: 307) compares the Mataguayan root to Proto-Guaicuruan **-ewe(?)la* ‘to

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be tired' (VB 2013b, #243), which is likely a spurious comparison.

Viegas Barros 2013a: 307 (*-wátlah 'slow, tired')

### *-ú[?]p[‘], *-úp-itsnest

Mk 3 *t-up* [1] (-its) (Gerzenstein 1999: 255; Paraguay 2022: 22) || Ni -u[?]p[‘], -up-is (Seelwische 2016: 308) || PCh *-úp (*-is) > Ijw -óp (-is); I'w 3 *hl-úp* (-is); Mj 3 *hl-óp* (-is) (Drayson 2009: 132; Gerzenstein 1983: 175; Carol 2018) || PW *-t-úp (*-is) > LB -t-ep; Vej -t-up; 'Wk -t-úp (-is) (Nercesian 2014: 170; Viñas Urquiza 1974: 66; Claesson 2016: 76)

[1] The Maká reflex unexpectedly lacks preglottalization in the coda in the singular form, as attested in Paraguay (2022: 22).

Fabre (2014: 306) notes the similarity with Enlhet *tō:p* 'pipe' (Unruh & Kalisch 1997: 230), but the similarity is obviously accidental.

Najlis 1984: 21 (**hlhnup*); Campbell & Grondona 2007: 20; Fabre 2014: 306; Gutiérrez 2015b: 254

### *-uwa 'termite house'

Ni -uβa (-k) (Seelwische 2016: 308) || PW *-t?uwa > Vej t?uwa; 'Wk t?uwa? (Gutiérrez & Osornio 2015: 66; Claesson 2016: 239)

Viegas Barros (2013a: 311) compares the root with Proto-Guaicuruan *a(?)lo 'termite house' (Viegas Barros 2013b, #119), which could be spurious.

Najlis 1984: 50 (**hlsewa*); Viegas Barros 2013a: 311 (*t?uwa)

### *-u(?) ~ *-ú(?) 'to throw, to push'; *n-u(?) ~ *n-ú(?) 'to throw oneself, to pass'

Ni [j]u? 'to throw, to push'; n-u? 'to throw oneself' (Seelwische 2016: 305) || PCh *[?i]<n>ú? 'to pass' > Ijw [?i]n^jú? / -nó?; I'w -nó 'to exit, to walk'; Mj [?i]n^jú? / -nó? (Carol 2014a: 95; Drayson 2009: 106; Gerzenstein 1983: 151; Carol 2018) || PW *[?i]<n>ú-APPL > LB [?i]ne-APPL; Vej -nu-APPL; 'Wk [?i]nú-APPL (Nercesian 2014: 177; Viñas Urquiza 1974: 69; Gutiérrez & Osornio 2015: 36; Claesson 2016: 279–282)

Najlis 1984: 13 (*nu 'to walk fast')

### *wák'a(?) (fruit); *wák'a-ju'k, *wák'a-jku-j^h (tree) 'guayacán (*Libidibia paraguariensis*)'

Mk wek'e-ju'k [1], wek'e-jkw-i (Gerzenstein 1999: 366) || PCh *wák'a-juk,

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*wák' a-*ku*-j^h > Ijw (h)wák^je-k [2]; I'w áe-*jik* ~ áʔa-*jik* ~ aʔi-*jík*, áe-si-? [3]; Mj ʔáʔa-*jik* [3] (Drayson 2009: 133; Gerzenstein 1983: 117; Scarpa 2010: 187; Carol 2018) || PW *wák^ja(?) ; *wák^ja-*juk*^w, *wák^ja-*k^ju*-j^h > LB *watfa-jek*^w, *watfa-tse-j* [4]; Vej wåtf'a-*juk* [5]; 'Wk wák^jåʔ; wák^jå-*juk* [5] (Nercesian 2014: 192; Gutiérrez & Osornio 2015: 19; Claesson 2016: 475)

[1] The preglottalized coda in the Maká suffix for tree names is attested elsewhere (Paraguay 2022: 7).

[2] The Iyojwa'aja' variant with *hw*- is attested in Drayson (2009: 133).

[3] In Iyo'awujwa' and Manjui, PCh *w was irregularly lost.

[4] In Lower Bermejeño, the glottalization in PW *k^j is unexpectedly lost. Spagarino (2008: 61) documents the unexpected form *wotfo-jek*^w.

[5] Vejoz and 'Weenhayek å is not the expected reflex of PW *a.

***wáqa(?)I 'to be fruitful, ready, ripe', CAUS *[ʔi]wáq(a)I-Vt**

Ni βakat / -βkat, CAUS [ji]βakt-it (Seelwische 2016: 311, 312; Campbell et al. 2020: 316, 390) || PCh *wáqat [1] > Ijw wákał; Mj wákał; CAUS *[ʔi]wáqahl-at > Ijw [ʔi]wákahl-<an-it>; Mj [ʔi]jákahl-at / -wákahl-at 'to bring up, to adopt' (Drayson 2009: 116, 156; Carol 2018) || PW *wáq'at [2] > LB *waq'at*; Vej *wak'at*; 'Wk *wáq'at*; CAUS *[ʔi]wáq'ł-at [2] > Vej -wakłat; 'Wk [ʔi]wáq'łat (Nercesian 2014: 50; Viñas Urquiza 1974: 79; Claesson 2016: 477, 478)

[1] The back vowel *á in Chorote (reconstructed based on the Iyojwa'aja' causative *[ʔi]wákahl-an-it) does not match the evidence from Nivaclé and Wichí.

[2] The glottalization in PW *q' is irregular.

***wátå(?)χ (fruit); *wáth(å-j)u'k 'palo flojo (*Albizia inundata* or *Enterolobium contortisiliquum*)'**

Ni βåtåx; βåtxå-*juk*, βåtxå-*ku*-j (Seelwische 2016: 372) || PCh *wáht<uk> > Ijw (h)wátok [1] 'Enterolobium contortisiliquum'; I'w wáhtok 'Albizia inundata'; Mj wáhtuk (-ij) 'Albizia inundata' (Drayson 2009: 133; Scarpa 2010: 187; Carol 2018) || PW *wátox^w > Southeastern (Salta) *watux*; 'Wk xʷátox^w [1] 'pacará' (Suárez 2014: 270; Claesson 2016: 164)

[1] Iyojwa'aja' and 'Weenhayek show reflexes of *ϕ instead of the expected *w.

***-wá'k 'bad mood'**

Mk -wak, -wah-*aj* (Gerzenstein 1999: 360) || Ni -βå'k (Seelwische 2016: 371)

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|| PCh *-wák > Ijw -wák (Drayson 2009: 127) || PW *-wák^w > LB -wok^w; Vej [te]wak^w-aje ‘to be in mad mood’; ’Wk -wák (Nercesian 2014: 161; Viñas Urquiza 1974: 75; Claesson 2016: 101)

[1]The Maká reflex unexpectedly lacks preglottalization in the coda in the singular form, as attested in the New Testament (e.g. Romans 9:22).

### *wäk ‘all, each other’

Mk we:k ‘all’ (Gerzenstein 1999: 365) || Ni =βatf ‘reciprocal’; -βatf ‘reflexive’ (Seelwische 2016: 311; Campbell et al. 2020: 172–173, 299) || PCh *(-)wék / *(-)wek-á?a... > Ijw wík^j<é?eji> ‘all’, <hi>wék ~ <hi>wék^j<e?e> ‘finally’; I’w k^j<ééhe> ‘all’ [1] (Carol 2014a: 83; Drayson 2009: 127, 157; Gerzenstein 1983: 142) || PW *-wek ‘each other, completely’ > LB =wek ‘each other’; Vej -wek ‘completely’; ’Wk -wek; *[ʔi]wek ‘to be together, close to each other’ > LB [ʔi]wek; ’Wk [ʔi]wek (Nercesian 2014: 247; Viñas Urquiza 1974: 80; Claesson 2016: 482)

[1]The loss of PCh *we- in Iyo’awujwa’ is irregular.

Viegas Barros (2013a: 319) compares it to the Proto-Guaicuruan “total quantifier” *-ʔawéʔke ~ *-t’awéʔke (VB 2013b, #720; a suffix found in demonstratives). Alternatively, it could be related to Proto-Guaicuruan *-ʔake ‘each other’ (Viegas Barros 2013b, #722).

Viegas Barros 2013a: 319 (*wek)

### *-wā’x, *-w(ä)x-áj^h ‘burrow; anus’ [1]

Ni -βaʃ, -βaf-aj^h ‘burrow’ (Seelwische 2016: 309) || PCh *-wéh; *-wéh-k’aló? (*-s) ‘buttock’ > Ijw -wéh ‘anus; container; cave’; -wé-k^jolo? (-s); I’w -wé-k’aló? (-s) ‘buttock’; Mj -wéh, -weh-éjh ‘anus’; -wé ʔel5? ~ -wé-’lo? ‘buttock’ (Drayson 2009: 127; Gerzenstein 1983: 169; Carol 2018) || PW *-wéχ, *-wh-áj^h; *-wéχ-k^jalo (*-s) ‘buttock’ > LB -weχ ‘back part, butt’; -wéχ-tʃ’alu ‘buttock’; Vej -weh ‘opening, anus’; -weh tʃ’alo (-s) [3] ‘buttock’; ’Wk -wéx, -m-áç; -wéx-k’alo? (-s) (Nercesian 2014: 153, 312; Braunstein 2009: 61; Viñas Urquiza 1974: 80; Claesson 2016: 102)

[1]The original semantics of this root must have been that of ‘hole, opening’. It is likely that PM *-wā’x is etymologically the second part of the opaque compounds *-tāwā’x ‘cavity, abdominal cavity’ and *kowā’x / *-kówā’x ‘hole’ (ChW).

[2]The term for ‘buttock’ in Chorote and Wichí is a compound of *-wā’x and *-k’alo(?) ~

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***-k'áló(?)** 'cheek'.

[3] Gutiérrez & Osornio (2015: 60) mistranscribe *tf* as *tf* in the Vejoz reflex.

Obviously related to Proto-Guaicuruan *-wV^g 'hole' (Viegas Barros 2013b, #644; cf. Viegas Barros 2013a: 311).

Najlis 1984: 34 (*wəhn)

***wé-APPL** 'be!'

Ni *βe-APPL* (Fabre 2014: 146) || PCh *wé-APPL > Ijw *wé-APPL* (Carol 2014b)

***wije?** 'cactus sp. (*Bromelia serra*)'

Ni *βije?* ~ *jije?* (-k) [1] (Seelwische 2016: 363, 386) || PCh *wijé? > Ijw (*h*)wiji? [2]; I'w *f'iji?* ~ *wiji?* [2]; Mj *wiji?* (Drayson 2009: 157; Gerzenstein 1983: 130; Scarpa 2010: 190; Carol 2018) || PW *wuje(?) [3] > LB *huje* [4]; Southeastern (Salta) *wije* [5]; Vej *wuje*; 'Wk *wuje?* (Spagarino 2008: 60; Suárez 2014: 223–224; Gutiérrez & Osornio 2015: 19; Claesson 2016: 115)

[1] The regular reflex *βije?* (-k) is used in the Chishamnee Lhavos dialect of Nivaclé; in other dialects, the irregular variant with *j*- is attested.

[2] In Iyojwa'aja' and Iyo'awujwa', the initial consonant has an irregular variant *hw/fw*. The absence of a final *?* in Gerzenstein's (1983) attestation of the Iyo'awujwa' reflex as *f'iji* must be a mistranscription.

[3] The Wichí reflex is entirely irregular: the initial consonant is unexpectedly glottalized, and the vowel of the first syllable is reflected as PW *u. The term may have been influenced by PW *wujés 'guinea pig'.

[4] The Lower Bermejeno reflex is entirely irregular. One would expect *wuje.

[5] The form *wije* is attested by Suárez (2014), whose ethnobotanical fieldwork was carried out in Salta with speakers of the Southeastern dialect of Wichí. Although it formally matches the Nivaclé and Chorote cognates (it could go back to PW *wije?), it should probably be considered a slightly irregular reflex of PW *wuje? (*wuje would be expected). Note that Suárez does not represent either glottalization in sonorants or word-final glottal stops in her transcription system, so the only irregularity is *i* instead of the expected *e.

Najlis 1984: 48 (*hwijéj)

***-whá'ja?** 'spouse'; ***[t]wha'já-?** 'to marry' [1]

Mk -whe'je? (-l ~ -ts); [te]whe'je-j [1] (Gerzenstein 1999: 164) || Ni -xa'ja (-s)

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‘spouse (before one has children)’; *[t]xa’ja-^j* (Fabre 2014: 133; Seelwische 2016: 147, 271) || PCh *-hwá’ja? > Ijw -hwá’je-hwa ‘co-sibling-in-law’; *[t^o]hwá’jé<j> ‘to marry’ > Ijw *[ti]hwá’ji* [2]; I’w -f^wají [2 3]; Mj *[ti]hwá’jíj?* (Carol 2014b; Drayson 2009: 151; Gerzenstein 1983: 128; Carol 2018) || PW *[t]wháje<j> [3] ‘to marry’ > LB *[t(a)]máej-*; ’Wk *[t(a)]máje?* [4] (Nercesian 2014: 209, 272, 296; Claesson 2016: 388)

[1] The glottalized palatal approximant in the Maká reflex is attested in the New Testament (e.g. Luke 2:36; Romans 16:3).

[2] The word-final *j* is unexpectedly missing in Iyojwa’aja’ and Iyo’awujwa’.

[3] Wichí has irregularly lost the glottalization in PM *^j > PW *j. In Iyo’awujwa’, the corresponding consonant is also attested as *j*, but this is likely a mistranscription.

[4] The expected reflex in ‘Weenhayek would actually be *[t(a)]májej?.

***[ji]wó ‘to do (light verb)’; *wóʔ-oj^h / *wó-...-ej^h ‘to look for’**

Mk *woʔ-oj* / *wo-...-ij* > ‘to look for’ (Gerzenstein 1999: 380) || Ni *βoʔ<oj>* ‘to look for’ (Seelwische 2016: 366) || PCh *[ʔi]wó / *-wó ‘to do, to say so’, *[ʔi]wóʔ-oj^h / *-wóʔ-oj^h / *-wó-...-ej^h ‘to say, to want’ > Ijw *[ʔi]jó* / -wó; Mj *[ʔi]jó* / -wó, *[ʔi]jóʔ-oj* / -wóʔ-oj ‘to say, to want’ (Carol 2014a: 78; Drayson 2009: 116; Carol 2018) || PW *[ʔi]wó- > LB *[ʔi]wu-*; ’Wk *[ʔi]wó-* (Nercesian 2014: 155; Braunstein 2009: 46; Claesson 2016: 486–508)

Viegas Barros (2013a: 305) compares the Mataguayan verb for ‘to look for’ with Proto-Guaicuruan *-awiʔa ‘to hunt’ (absent from Viegas Barros 2013b), which is likely a spurious comparison.

Viegas Barros 2013a: 305 (*-woʔj) ‘to look for’

***-wó (*-ts) ‘worm’; 3 *ɿ-wó ‘mythological snake’**

Ni -βoʔ (-s); *la-βoʔ* (Seelwische 2016: 166, 363) || PCh *-wóʔ (*-s) > Ijw <ʔa>wóʔ (-s); I’w/Mj -wóʔ (-s) (Drayson 2009: 95; Gerzenstein 1983: 170; Carol 2018) || PW *-wó (*-s); *ɿ-wó ‘mythological snake; rainbow’ > LB *lawu*; Vej <i>wo ‘worm’; *le-wo* [1]; ’Wk -woʔ ‘wart’; <ʔi>wó-s ‘worms’; *la-wóʔ* (-lis ~ -ɿajis) (Suárez 2014: 77; Nercesian 2014: 47; Viñas Urquiza 1974: 61; Gutiérrez

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& Osornio 2015: 43; Claesson 2016: 43, 103, 222)

[1] The noun is misprinted as *le-we* in Gutiérrez & Osornio (2015: 43).

Gutiérrez 2015b: 77

### *[*ji*]wo[~]*m* ‘to throw’

Mk [i]wu[~]*m* ‘to push, to throw’ [1] (Gerzenstein 1999: 380–381) || PCh *[?i]wóm-APPL ‘to add’ > Ijw/Mj [?i]jóm-APPL / -wóm-APPL (Drayson 2009: 116; Carol 2018) || PW *[?i]wo[~]*m* > LB [?i]wum-*ti* ‘to share’; Vej -wom ‘to distribute’; ’Wk [?i]wo[~]*m* ‘to throw, to abandon’ (Nercesian 2014: 402; Viñas Urquiza 1974: 81; Gutiérrez & Osornio 2015: 37; Claesson 2016: 496)

[1] The glottalized coda in the Maká reflex is attested in the New Testament (e.g. Luke 6:42; Matthew 7:5).

### *wósitseχ (fruit); *wósits-*u*[~]*k*, *wósits(*e*)-*ku*-*j^h* ‘*Prosopis nigra*’

Mk ositsax; osits-*u*[~]*k*, osits-*ik-wi* [1 2] (Gerzenstein 1999: 284) || Ni βaitsex; βaitse-juk, βaitse-ku-j [3] (Seelwische 2016: 313) || PCh *wósis-uk, *wósis-ku-*j*[?] > Ijw ?is^jóxs^jo; ?is^jóxs-*ok*, ?is^jóxs-*ok-is* [2 4]; I^jw wóxisis^j-uk, wóxisis-*ki*-?; Mj wóxfis^j-uk ~ wóxfus^j-uk [5] (Drayson 2009: 111; Gerzenstein 1983: 172; Carol 2018) || PW *wósotsax; *wósots-uk^w [5] > LB wusutsax, wusuts-ek^w [6]; Vej wosotsax, wosots-uk; ’Wk wósotsax; wósots-uk (Spagarino 2008: 60; Viñas Urquiza 1974: 81; Gutiérrez & Osornio 2015: 19; Claesson 2016: 503)

[1] The absence of preglottalization in the term for the fruit in Maká is attested in a narrative by Unu’ueiki Patricia (2011: 17). The preglottalized coda in the Maká suffix for tree names is attested elsewhere (Paraguay 2022: 7).

[2] The loss of **w* in Maká and Iyojwa’aja’ is irregular.

[3] The Nivaclé reflex is irregular: one would expect *βositsex and not βaitsex.

[4] The Iyojwa’aja’ reflex shows an irregular metathesis of **o* and **i*. The plural form is also not etymological.

[5] In Wichí and optionally in Manjui, the vowel of the second syllable irregularly becomes rounded.

[6] Spagarino (2008: 60) actually gives wusutasax, wusuts-ewk, which look like typos.

### *-wo[?] ~ *-wó[?] (*-ts) ‘expert, professional, owner; related to’

Mk -wo[?] (-ts) ‘object that serves for X’ (Gerzenstein 1994: 221) || Ni -βo[?] (-s)

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(Seelwische 2016: 166, 363) || PCh *-wóʔ (*-s) > Ijw -wó (-s) [1]; Mj -wóʔ (-s) (Carol 2014a: 79, fn. 6; Drayson 2009: 127; Carol 2018) || PW *-woʔ ~ *-wóʔ (-s) > LB -wu (-s); Vej -wo; 'Wk -woʔ ~ -wó (-s) (Nercesian 2014: 199; Viñas Urquiza 1974: 81; Gutiérrez & Osornio 2015: 51; Claesson 2016: 103)

[1] The absence of a word-final glottal stop in Drayson's (2009) attestation of this noun must be a mistranscription.

***-w(t)s'é (*-l) 'belly'**

Ni -βts'ē? (-k) (Seelwische 2016: 338) || PCh *-ts'ē? (*-l) > Ijw -ts'ē? (-l); I'w -tsé? (-l); Mj -ts'ē? (-l) (Drayson 2009: 126; Gerzenstein 1983: 167; Carol 2018) || PW *-ts'ē (*-l^h) > LB/Vej -ts'ē (-l); 'Wk -ts'ē? (-l) (Nercesian 2014: 147, 191; Viñas Urquiza 1974: 56; Gutiérrez & Osornio 2015: 60, 61; Claesson 2016: 101)

***wVχ, *wV-ts [1 2] 'large, fat'**

Ni [t̪a]βå'x 'to be of a size' (Seelwische 2016: 371) || PCh *wúh, *wú-s > Ijw wúh, wú-s; I'w (-)wúh; Mj wúh, wú-s (Drayson 2009: 157; Gerzenstein 1983: 172; Carol 2018) || PW *wúx^w, *wú-s > LB wef^w; Vej wúh; 'Wk wúx^w, wú-s (Nercesian 2014: 357; Viñas Urquiza 1974: 82; Claesson 2016: 509)

[1] The vowel cannot be securely reconstructed at this time. Nivaclé points to PM *å, Chorote and Wichí to *u. The correspondence is similar to the one in PM *-wV^h ~ *-wV^h 'to climb'.

[2] The plural form is reconstructed based on the evidence of Iyo'awujwa', Manjui, and Wichí. It is thus technically reconstructible only for Proto-Chorote-Wichí.

Fabre (2014: 308) compares the Mataguayan root with Enlhet *wah* 'big' (Unruh & Kalisch 1997: 659).

***wátshan ~ *wátsxan 'to be healthy, alive'**

Ni βatsxan 'to be healthy' (Seelwische 2016: 357) || PCh *wásan [1] 'to be alive' > Ijw 'wáxsa'n; Mj 'wáxsa'n 'to be green, living (plant)' (Drayson 2009: 163; Carol 2018) || PW *wátshan 'to be green, blue, alive' > LB wats^han [2 3]; Vej 'wats^han ~ 'watsan [3 4]; 'Wk 'wáts^han (Nercesian 2014: 106, 262; Gutiérrez & Osornio 2015: 8, 42; Claesson 2016: 106)

[1] The glottalization of the final consonant in Chorote is irregular (both Nivaclé and Wichí point to its absence in PM). A superficially similar yet distinct root is PCh *-wáts'oh 'green, raw' > Ijw -wáts'o 'green, alive'; I'w -wáts'o (probably a mistranscription for -wats'o) 'green'; Mj [ʔi]jéts'o-one / -wáts'o-one 'to eat raw' (Drayson 2009: 127; Gerzenstein 1983: 168; Carol

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2018). In principle, it is conceivable that  $^{*}\text{-wáts}'\text{oh}$  and  $^{*}\text{wása}'\text{n}$  ultimately go back to  $^{*}\text{wáts-?o}(\text{?})\text{X}$  (with irregular dissimilation) and  $^{*}\text{-wáts-han}$ .

[2] The absence of glottalization in the initial consonant in Lower Bermejeño is irregular.

[3] Both in Lower Bermejeño (Braunstein 2009: 60) and in Vejoz (Viñas Urquiza 1974: 79; Fernández Garay 2006–2007: 212) this form has been documented as *watsan*, which could be a mistranscription.

[4] Gutiérrez & Osornio (2015: 8, 42) attest both the expected form  $^{*}\text{wats}'\text{an}$  and the apparently irregular  $^{*}\text{watsan}$ .

Najlis 1984: 28 ( $^{*}\text{wátshan}$ )

### $^{*}\text{wánXåtlåχ}$ , $^{*}\text{wánXåtlå-ts}$ ‘rhea’

Mk *waatłax* (-*its* ~ *waale-ts*) [1] (Gerzenstein 1999: 360; Paraguay 2022: 20) || Ni *βánxåtlåχ*, *βánxåtlå-s* (Seelwische 2016: 370) || PCh  $^{*}\text{wánhlåh}$  ( $^{*}\text{-ås}$  ~  $^{*}\text{wánhlå-s}$ ) [2 3] > Ijw  $^{*}\text{wánhla}$  (-*has* ~ -*s*); I'w  $^{*}\text{ámhla}$  (-*s*) [4]; Mj  $^{*}\text{ámhla}$  (-*as*) [4] (Drayson 2009: 163; Gerzenstein 1983: 121; Carol 2018) || PW  $^{*}\text{wá}'\text{nłåχ}$ ,  $^{*}\text{wá}'\text{nłå-s}$  [2 5] > LB *wonłox*; 'Wk  $^{*}\text{wá}'\text{(n)łåx}$ ,  $^{*}\text{wá}'\text{(n)łå-s}$  (Nercesian 2014: 170; Claesson 2016: 475)

[1] The loss of PM  $^{*}\text{nX}$  in Maká is unprecedented. The plural variant *waale-ts* is in all likelihood innovative, its shape having been influenced by the Maká nouns whose PM etymon ended of  $^{*}\text{-aχ}$  (plural  $^{*}\text{-a-ts}$ ), which regularly yielded Maká  $^{*}\text{-aχ}$ , plural  $^{*}\text{-e-ts}$ . The word-initial sonorant is attested as non-glottalized in the sources that distinguish between plain and glottalized sonorants (Paraguay 2022: 20).

[2] The vowel of the medial syllable was irregularly lost in Chorote and Wichí.

[3] The plural variant  $^{*}\text{wánhlåh-ås}$  in Chorote is likely innovative. The original plural is preserved as a variant in Iyojwa'ja'.

[4] The Iyo'awujwa' and Manjui reflexes are irregular; one would expect  $^{*}\text{wánhla}$ ,  $^{*}\text{wánhlåh-as}$ .

[4] In Wichí, the preglottalization has apparently moved from the initial segment to  $^{*}\text{n}$  and was later lost in Lower Bermejeño and retained in 'Weenhayek (with an optional loss of the nasal consonant).

Najlis 1984: 42 ( $^{*}\text{wahnhlå}$ ); Viegas Barros 2002: 144 ( $^{*}\text{wam(xa)łłax}$ )

### $^{*}\text{wäle}'\text{k}$ ‘to walk’; $^{*}\text{wälke-}'\text{mat}$ ‘to limp’

Mk  $^{*}\text{-i>wélik-}'\text{met}$  [1] ‘to limp’ (Gerzenstein 1999: 216) || Ni *βaklē}'tf* ‘to walk’, *βaktse-mat* ‘to limp’ (Seelwische 2016: 312) || PCh  $^{*}[i]'$ *wélek* > Mj  $^{*}[i]'$ *jilek* /  $^{*}\text{-wélek}$  (Carol 2018) || PW  $^{*}\text{weleq}$  > LB  $^{*}\text{wileq}$  [2]; Vej  $^{*}\text{welek}$  [3]; 'Wk  $^{*}\text{welek}$  ‘to camp’ (Nercesian 2014: 311; Gutiérrez & Osornio 2015: 37; Claesson 2016: 109)

[1] The preglottalization in the root-initial consonant in Maká is inferred based on the Chorote

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and Wichí cognates; the suffix is attested with a glottalized nasal, for example, in the New Testament (*eqfe-’met* ‘ill’; Revelations 8:12).

[2] The vowel *i* in the Lower Bermejeño reflex, as attested by Nercesian (2014: 311), is entirely unexpected. The etymological vowel *e* is documented in Braunstein (2009: 61) *welek-łi* ‘to walk’, but that source fails to transcribe the glottalization in the stem-initial consonant.

[3] Viñas Urquiza (1974: 80) documents the verb as *welek* ‘to travel’, with no glottalization in *w*.

Obviously related to Proto-Guaicuruan *-awalek ‘to walk’ (Viegas Barros 2013b, #163; cf. Viegas Barros 2013a: 306).

Viegas Barros 2013a: 306 (*-welek)

*[*ji*]’wān ‘to see’

Mk [ji]’wen (Gerzenstein 1999: 366; Braunstein 1987: 203) || Ni [ji]’βan (Seelwische 2016: 314) || PCh *[i]’wén > Ijw [i]’wí’n / -’wé’n; I’w [i]’jín / -’wén; Mj [i]’jín / -’wén (Carol 2014a: 77; Drayson 2009: 117; Gerzenstein 1983: 44, 169; Carol 2018) || PW *[hi]’wén > LB [hi]’wen ‘to see; to have’; Vej [hi]’wen [1]; ’Wk [hi]’wéñ (Nercesian 2014: 172, fn. 31, 339; Gutiérrez & Osornio 2015: 41; Claesson 2016: 110)

[1] The Vejoz root is attested as *-wen* in Viñas Urquiza (1974: 80) and Fernández Garay (2006–2007: 212).

Obviously related to Proto-Guaicuruan *-wen ‘to see; to look’ (Viegas Barros 2013b, #626; cf. Viegas Barros 2013a: 306).

Viegas Barros 2013a: 306 (*-wen)

*-’wät ‘place’

Mk -’wet [1] (-its) (Gerzenstein 1994: 221) || Ni -’βat, -βt-es (Fabre 2014: 113–114) || PCh *-’wét > Ijw -’wét (-is); I’w -wét (-is); Mj -’wét (-es) (Drayson 2009: 127; Gerzenstein 1983: 169; Carol 2018) || PW *-’wet > LB/Vej -’wet (-es) [2] ‘place; house’; ’Wk -’wet (Nercesian 2014: 153, 154, 191; Gutiérrez & Osornio 2015: 52; Claesson 2016: 56)

[1] The Maká reflex functions as a derivational suffix. The glottalization in its initial sonorant is attested in the New Testament in forms such as *t-’exinqa-’wet* ‘field’ (Mark 13:16) or *te-wenq’en-he-’wet* ‘her/his plantation’ (Matthew 13:3), though not in *wit-aqha-wet* ‘market’ (John 2:16).

[2] The Vejoz root is attested as *-wet* in Viñas Urquiza (1974: 80) and Fernández Garay (2006–2007: 212, 219).

Viegas Barros (2013a: 318) compares this root to the Proto-Guaicuruan root for ‘home’ (-’wat’á ‘home, camp, family’; Viegas Barros 2013b, #642).

Najlis 1984: 48 (*wet*); Viegas Barros 2013a: 319 (*-wet)

*-’włi? ~ *-’włi?, *-’włi-ts ‘rib’

Mk -’wetli? (-ts) [1] (Gerzenstein 1999: 366) || Ni -’βłi / -βłi? (-s) (Seelwische 2016: 336) || PCh *-hłi<s> [2], *-hłis-is > Ijw -hłés, -hłés-is; I’w -hłés, -hłés-is; Mj -hłéis, -hłéif-is (Drayson 2009: 119; Gerzenstein 1983: 174; Carol 2018)

[1] The glottalization in the root-initial sonorant is attested in Unu’unciki Patricia (2011: 17)

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and in the New Testament (Acts 12:7; John 19:34; John 20:20).

[2] The PM plural form has been reanalyzed as singular in Chorote.

### *-²wo, *-²wó-*l* 'neck'

Mk -wo<nxe?> (-l ~ -ts) [1] (Gerzenstein 1999: 379) || Ni -²βo? (-k) [2] 'neck, nape' (Campbell et al. 2020: 80) || PCh *-²wó? (*-l) > Ijw -²wó? (-l) (Drayson 2009: 128) || PW *-²wo, *-²wó-*l^h* > LB -²wu (-j) [3]; 'Wk -²wo [4]; 'Wk -²wo? (-l) (Nercesian 2014: 163; Gutiérrez & Osornio 2015: 60; Claesson 2016: 57)

[1] The formative -nxe? in Maká does not appear to be morphologically segmentable, but it is also found in -fonxe? 'ankle' and other body-part terms. The root-initial consonant unexpectedly lacks glottalization, as attested in the New Testament (Luke 15:5).

[2] Seelwische (2016: 353) documents the initial consonant of this stem as  $\beta$ .

[3] The Lower Bermejeño plural suffix does not match the evidence from Nivaclé and 'Ween-hayek.

[4] The Vejoz root is attested as -wo in Viñas Urquiza (1974: 81).

Najlis 1984: 9, 18 (*wo, 2 *a-wo); Gutiérrez 2015b: 255

### *(-)²wo *j* 'blood'

Ni  $\beta\text{o}^j$ , - $\beta\text{o}j\text{-ej}$  [1] (Seelwische 2016: 366, 368; Campbell et al. 2020: 71, 515) || PCh *(-)²wój-is (*plurália tantum*) > Ijw -²wój-is; I'w -²wój-is, Mj (-)wój-is (Drayson 2009: 128; Gerzenstein 1983: 170; Carol 2018) || PW *²wój-is / *-²wój-is (*plurália tantum*) > LB -²wuj-is ~ -²wij-is [2]; Vej -woj-is ~ -²woj-s; 'Wk -²wój-is / ²woj-is (Nercesian 2014: 48, 152, 164; Viñas Urquiza 1974: 82; Gutiérrez & Osornio 2015: 69; Claesson 2016: 54, 114)

[1] Seelwische (2016: 366, 368) documents the initial consonant as  $\beta$  not only in the singular (absolute) form, but also in the plural (relational) form of this stem.

[2] The variants -²wij-is ~ -wuj-is, attested in Lower Bermejeño Wichí, are irregular.

### *²wósá(?)*q* ~ *²wósá(?)*k* 'butterfly'

Ni  $\beta\text{osák}$ ,  $\beta\text{osákl-is} \sim \beta\text{osákl-ij}$  (ShL  $\beta\text{osok}$ ,  $\beta\text{osokl-is}$ ) [1] (Stell 1987: 125; Gutiérrez 2015b: 119; Seelwische 2016: 367; Campbell et al. 2020: 99) || PCh *²wósak > Ijw ²wóxsak (-is) (Drayson 2009: 163)

[1] The Nivaclé plural form must be an analogical development because it points to a stem-final **l* in PM, which is incompatible with the Chorote datum. Alternatively, the Iyojwa'aja' word could be a Nivaclé loan.

Fabre (2014: 308) compares the Nivaclé reflex to Enlhet/Enxet/Angaité/Sanapaná/Guaná *seleklek* 'butterfly' (Unruh & Kalisch 1997: 603; Wheeler 2020: 23, 92; Elliott 2021: 559; Kalisch 2023: 184), which is obviously a spurious comparison.

Najlis 1984: 45 (*wohsák)

### *-²wut ~ *-²wút (fem. *-²wút-e?) riding animal

Mk -²wut (-its) (fem. -²wut-i? (-j)) [1] (Gerzenstein 1999: 382) || PW *-²wút<e> (*-j^h) [2] > LB [?i]wu-²wete-*j*-ato ride an animal; Vejoz or Guisnay -²wute (-j) 'mount, bicycle'; 'Wk -²wúte? (Nercesian 2014: 267; Lunt 2016: 109; Claesson 2016: 57)

[2] The preglottalization in ²w is attested in the New Testament (e.g. Luke 10:34).

[3] The Wichí reflex continues the erstwhile feminine form. It is formally possible to in-

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clude PW *-²wut, *-²wút-es ‘pole, log, bar, crossbar, crossbeam, handle’ > Vejoz or Guisnay -²wut(-es); ’Wk -²wut, -²wút-es (Lunt 2016: 109; Claesson 2016: 57), which would reflect the erstwhile masculine form, but this runs into semantic difficulties. If these etyma are shown to be related, the PM masculine form should be reconstructed with an unaccented vowel.

***-²wV²I ~ *-²wV²I [1] ‘to climb’**

Mk we²I (Gerzenstein 1999: 366; Paraguay 2022: 3) || Ni βā²I (Seelwische 2016: 371) || PCh *[?i]²wútl > Ijw [?i]²jútl / -²wútl; I’w -wúl; Mj [?i]²jútl / -²wútl (Drayson 2009: 118; Gerzenstein 1983: 172; Carol 2018) || PW *[t]²wut ~ *[t]²wút > LB [t(a)]²wet; Vej -wut-o; ’Wk [t(a)]²wut ~ [t(a)]²wút (Nercesian 2014: 128, 258; Viñas Urquiza 1974: 82; Claesson 2016: 347)

[1] The vowel cannot be securely reconstructed at this time. Maká points to PM *a, Nivaclé to *å, Chorote and Wichí to *u. The correspondence is similar to the one in PM *wVx ‘large’.

Najlis 1984: 24 (*wulq); Gutiérrez 2015b: 254

***-xa, *-xá-l ‘price’**

Ni -fa?(-k) (Seelwische 2016: 238) || PW *-ha, *-há-l^h > LB -ha, ’Wk -ha?, -há-l^h (Nercesian 2014: 273, 291; Claesson 2016: 57)

***...xa²χ, *...xáh-aj^h [1] ~ *Xon-xa²χ, *Xon-xáh-aj^h ‘night’**

Mk <na>xa²χ [2], <na>xa-j (Gerzenstein 1999: 266) || Ni <xon>fa²x ‘mid-night’, <xon>fax-aj ‘every night’ (Seelwische 2016: 150) || PCh *<?a>h<n>áh ~ *<?å>h<n>áh (*-as) [3] > Ijw ?ahnáh (-as); I’w ahnáh, ahná-as; Mj ?ahnáh, ?ahná-as (Carol 2014a: 91; Drayson 2009: 93; Gerzenstein 1983: 124; Carol 2018) || PW *<hon>ax, *<hon>áh-aç ‘afternoon, night’ [4] > LB hunax ‘afternoon’; Vej honax, honah-aj ‘afternoon’; ’Wk honax, honáh-aç; *honá<tsi> ‘night’ > LB hunatsi; Vej honatsi; ’Wk honátsi?(-s) (Nercesian 2014: 344; Viñas Urquiza 1974: 57; Gutiérrez & Osornio 2015: 43, 70; Claesson 2016: 153)

[1] We speculate that this was a suffix in PM. In individual languages, it is attached to otherwise unattested roots: Maká na-, Nivaclé xon-, Chorote *?an- or *?ån-, and Wichí *hon- (the latter two prefixes are also found in the word for ‘earth’). Chorote *?an- ~ *?ån- might be cognate with Nivaclé xon-, Wichí *hon-.

[2] The preglottalized coda in the Maká singular form is attested in the New Testament (e.g.

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John 11:10).

[3] The Chorote plural form is non-etymological.

[4] The development PM *nx > PW *n is irregular.

Najlis 1984: 10, 27, 41 (*hnahn)

### *-xājk'u(?) (*-l) 'egg'

Ni -sajk'u (-k) (Seelwische 2016: 357) || PCh 3 *hl-éjk'u? (*-l) > Ijw 3 hl-éts'ju? (-l); I'w 3 l-é'k'ju? (-l); Mj 3 hl-é?ju? (-l) 'egg, pulp, tree heart' (Drayson 2009: 131; Gerzenstein 1983: 146; Carol 2018) || PW *-t-ík'ju? (*-l^h) [1] > LB t-ef'e (-t); Vej -t-it'ju; 'Wk -t-ík'ju? (-t) (Nercesian 2014: 191; Viñas Urquiza 1974: 66; Claesson 2016: 75)

[1] It is uncertain whether PW *i is the regular outcome of PM *äj.

**Rejected:** Despite a superficial similarity to the aforementioned forms, Maká tih*i*? (-j) shows no regular correspondence with PM *xéjk'u (*-l), whose expected reflex in Maká would be *-xijk'u (*-l).

Najlis 1984: 22, 48 (*hlec'u); Campbell & Grondona 2007: 16

### *-xāte'k, *-xāthe-j^h [1] 'head'

Ni -sate'tʃ, -satxe-s (ShL -satitʃ, -satxi-s) (Seelwische 2016: 357) || PCh *-hétek, *-héhte-j^h > Ijw -hétik, -héte-^l [2]; I'w -hétik, -héte-j [2]; Mj -hétek, -héhte-j (Carol 2014a: 90, 98; Gerzenstein 1983: 146; Carol 2018) || PW *-t-éteq, *-t-éthe-j^h > LB -t-eteq, -t-et^he-j; Vej -t-eteq; 'Wk -t-étek, -t-ét^he-ç (Nercesian 2014: 166, 192; Viñas Urquiza 1974: 66; Gutiérrez & Osornio 2015: 60, 61; Fernández Garay 2006–2007: 217; Claesson 2016: 74, 204, 300)

[1] The plural form is reconstructed based on the evidence of Iyo'awujwa', Manjui, and Wichí. It is thus technically reconstructible only for Proto-Chorote-Wichí.

[2] The vowel i in the singular form in Iyojwa'aja' and Iyo'awujwa' is not etymological, as is the choice of the suffix in the plural form in Iyojwa'aja'.

Fabre (2014: 308) compares the Mataguayan root with the Enlhet–Enenlhet term for 'head': Enlhet -pa?tek / -ka:tek, Enxet -pa:tek / -qa:tek, Enenlhet-Toba -patek / -qatek, Sanapaná -patek / -katek, Angaité -pa?tek, Guaná -pa?tek / -(p)qatek (Unruh & Kalisch 1997: 144; Unruh et al. 2003: 186, 308; Gomes 2012: 168, 173; Wheeler 2020: 92; Elliott 2021: 125, 677; Kalisch 2023: 84). The root is also similar to Proto-Guaicuruan *-t'ek 'hair; to brush one's hair', (?) *-(a)t'ek

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‘head, hair’ (Viegas Barros 2013b, #558).

Najlis 1984: 23, 34, 48 (**ethe*, PL **ethe-j* ~ **ethe-s*); Viegas Barros 2002: 142 (*-*yetik*); Campbell & Grondona 2007: 16, 22; Fabre 2014: 308; Gutiérrez 2015b: 64

### **xéjå?* (*-*l*) ‘bat’

Mk *xaja?* (-*l*) [1] (Gerzenstein 1999: 386; Paraguay 2022: 7) || Ni *sejå* (-*k*) [2] (Seelwische 2016: 240) || PCh **<?a>héja?* (*-*l*) [3] > Ijw *?ehéje?* (-*jis*) [4]; I’w *ahéje?* (-*l*); Mj *?ahéje?* (-*l*) (Drayson 2009: 96; Gerzenstein 1983: 123; Carol 2018)

[1] The reflex of the vowel of the initial syllable in Maká is entirely irregular.

[2] In the Yita’ Lhavos dialect of Nivaclé, the vowel of the initial syllable is irregularly raised to *i*.

[3] In Chorote, an element **?a-* of unclear origin was appended to the root, and PM **å* is unexpectedly reflected as **a*.

[4] The Iyojwa’aja’ plural form is non-etymological.

Viegas Barros 2002: 142 (**(V)xejå?*)

### **xélå*(*’*)*X*₁₂ (fruit), **xélå-ju’k* (tree) ‘tree sp.’

Ni *sekłåx* ‘sutia fruit (*Solanaceae*)’; *sekłå-juk*, *sekłå-ku-j* ‘*Prosopis* sp. tree’ (Seelwische 2016: 240) || PCh **hél<ek>*, **hél<ke>-j^h* ‘*Tabebuia nodosa*’ > Ijw *hélik*, *hélik^j-et* ~ *hélki-?* [1]; I’w *hélik*, *hélki-?*; Mj *hélek*, *hélki-j* (Drayson 2009: 119; Gerzenstein 1983: 173; Carol 2018) || PW **hél<ek^w>* > LB *helek^w*; Vej *helek*; ’Wk *hélek* (Spagarino 2008: 59; Suárez 2014: 205; Viñas Urquiza 1974: 57; Claesson 2016: 148)

[1] The final glottal stop in Ijw *hélki-?* is unexpected.

### *-*xíj^h* ‘recipient’

Mk *-xij* (Gerzenstein 1994: 221) || Ni *-sij* / *-xij* (after *V_[+back](C_[+grave])*) (-*is*) (Fabre 2014: 99–100; Campbell et al. 2020: 129) || PW *-*híh*, *-*hí-s* > LB *-hi* (-*s*); ’Wk *-híh*, *-hí-s* (Nercesian 2014: 215, 393; Claesson 2016: 58)

Viegas Barros (2013a: 316) compares it to the Proto-Guaicuruan locative suffix *-*’gi* (Viegas

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Barros 2013b, #790).

Viegas Barros 2002: 143 (*-xij); Viegas Barros 2013a: 316 (*-hij)

### *xnáqha(’)j (*-its) ‘fog’

Ni *snakxaj* ~ *snakxaj* (-is) (Stell 1987: 110; Seelwische 2016: 244) || PCh **iihnáhqaj*(*)-is [1] > Mj *ʔihñ(̥)éhkaj?*(-is) (Hunt 1994)

[1] It is not clear why Chorote reflects PM *xn- as *iihn- here (cf. the reflex *n- in PM *xnáwāp).

**Rejected:** despite superficial similarity, Maká *xunkhaj* ‘fog’ (Gerzenstein 1999: 393) and Iyojwa’aja’ *sináka?* ‘fog’ (Drayson 2009: 145) show no regular correspondence with PM *xnáqha(j). They must have been borrowed from Nivaclé *snakxaj*, just like Mk *xunkhaj* < Ni *sklākxaj* ~ *sklākxaj* ‘wild cat’. A problematic fact for our hypothesis is that the Iyojwa’aja’ (unlike Iyo’awujwa’ and Manjui) have not been demonstrably in contact with the Nivaclé until recently. Alternatively, one could view the Iyojwa’aja’ form as inherited and reconstruct PM *snáqha(j), in which case the Manjui form would have to be explained as an early loan from Nivaclé (however, it would be more difficult to account for its phonological adaptation pattern than if the Manjui datum is considered cognate with the Nivaclé one).

Najlis 1984: 12, 25, 38 (*snaqaj); Campbell & Grondona 2007: 15

### *xnáwāp ‘spring’ [1]

Mk *xinawa’p*, *xinawap-its* (Gerzenstein 1999: 389; Paraguay 2020: 23–25) || Ni *snáβáp* ~ *snáβáp* (Gutiérrez 2015b: 64; Seelwische 2016: 244) || PCh **náwop* [2] > Ijw/I’w *náwop* (Drayson 2009: 140; Gerzenstein 1983: 150) || PW **náwop* [2] > LB *nawup*; Vej *nawop* ~ *inawop*; ’Wk *ʔináwop* (Nercesian 2014: 47; Viñas Urquiza 1974: 67; Gutiérrez & Osornio 2015: 43; Claesson 2016: 32)

[1] This noun is obviously related to PM *-áwā ‘flower’ and literally means ‘flower season’.

[2] The raising of PM *á to PCh/PW *o is not known to be regular.

Najlis 1984: 33 (*hnawop); Viegas Barros 2002: 142 (*xinawap); Gutiérrez 2015b: 64

### *xókhajex ‘Muscovy duck’

Mk *xokhejaχ* [1], *xokheji-ts* (Gerzenstein 1999: 390; Paraguay 2022: 5) || Ni *xokxajex* (-is) ‘Muscovy duck; canoe’ (Seelwische 2016: 149) || PCh **qa-jáh*(*-Vs) [2] > I’w *kajé(-es)*; Mj *kajéh*, *kajé-es* ‘Muscovy duck; canoe’ (Gerzenstein 1983: 136; Carol 2018) || PW **xʷóq’jaχ* [3] > LB *fʷu’jaχ* [4]; ’Wk *xʷóq’jax*; **xʷóq’je-taχ* [3] > Vej *hʷok(j)e-tah* (Spagarino et al. 2013 [2011]; Gutiérrez &

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Osornio 2015: 20; Claesson 2016: 174)

[1] The absence of preglottalization in Maká is attested in a narrative by Unu'uneiki Patricia (2011: 17), as well as in Braunstein (1987: 67).

[2] The Chorote reflex is irregular. One would expect PCh ***hóhqajah*.

[3] The Wichí reflex is irregular. One would expect PW ***xókhajax*.

[4] Nercesian (2014: 51) mistranscribes the Lower Bermejeño reflex as *f'ujay*.

Najlis 1984: 44 (**hwokajehn*)

****xpå'k ~ *xpå'k 'straw'***

Mk *chupak* (Beliaeff 1931: 62), *xupek* (*Imperata sp.*) [1] (Braunstein 1987: 83) || Ni *xpå'k*, *xpåk-uj* (Seelwische 2016: 156) || PCh **ʔipåk* > Ijw *ʔip'ák*, *ʔip'ák-et*; I'w *ip'ék* (Drayson 2009: 109; Gerzenstein 1983: 131)

[1] The Maká form attested by Braunstein (1987) is surprising; one would expect **xupa'k*.

Fabre (2014: 306) suggests that the Nivaclé reflex is related to the Enlhet–Enenlhet term for 'grass' – Enlhet/Enenlhet–Toba/Guaná *pa?at* 'grass, house', Enxet/Sanapaná *pa?at* 'grass' (Unruh & Kalisch 1997: 536; Unruh et al. 2003: 334; Gomes 2012: 140; Elliott 2021: 210; Kalisch 2023: 78) – via borrowing.

Najlis 1984: 9, 18, 25, 28 (**ip'håk*)

****xunxátaχ (fruit); *xunxáta-(ju)'k (tree); *xunxáta-kat (grove) 'tusca (Acacia aroma)'***

Mk *xunxetaχ*; *xunxete-'*k; *xunxete-ket* [1] (Gerzenstein 1999: 394) || Ni *xunfataχ*; *xunfata-juk*; *xunfata-tsat* (Seelwische 2016: 159) || PCh **ʔihna-tah*; **ʔihna-ta-k*; **ʔihna-ta-kat* > Ijw *ʔihni'etah*; *ʔihni'éta-k*; –; I'w –; *ihni'éta-k*; *ihni'éta-ket*; Mj –; *ʔihni(j)éta-k*; – (Drayson 2009: 98; Gerzenstein 1983: 133; Carol 2018) || PW **xnhátaχ*; **xnháte-q* > LB *ɳataχ*; –; Southeastern (Salta) *ʔiɳataχ* ~ *nataχ*; *ʔiɳate-q* ~ *nate-q*; Vej –; *ɳate-k* [2]; 'Wk *ʔiɳátaχ*; *ʔiɳáte-k* (Spagarino 2008: 60; Nercesian 2014: 52; Suárez 2014: 265; Gutiérrez & Osornio 2015: 18; Claesson 2016: 32, 33)

[1] The absence of preglottalization in the term for the fruit in Maká is attested in Braunstein (1987: 77). The preglottalized coda in the Maká suffix for tree names is attested elsewhere (Paraguay 2022: 7).

[2] The Vejoz reflex is mistranscribed as *nate-k* in Viñas Urquiza (1974: 125).

Najlis 1984: 34, 47 (*(*hnu)hnetak* ~ **hnatak*); Viegas Barros 2002: 142 (**xunxetek*); Campbell

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& Grondona 2007: 16, 22; Gutiérrez 2015b: 64

### *xu(’)p ‘grass’

Mk *xup-’el* [1] (Gerzenstein 1999: 158) || PCh **húp*, **hup-áj^h* > Ijw *hóp*; I’w *hóp* ‘maize’, *hup-áj* ‘grass’; Mj *húp*, *hup-ájh* maize (in plural also ‘grass’) (Drayson 2009: 128; Gerzenstein 1983: 176; Carol 2018) || PW **hup* (*-új^h) ‘grass; house made of hay’ > LB *hep* (-ej); Vej *hup* (-uj); Wk *hup* (-úç) (Nercesian 2014: 161, 327; Viñas Urquiza 1974: 58; Claesson 2016: 158)

[1] We have no explanation for the element -’el in Maká. Braunstein (1987: 83) gives the form *xupel*.

**Rejected:** Najlis (1984: 33) includes Ni *t-u’p* ‘its nest’ under this etymology, which is obviously incorrect.

Najlis 1984: 33 (**hnup*); Viegas Barros 2002: 143 (**xup*)

### *[ji]X₁₃o(?) ~ *[ji]X₁₃ó(?) ‘to go’; *[ji]X₁₃ó?xä’ne? ‘to lie down’

Ni *[ji]xo?* ‘to advance’; *[ji]xo?-xane* ‘to lie down’ (Seelwische 2016: 149) || PCh **[?i]hó?* > Ijw *[?i]hjó?* / -hó?; I’w -hó-APPL; Mj *[?i]hjó?* / -hó?; **[?i]hó-he’n(e?)* ‘to lie down’ > Ijw *[?i]hjó-hwe’n* / -hó-hwe’n; I’w -hó-?ne?; Mj *[?i]hjó-o’ne?* / -hó-o’ne? (Carol 2014b; Drayson 2009: 97; Gerzenstein 1983: 176; Carol 2018) || PW **[ji]ho(?)* ~ **[ji]hó(?)* > LB *[ji]hu-APPL*; Vej -ho; Wk *[ja]hó-APPL* (Nercesian 2014: 265, 329; Viñas Urquiza 1974: 57; Claesson 2016: 151–156)

Najlis 1984: 32 (**hnowet* ‘bed’)

### *X₁₃ó’k ‘*Bulnesia sarmientoi*’

Ni *xo’k*, *xok-is* (Seelwische 2016: 150) || PCh **hók* > I’w *hók*, -i?; Mj *hók* (-ej) (Gerzenstein 1983: 176; Carol 2018) || PW **hók^w* > LB *huk^w*; Vej *hok* [1]; Wk *hók* (Nercesian 2014: 193; Viñas Urquiza 1974: 57; Gutiérrez & Osornio 2015: 18; Fernández Garay 2006–2007: 218; Claesson 2016: 152)

[1] The absence of labialization in the reflex of PW *-k^w in Vejoz is unexpected.

Najlis 1984: 17 (**hno-uk*); Campbell & Grondona 2007: 19 (‘lapacho tree’, with the suffix *-tax)

### *X₁₃ó’t ‘sandy place’

Ni *xo’t*, *xot-oj* (Seelwische 2016: 151) || PCh **hót* > Ijw *hót*; Mj *hót* (-ej) ‘sand’

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(Drayson 2009: 128; Carol 2018) || PW *hót > 'Wk hót (Claesson 2016: 154)

***-X₁₃u'k, *-X₁₃ú-j^h ‘firewood’**

Ni -xu'k, -xu-j (Seelwische 2016: 160) || PCh *(ʔítāh)-huk > I'w éjti-f^wuk [1] (Gerzenstein 1983: 126) || PW *-huk^w, *-hú-j<is> > 'Wk -huk, -hú-jis (Claesson 2016: 38, 59)

[1] Iyo'awujwa' ^w could be a mistranscription (*pro* the expected reflex *h*) on Gerzenstein's (1983) part.

***[ji]X₁₃út ‘to push’**

Ni [ji]xut ‘to give’ (Seelwische 2016: 159) || PCh *[ʔi]hút > Ijw [ʔi]hjút / -hót; Mj [ʔi]hjút / -hót (Drayson 2009: 97; Carol 2018) || PW *[ji]hút > LB [ji]het-tsi; Vej -hut; 'Wk [ja]hút (Braunstein 2009: 63; Viñas Urquiza 1974: 58; Claesson 2016: 159)

***(ʔa)X₁₃útsa(?)χ, *(ʔa)X₁₃útsha-ts [1] ‘crested caracara’**

Ni xutsax, xutsxa-s (Seelwische 2016: 159) || PCh *(ʔa)húsah, *(ʔa)húsa-s > Ijw ʔawúxse (-jis) [2]; I'w ohúxsa, ohúxse-s [3]; Mj ʔahúxsa ~ hóxsa (-s) (Drayson 2009: 95; Gerzenstein 1983: 154; Carol 2018) || PW *ʔahútsaχ, *ʔahútsha-s ‘crested caracara; kind of dance’ > LB ʔahetsaχ ‘crested caracara’; Vej ahutsah ‘dance’; 'Wk ʔahútsax, ʔahúts^ha-s (Nercesian 2014: 66; Viñas Urquiza 1974: 50; Claesson 2016: 10)

[1] The form without *ʔa- is reflected in Nivačle and Manjui. In Chorote and Wichí, a reflex of *ʔa- is found.

[2] The reflex *w* (< PCh **h*) and the plural suffix in Iyojwa'aja' are irregular.

[3] The Iyo'awujwa' reflex is somewhat irregular: one would expect *ahúxsa (-s) ‘.

Campbell & Grondona 2007: 19

***...X₂₃a't, *...X₂₃át-its ‘earth, land’ [1]**

Ni <kots>xa't, <kots>xat-is (YL <kuts>xa't [2]) (Gutiérrez 2015b: 38, fn. 19; Seelwische 2016: 155) || PCh *<ʔa>h<n>át ~ *<ʔa>h<n>át (*-es) > Ijw ʔahnát (-is); I'w ahnát (-is); Mj ʔahnát (-es) (Drayson 2009: 93; Gerzenstein 1983: 124; Carol 2018) || PW *<hon>hat, *<hon>hát-es > LB huñat; Vej hoñat (-es); 'Wk hoñat, hoñát-es, hoñát-it (Nercesian 2014: 48; Gutiérrez

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& Osornio 2015: 43; Claesson 2016: 154)

[1] We speculate that this was a suffix in PM. In individual languages, it is attached to otherwise unattested roots: Nivaclé *kots*-, Chorote **?an*- or **?ān*-, and Wichí **hon*- (the latter two morphemes are also found in the word for ‘night’). Chorote **?an*- ~ **?ān*- is likely cognate with Wichí **hon*- and goes back to Proto-Chorote–Wichi **X_{i,3}on*-.

[2] In the Yita’ Lhavos dialect, *o* is unexpectedly raised to *u* in this word.

[3] The Vejoz reflex is mistranscribed as *honat* in Viñas Urquiza (1974: 57).

Najlis 1984: 32 (**hnat*)

### *(-)X₂₃*pél* (*-*its*) ‘shadow, image’

Ni -*xpek*, -*xpekł*-*es* (ShL -*xpik*, -*xpikł*-*is*) [1] (Stell 1987: 124–125; Seelwische 2016: 155) || PCh *-*pél* (*-*is*) > Ijw -*pé'l*, -*pél*-*is*; I'w -*pél*<*uk*> (-*is*); Mj -*péil*<*ik*>, -*péihl*<*i*-*j* [2] (Drayson 2009: 124; Gerzenstein 1983: 155; Carol 2018) || PW **hpél^h* / **-hpel^h* > LB *hipeł* / -*pet*; Vej *hupel* ~ *hupet*; 'Wk -*húpet* / *hupéł*, *hupél*-*is* (Nercesian 2014: 278; Braunstein 2009: 41; Viñas Urquiza 1974: 58; Gutiérrez & Osornio 2015: 57; Claesson 2016: 59, 158)

[1] In Nivaclé, the Chishamnee Lhavos has innovated with regard to the vowel in the plural suffix, whereas the Shichaam Lhavos has lowered the root vowel.

[2] The Iyo’awujwa’ and Manjui reflexes contain a fossilized suffix (-*ik*); at least Manjui shows an irregular reflex of PCh **e* (one would expect *-*pél*).

Fabre (2014: 306) notes the similarity with the Enlhet–Enenlhet term for ‘shadow’ – Enlhet/Enenlhet-Toba/Sanapaná *peskeska*; Guaná (*m*)*peskeska* (Unruh & Kalisch 1997: 555; Unruh et al. 2003: 335; Gomes 2012: 130; Kalisch 2023: 110) – but this could be accidental.

Najlis 1984: 10, 25, 28, 36, 53 (**phel*); Viegas Barros 2002: 144 (**χupel*); Fabre 2014: 306; Gutiérrez 2015b: 253

### *X₂₃*wé'lah*, *X₂₃*wé'la*-*ts* ‘moon’ [1]

Ni *xiþe'kla* (-*s*) (Seelwische 2016: 148) || PCh **wé'lah*, **wé'la*-*s* > Ijw *wé'la* (-*s*); I'w *wé'la* (-*s*); Mj *wé'la* (-*s*) (Drayson 2009: 157; Gerzenstein 1983: 169; Carol 2018) || PW **wé'lah*, **wé'la*-*s* > LB *we'la* (-*lis*) [2]; Vej *iwela* ~ *wela* (-*s*); 'Wk *ʔiwé'lah*, *ʔiwé'la*-*lis* [2] (Nercesian 2014: 48, 334; Viñas Urquiza 1974: 61; Gutiérrez & Osornio 2015: 44; Claesson 2016: 41)

[1] Maká *xuwel*(-*its*) ‘moon’ (Gerzenstein 1999: 395; Paraguay 2022: 3, 9) is suspiciously similar to the reflexes of PM **X₂₃wé'lah* but the sound correspondences do not follow any regular

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pattern. It could be an early borrowing from *pre-Nivaçle* ‘*xwé’la’.

[2] The LB and ’Wk plural allomorph does not match the Nivaçle and Chorote data and is thus considered non-etymological.

Najlis 1984: 35 (*iwela); Viegas Barros 2002: 142 (*xuwella); Gutiérrez 2015b: 253

### *ʔaɸqó(t)s ‘to crawl’ [1]

Ni [t]’aɸkos (Seelwische 2016: 283) || PCh *[t]’aₘqós > Ijw [t]’ahkóxs-^η; Mj [t]’alkós [2] (Drayson 2009: 153; Carol 2018) || PW *[t]qhós [3] > LB [ta]qʰus; ’Wk [t(a)]qʰós (Nercesian 2014: 48; Claesson 2016: 378)

[1] This verb is semantically and formally similar to PM *-ʔaɸhu’ts ~ *-ʔaɸhú’ts ‘knee’, and we believe they may be ultimately etymologically related, but the relation had become opaque by the Proto-Mataguayan stage. The verb *ʔaɸqó(t)s might involve an allomorph of the locative verb PM *-å’w- plus the root for ‘knee’. A parallel is seen in Chorote, where the verb for ‘to sit (down)’ consists of the locative verb plus the locative suffix PCh *-he’n(e?) ‘downwards’).

[2] Mj lk is not known to be the regular reflex of PCh *ₘk.

[3] PW *qh is not known to be the regular reflex of PM *ɸq.

### *ʔaɸu ~ *ʔaɸú ‘woman’

Mk efu (-ts) (Gerzenstein 1999: 141) || PCh *ʔahwú? > I’w ʔah(w)ú? ~ ʔahó- ~ ʔohó-, ʔahó-wet; Mj ʔahwú? ~ ʔahwó?, ʔahó-wet (Gerzenstein 1983: 125, 209; Carol 2018)

Viegas Barros (2013a: 314) notes the similarity with Pilagá awó ‘woman’.

Viegas Barros 2013a: 314 (*ahʷu)

### *-ʔá(j)k’i(h) ~ *-ʔá(j)k’iʔ, *-ʔá(j)k’i-l [1] ‘saliva’

Ni -ʔatʃ’i (-k) (Seelwische 2016: 37) || PCh *-ájk’i<l><is> [2] > Ijw -áts’ilis [2]; I’w -átsilis (-is) [3]; Mj -áʔalis (Drayson 2009: 129; Gerzenstein 1983: 123; Carol 2018) || PW *-t-ák’i^l > LB -t-atʃ’i^l; ’Wk -t-ák’i^l (Braunstein 2009: 73; Claesson 2016: 72)

[1] Nivaçle and Wichí point to *-ʔák’i(h) ~ *-ʔák’iʔ, and Chorote to *-ʔájk’i(h) ~ *-ʔájk’iʔ.

[2] In Chorote and Wichí, the plural form of PM has been reanalyzed as a singular one, with the erstwhile plural suffix being reinterpreted as a part of the root. In Chorote, the process occurred even twice, with the innovative plural suffix *-is being fossilized to the root.

[3] The plain (non-ejective) ts in Gerzenstein’s (1983) attestations of the Iyo’awujwa’ reflex

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must be a mistranscription.

### *[t]’á’ł ‘to ask’

Ni [t]’á’ł (Seelwische 2016: 282) || PCh *[t]’áł [1] > Ijw [t]’ał-APPL; I’w -áhl-am; Mj [t]’ał (Carol 2014a: 80; Drayson 2009: 154; Gerzenstein 1983: 123; Carol 2018) || PW *[t]’áł > LB [t]’ał-a; Vej [t]’áł; ’Wk [t]’áł (Nercesian 2014: 239; Viñas Urquiza 1974: 77; Claesson 2016: 431)

[1] PCh *á (as opposed to *a) is reconstructed based on the behavior of its reflex in Iyojwa’aja’: in forms such as *hit-’áhl-e* ‘you ask’ (Drayson 2009: 154) it fails to undergo raising to [e], as is typical of PCh *a. PCh *á is not the regular reflex of PM *a.

### *ʔáłu(?) (*-ts) ‘iguana’; *ʔáłu-taχ, *ʔáłu-ta-ts ‘alligator’

Ni ʔału (-s); ʔału-taχ, ʔału-ta-s (Seelwische 2016: 43) || PCh *ʔáłu? (*-s); *ʔáłu-tah, *ʔáłu-ta-s > Ijw ʔáhl’u? (-s); ʔáhl’u-t’e (-hes) [1]; I’w ʔáłu? (-s); ʔáłu-tah (-as) [1]; Mj ʔáłu? (-s); ʔáłu-ta ~ ʔáłu-t(j)e (-s) (Carol 2014a: 100, fn. 35; Drayson 2009: 93; Gerzenstein 1983: 123–124; Carol 2018) || PW *ʔáłu; *ʔáłu-taχ, *ʔáłu-t-as > LB ʔałe; ʔałe-taχ; Vej ału (-łajs); ału-tah, ału-tas [2]; ’Wk ʔáłu? (-lis); ʔáłu-taχ, ʔáłu-t-as (Nercesian 2014: 197; Viñas Urquiza 1974: 50; Gutiérrez & Osornio 2015: 20; Fernández Garay 2006–2007: 221; Claesson 2016: 11)

[1] The plurals ʔáhl’u-t’eh-es (Iyojwa’aja’), ʔáłu-tah-as (Iyo’awujwa’) ‘alligators’ are non- etymological; all other languages and varieties point to PM *ʔáłu-ta-ts, which would yield Iyojwa’aja’ *ʔáłu-t’eh-s, Iyo’awujwa’ *ʔáłu-ta-s.

[2] Viñas Urquiza (1974: 50) mistranscribes the Vejoz term for ‘iguana’ as aʔłu.

Najlis 1984: 10, 27 (*ahlu; *ahlutha); Gutiérrez 2015b: 254

### *ʔámʔåh, *ʔámʔå-ts ‘rat’

Ni ʔamʔå (-s) (Seelwische 2016: 43) || PCh *ʔámʔah ~ *ʔámʔåh, *ʔámʔa-s ~ *ʔámʔå-s > I’w ʔámaa (-s); Mj ʔám(a)ʔa (-s) (Gerzenstein 1983: 120; Carol 2018) || PW *ʔáma [1] > LB ʔama; Vej ama (-łajis); ’Wk ʔáma? (Nercesian 2014: 161; Viñas Urquiza 1974: 50; Gutiérrez & Osornio 2015: 20; Claesson 2016: 12)

[1] Wichí must have undergone irregular vowel harmony (*a...å > *a...a). Chorote may have

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also participated in this sound change, but is not recoverable whether this is the case.

Najlis 1984: 10 (**hmaa*)

***?áp'a(?)χ ~ *?áɸ'a(?)χ 'jararaca'**

Ni ?ap'ax [1], ?apx-as (Gutiérrez 2020: 286–287) || PCh *?áp'ah > Iwj ?áp'a-ki (-jis); I'w ?á'pah (-as); Mj ?áp'a (-s) (Drayson 2009: 94; Gerzenstein 1983: 121; Carol 2018)

[1] Campbell et al. (2020: 27) attest the variant ?ap'ax, where [p'] is likely an allophone of /p'/.

Najlis 1984: 9 (**ap'áq*)

***?aqáje'k 'wild honey' [1]**

Ni ?akájetʃ, ?akájxe-s / -β-ákájetʃ (Seelwische 2016: 36) || PW *?aqájeq > LB ?aqojeq; Vej k'ájek [2]; 'Wk ?aqájek (Nercesian 2014: 350; Viñas Urquiza 1974: 63; Claesson 2016: 14)

[1] This is obviously a derivative from PM *-aje'k ~ *-ajé'k 'honey comb'.

[2] Vejoz k'ájek is not a regular reflex of PW *?aqájeq.

***?áqátse(?)χ 'kind of armadillo'**

(?) Mk *enqetsax<hithehus>* 'six-banded armadillo' [1] (Braunstein 1987: 51) || Ni ?akátse-tax, ?akátse-ta-s 'six-banded armadillo' (Seelwische 2016: 36) || PCh *?áqásah 'nine-banded armadillo' > Iwj ?ákasa; Mj ?ákasa [2] (Drayson 2009: 93; Carol 2018)

[1] The Maká reflex shows a number of irregularities, provided it is related at all. The expected reflex would be **aqatsax*.

[2] The Manjui reflex has irregularly rounded the stressed vowel.

***?a(C)qáχ, *?a(C)qá-ts [1] 'rich, pleasant, tasty'**

Ni ?akáx, ?aká-s (Seelwische 2016: 36) || PCh *-(?aC)qáh-, *-(?aC)qá-s- [1] > Iwj -(?ah)káh-e?, -(?ah)ká-s-i?; I'w -káh-ej ~ -káh-aj; Mj -(?am)káh-(...) in 'happy, rich' (Drayson 2009: 108; Gerzenstein 1983: 138; Carol 2018) || PW *?aqáχ, *?aqá-s 'pleasant, tasty' > LB ?aqoχ; 'Wk ?aqáx, -?áqá-s (Nercesian 2014: 197; Claesson 2016: 13)

[1] Chorote suggests that there was a consonant between PM *a and *q, but Iyojwa'aja' and

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Manjui point to different consonants (the former to PM *ɸ or *t > PCh *m or *t, the latter to *m).

### *-ʔaqhu⁷ts ~ *-ʔaqhú⁷ts ‘knee’

Mk -aqhu⁷ts [1] (-ij) (Gerzenstein 1999: 127) || Ni -(ʔa)kxu⁷s, -(ʔa)kxatsu-j (Seelwische 2016: 70, 354) || PCh *-ʔaqús > Ijw -ʔakós / -kós-ki; I'w -kós(-hl-étik-i?); Mj -(ʔa)kós, -ʔakúʃ-is (Drayson 2009: 123, 154; Gerzenstein 1983: 144, 219; Carol 2018)

[1] The Maká noun is not attested in Unu'uneiki Patricia (2011), Paraguay (2020, 2022), or the New Testament, where only the verb [wo]nokok'en 'to kneel' is found (Mark 15:19); the presence of a preglottalized coda in Maká is thus inferred based on the Nivaclé cognate. The absence of a stem-initial ? in Maká could be a mistranscription.

Najlis 1984: 24 (*t'aqawsq); Campbell & Grondona 2007: 15

### *-ʔaqá⁷t ~ *-ʔaqá⁷t ‘chin’

Ni -(ʔa)ka⁷t, -(ʔa)kat-is ‘chin, barbel’ (Campbell et al. 2020: 152) || PCh *-ʔakát > Ijw -ʔakát (Drayson 2009: 154)

Obviously related to Proto-Guaicuruan *-aq'ád ‘chin’ (Viegas Barros 2013b, #101).

### *ʔatu⁷χ ~ *ʔatú⁷χ ‘snake sp.’

Ni ʔatu⁷χ, ʔatux-is ‘Argentine boa’ (Seelwische 2016: 50) || PCh *ʔatúh > Ijw ʔatóh ‘a kind of snake (yellow, large, agressive when it eats)’ (Drayson 2009: 95)

### *ʔáwu(C)tseχ [1] ‘Chacoan peccary; collared peccary’

Ni ʔabuktse, ʔabuktse-s ~ ʔabuktse, ʔaboktse-s [2] ‘Chacoan peccary’ (Seelwische 2016: 51; Campbell et al. 2020: 23) || PCh *ʔáwusah > Ijw ʔávxse, ʔávxseh-es ‘collared peccary’; Mj ʔáwaxsa ‘Chacoan peccary’ (Drayson 2009: 95; Carol 2018) || PW *ʔáwutsaχ > LB ʔawetsaχ ‘collared peccary’; Vej awutsah, 'Wk ʔáwutsax, ʔáwuts^h-as (Braunstein 2009: 38; Viñas Urquiza 1974: 51; Gutiérrez & Osornio 2015: 20; Claesson 2016: 19)

[1] Nivaclé points to PM *ʔáwoltseχ or *ʔáwoktseχ, whereas Chorote and Wichí point to *ʔáwutseχ.

[2] The form ʔabuktse, ʔaboktse-s with the unexpected vowel o is attested in Seelwische (2016):

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51), whereas Campbell et al. (2020: 23) give *?aβuktsex*, *?aβuktse-s*.

***?áxa?** ‘stork’

Mk *exe?* (-l) ‘maguari stork’ (Gerzenstein 1999: 167; Paraguay 2022: 5) || PCh *?áha? > Ijw ?áha? ‘jabiru’ (Drayson 2009: 93)

Viegas Barros 2002: 142 (*axa?)

***?aX₁₃áje(?)χ** (fruit); ***?aX₁₃áj-u^hk**, ***?aX₁₃áj-ku-j^h** (tree) ‘mistol (*Ziziphus* **mistol**)’

Ni ?axájex; ?axáj-uk, ?axáj-ku-j (Seelwische 2016: 41–42) || PCh *?ahájah; *?aháj-uk, *?aháj-ku-j^h > Iw —; aháj-ik, aháj-si-?; Mj ?aháje (-l); ?aháj-uk (Gerzenstein 1983: 123; Carol 2018) || PW *?ahájaχ; *?aháj-uk^w > LB (?a)hojaχ; (?a)hojek^w [1]; Vej ahájak, aháj-uk [2]; 'Wk ?ahájax; ?aháj-uk (Spagarino 2008: 60; Nercesian 2014: 192, 340; Gutiérrez & Osornio 2015: 16; Claesson 2016: 9)

[1] In Lower Bermejeño, there appears to be a variant with an irregular loss of the initial vowel. Nercesian (2014) gives the forms *?ahojaχ*, *hojek^w*. Spagarino (2008), by contrast, documents the *hojaj*, *?ahojek^w*.

[2] The final *-k* in the name of the fruit in Vejoz is irregular. Viñas Urquiza (1974: 50) mistranscribes the name of the tree as *aha-juk*.

Campbell & Grondona 2007: 19

***-?áX₂₃te(?)** ( *-j^h) ‘female breast’

Ni -?axte (-j) (Seelwische 2016: 42) || PCh *-?áhate? (*-j^h) > Ijw -?áhate [1]; Mj -?áate?(-j) (Drayson 2009: 153; Carol 2018) || PW *-t'-áte (*-j^h) > LB -t'-áte; Vej -t'-áte; 'Wk -t'-áte? (-ç) (Nercesian 2014: 164; Braunstein 2009: 59; Viñas Urquiza 1974: 78; Claesson 2016: 96)

[1] The absence of a word-final glottal stop in Drayson’s (2009) attestation of this noun must be a mistranscription.

***?á'jteχ, *?á'jte-ts** ‘to hurt’

Mk a?taχ, a?ti-ts [1] (Gerzenstein 1999: 130) || Ni ?á'βteχ, ?á'βte-s ~ ?á'jteχ [2] (Gutiérrez 2015b: 27; Seelwische 2016: 45; Campbell et al. 2020: 102, 166) || PCh *?á'jtah-APPL, *-?á'jte-s-APPL > Ijw ?á?t'eh-e? ~ ?á?tih-i?, -?á?ti-s-i? [3]; Iw átih-i?; Mj ?átih-APPL [4] (Carol 2014a: 90; Drayson 2009: 96; Gerzenstein

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1983: 122; Carol 2018) || PW **ʔájtaχ*, **ʔájte-s* > LB *ʔojtaχ*; Vej *ʔajtah* [5]; 'Wk *ʔájtax*, *ʔájte-s* (Nercesian 2014: 403; Gutiérrez & Osornio 2015: 32; Claesson 2016: 8)

[1] Gerzenstein (1999: 130) documents this as *a(?)taχ*, *ati-ts*. In the New Testament, only *aʔtaχ*, *aʔti-ts* is attested (1 Corinthians 13:7; Romans 3:16).

[2] The Nivačle variant with *j* is attested in Seelwische (2016: 45) only. Note that the rhyme *áβ* is phonetically realized as [aɔβ] (Gutiérrez 2015b: 27) or [aʔaw] (Campbell et al. 2020).

[3] Drayson (2009: 96) mistranscribed the plural form of Iyojwa'aja' as *-ʔáʔti-s-i*.

[4] The loss of **j* in Manjui is irregular.

[5] Viñas Urquiza (1974: 51) mistranscribes the Vejoz reflex *ajtah*.

Hunt 1915: 240

### *[n]å'l, CAUS *-[n]ål-it ~ [ji]n-å'l-it 'to be visible'

Mk [n]a'l / -a'l to be present, to exist [1], [n]a'l-(-APPL)kij 'to be (of light)' [1], [n]a'l-ip-xi? 'to be illuminated from above' [1], CAUS [n]-al-it-ik'i 'to illuminate' (Gerzenstein 1999: 117) || Ni [n]å'k / -ʔå'k, CAUS [ji]n-åkl-it, [ta]n-å'k-łanit; ChL [n]å'k / -å'k [2], CAUS n-åkl-it / -n-åkl-it [2] (Seelwische 2016: 199, 200; Campbell et al. 2020: 79) || PCh *-<n>å'l > Mj 'nál 'to be visible, to appear nitidly' (Drayson 2009: 162; Carol 2018) || PW *-<n>å'l / *-<n>ål-APPL / *-<n>å'n-APPL [3], CAUS *[hi]'-<n>å'l-it / *[hi]'-<n>å'l-t- > LB 'nol<ex> ~ 'no<χ> 'apparently' [4]; Vejoz or Guisnay 'nál / 'nål-APPL/ 'nåŋ-APPL/ 'nåñ-APPL, CAUS -'nål-it / -'nål-t-; 'Wk 'nå'l ~ 'nåł / 'nål-APPL/ 'nåŋ-APPL, CAUS [hi]'-nå'l-it / [hi]'-nål-t- (Nercesian 2014: 334–335; Lunt 2016: 69; Claesson 2016: 50–52)

[1] The preglottalized coda in Maká is attested in the New Testament (e.g. Juan 8:58; Mark 8:18; Revelations 16:18). The loss of the stem-initial glottal stop is irregular, except in third-person forms with the prefix *n-*, where it is expected. It is possible that the stem was remodeled based on the third-person forms.

[2] The forms attested in Campbell et al. (2020) (presumably representative of the Chishamnee Lhavos dialect) show an irregular loss of the stem-initial glottal stop in the underived verb (as seen in *ts-ôôc* 'I appear'); the expected reflex is documented in Seelwische (2016). Conversely, when the root is preceded by the prefix *-n-*, the underlying glottal stop shows up in

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Chishamnee Lhavos, but not in Seelwische's (2016) data.

[3] The allomorph **nåñ-* in Wichí expectedly appears before **h*-initial suffixes.

[4] The Lower Bermejeño particle *'noleχ ~ 'noχ*, with an optional irregular loss of two segments, goes back to PW *"nå'l-eχ* 'to look like, to appear as'.

***-2å(?)l, 3 *'[j]i(?)l [1] 'to die'**

Mk (Lengua) <al>, <il> (Peña 1898: 496) || PCh **[j]å(?)l* > Ijw *[j]å'l*; I'w *[j]él* / -ål / -åhl- (Carol 2014a: 78, 79, fn. 8; Drayson 2009: 165; Gerzenstein 1983: 78, 119, 208) || PW **[j]il^h* > LB *[j]it*; Vej *[j]it* [2]; 'Wk *[j]it* (Nercesian 2014: 292; Fernández Garay 2006–2007: 218, 219; Claesson 2016: 124)11

[1] This verb evidently presented the same alternation as PM **-åp*, 3 **'[j]ip* 'to cry'. Chorote and Wichí generalized the allomorphs with **å* and **i*, respectively. The reconstruction of the presence or absence of glottalization in the final consonant is uncertain because diagnostic cognates in modern Maká, Manjui, and Nivaclé are lacking.

[2] The absence of a glottal stop or glottalization in the root-initial position in Vejoz could result from mistranscription. Viñas Urquiza (1974: 84) documents the verb as *[j]ijl*.

***2å'lå 'South American rattlesnake; caninana'; *2å'lå-tax 'Argentine boa'**

Ni *2å'klå* (-s) 'South American rattlesnake; caninana'; *2å'klå-tax*, *2å'klå-ta-s* 'jararaca or similar snake (*Bothrops alternatus*; *Xenodon merremii*; *Bothrops neuwedi meridionalis*; *Lystrophis dorbignii*)' (Seelwische 2016: 210) || PCh **2å'lå<tah> ~ *2å'lå<tah>*, **2å'lå<ta>-s ~ *2å'lå<ta>-s* > Ijw *2a'låtah* (-as) [1]; I'w *alåtah*, *alåta-s*; Mj *2a'låta* (-s) (Drayson 2009: 95; Gerzenstein 1983: 119; Carol 2018) || (?) PW **lá<tax>* [2] > LB *lataχ* (Nercesian 2014: 368)

[1] The Iyojwa'aja' plural form is non-etymological.

[2] Lower Bermejeño *lataχ* is not the expected reflex of PM **2å'lå-tax*; one would rather expect **2o'lotaχ*. It is possible that the Wichí term does not belong to this etymology altogether.

***2ål(V)tse(?)χ, *2ål(V)tse-ts [1] 'cháguar (*Bromelia urbaniana* = *Deinacanthus urbanianum*)'**

Ni *2åktsex*, *2åktse-s* 'Dyckia chaguar' (Seelwische 2016: 209) || PCh **2ålVsah*, **2ålVse-s* [2] > Ijw *2ålisa* / -*w-ålisa*; I'w *ålisa*, *ålisi-s*; Mj *2ålasa* / -*w-ålasa* (Carol 2014a: 99; Drayson 2009: 94, 127; Gerzenstein 1983: 120; Carol 2018) || PW **2åletsax* > LB *2oletsax* (Spagarino 2008: 59; Nercesian 2014: 48; Suárez

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2014: 225)

[1] The Nivaâle form points to PM *?*ältseχ*, the Chorote one to PM *?*álVtseχ*, and the Wichí one to PM *?*áletseχ*.

[2] PCh *V can stand for any vowel that fails to cause both the first and the second palatalization in Chorote (such as *a or *á).

*?*ánhajeχ* (bean); *?*ánhaj-u'k* (plant); *?*ánhaje-[?]p* (season) ‘*Capparis retusa*’

Mk *anhejaj*; *anhej-u'k*; *anheji-[?]p* (Braunstein 1987: 77; Gerzenstein 1999: 121; Paraguay 2020: 23–25, 2022:7) || Ni *ʔånxajex*; *ʔånxaj-uk*; *ʔånxaje-p* (Seelwische 2016: 212) || PCh *?*óhnajah*; *?*óhnaj-uk*, *?*óhnaj-ku-j^h* [1] > Ijw *ʔóhnaje* [2]; Mj *ʔóhnaje* ~ *ʔóhnaji* ~ *ʔóhneje* [3]; *ʔóhnaj-ik*, *ʔóhnaj-[?]i-j* (Drayson 2009: 142; Carol 2018) || PW *?*ánhjax*; *?*ánhj-uk^w* [4] > LB *ʔonjax*, *ʔonj-ek^w* [5]; Vej *åñjax*; *åñj-uk*; ’Wk *ʔáñjax* (Spagarino 2008: 60; Nercesian 2014: 324, 403; Gutiérrez & Osornio 2015: 17; Claesson 2016: 7)

[1] We surmise that the vowel of the first syllable is irregularly reflected in Chorote as PCh *o due to the contamination with PCh *?*óhna*? ‘*Capparis salicifolia* fruit’.

[2] The word-final -? in the Iyo'awujwa' form is irregular.

[3] The Manjui variant *ʔóhneje* is irregular.

[4] The loss of PM *a in the Wichí form is irregular.

[5] The voiced nasal n in the Lower Bermejeño Wichí form is irregular.

*?*ánitih* ‘wasp sp.’

Ni *ʔáñiti* (-s) ‘red paper wasp swarm’ (Seelwische 2016: 211) || PCh *?*ánitih* > Ijw *ʔáñiti* (-jis) ‘black wasp’ (Drayson 2009: 94)   
 Najlis 1984: 16 (**ånthi*)

*[t]’ås ‘to step’

Ni [t]’ås (Seelwische 2016: 289) || PCh *[t]’ås > Ijw [t]’ås; Iw [t]åts-e?/-åhts-e? [1]; Mj [t]’as (Drayson 2009: 154; Gerzenstein 1983: 124, 215; Carol 2018) || PW *[t]’ås-APPL > LB [t]’os-APPL; Vej [t]’ås-APPL; ’Wk [t]’ås-APPL (Nercesian 2014: 239; Viñas Urquiza 1974: 78; Claesson 2016: 429–430)

[1] The Iyo'awujwa' reflex is attested as [t]åts-e?/-åhts-e? in Gerzenstein (1983), which is likely a mistranscription for [t]’å(h)ts-’e?/-å(h)ts-’e? (where the initial glottal stop of the applicative

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*-t̥e?* fuses with the underlying /s/ as (*h*)ts'). The underived verb most probably exists in the language but is not documented in the cited work.

***?ask'ála(?)χ 'widower'; *?ask'ál(a)-ke? 'widow'**

Ni ?ástf'aklax (-is); ?ástf'ak-tse (-j) (Seelwische 2016: 213) || PCh *?åsk'élah; *?åsk'ela-ke? (*-j^h) > Ijw ?ask'íl^je; ?ask'íl^je-ki [1]; I'w ast'éla (-s); ast'éla-ki?; Mj fi?éla (-s); fi?éla-ki? (-j) (Drayson 2009: 94; Gerzenstein 1983: 122; Carol 2018)

[1] The absence of a word-final glottal stop in Drayson's (2009) attestation of this noun must be a mistranscription.

Campbell & Grondona 2007: 22

***?åtits ~ *?åtítis ~ *?åtets ~ *?åtéts [1] 'wild pepper'**

Mk atits [1] (-ket) (Gerzenstein 1999: 132) || PCh *?åtés > I'w ?atés; Mj ?atés, ?atés ~ ?até(h)f-is (Gerzenstein 1983: 122; Carol 2018)

[1] The reconstructions *?åti^jts ~ *?åti^jts ~ *?åte^jts ~ *?åté^jts are ruled out because the Maká reflex is attested with a plain coda in Braunstein (1987: 80).

***-?åx (*-íts) 'skin, bark'**

Mk -?ax (-its) (Gerzenstein 1999: 135) || Ni -?åx (-is) (Seelwische 2016: 355) || PCh *-?åh, *-?åh-és > Ijw -?åh, -?eh-és; I'w -åh (-as) [1]; Mj 3 t- 'åh, -(?a)h-éki? (Carol 2014a: 86, 92; Drayson 2009: 153; Gerzenstein 1983: 123; Carol 2018) || PW *-t- 'åχ, *-t- 'åh-és > LB -t- 'oχ, -t- 'oh-es; Vej 3 t- 'åh; 'Wk -t- 'åx, -t- 'åh-és (Nercesian 2014: 191; Viñas Urquiza 1974: 78; Claesson 2016: 7, 95)

[1] The plural form attested in Iyo'awujwa' is non-etymological.

Likely related to Proto-Guaicuruan *-?åkoleather, skin (Viegas Barros 2013b, #650; cf. Viegas Barros 2013a: 309).

Najlis 1984: 10, 19 (*t'åhn, 1 *j-t'åhn, 2 *a-t'åhn); Viegas Barros 2002: 143 (*-?åx); Viegas Barros 2013a: 309 (*-åh)

***'[n]åCtsi? [1] 'to feel disgust'**

Ni [n]åxtsi / -?åxtsi (Seelwische 2016: 211) || PCh *'[n]åjtsi? [2] > Ijw '[n]åtfi? ~ 'åtfi? [3]; I'w -åjsij-e; Mj '[n]åjfi(j)? (Carol 2014b; Drayson 2009: 162;

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Gerzenstein 1983: 118; Carol 2018)

[1] Nivañe points to PM **xts* or **χts*, and Chorote to **jts*.

[2] The cluster PCh **ts* is reconstructed based on the Iyojwa'aja' reflex with an affricate. Note that Chorote has no affricate /ts/, suggesting that we are dealing here with a cluster composed of /t/ and /s/.

[3] Drayson (2009: 162) mistranscribes this as '*<n>átfi*'.

### *[*t*]’äk [1] ‘to eat (intr.)’

Mk [t]’ek [1] (Gerzenstein 1999: 142, 267) || PW *[t]’eq > LB [t]’eq; Vej/’Wk [t]’ek (Nercesian 2014: 237, 239; Braunstein 2009: 56; Viñas Urquiza 1974: 78; Fernández Garay 2006–2007: 213; Claesson 2016: 438)

[1] The reconstruction *[t]’ä’k is ruled out because the Maká reflex, as attested in the New Testament (e.g. Luke 18:12), shows a coda with no glottalization.

Viegas Barros (2013a: 305) compares this verb to Proto-Guaicuruan *-ekéʔe, but the updated reconstruction *-kége ‘to eat’ (Viegas Barros 2013b, #326) appears to be incompatible with the Mataguayan datum.

Viegas Barros 2013a: 305 (*-ek ‘to eat’)

### *[*t*]’äskäj ‘to laugh’

Ni [t]’astfaj / -?istfaj ‘to smile’, [t]’astfaj=?in / -?istfaj=?in ‘to laugh’ (Campbell et al. 2020: 242, 317) || PCh *[t]’iskéj? > Ijw [t]’iskí? / -skí?; I’w -skíj=(?)in; Mj [t]’iskí? / -skíj? ‘to laugh, to smile (of a baby)’; [t]’iskí-hi’ne? ‘to laugh’ (Drayson 2009: 155; Gerzenstein 1983: 161; Carol 2018) || PW *[t]’isk’ej > LB [t]’istsej; Vej -stsej-*ti*, ’Wk [t]’isk’ej? (Nercesian 2014: 149; Viñas Urquiza 1974: 72; Claesson 2016: 445)

[1] This etymology has been first identified by Campbell (submitted).

Campbell submitted (*-iskey)

### *-?äsχa’n, *-?äsχán-*its* ‘meat’

Mk -?ese’n [1] (-*its*) (Gerzenstein 1999: 158, 257) || Ni -(ʔa)sxa’n, -(ʔa)sxan-*is* (Seelwische 2016: 234, 354) || PCh *-?isá’n, *-?isán-*is* > Ijw -(ʔi)sé’n; I’w -s’én; Mj -(ʔi)sé’n, -?isén-*is* (Drayson 2009: 155; Gerzenstein 1983: 159; Carol 2018) || PW *-t-’isa’n, *-t-’isán-*is* > LB/Vej -t-’isan; ’Wk -t-’isa’n, -t-’isán-*is* (Nercesian

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2014: 291; Viñas Urquiza 1974: 78; Claesson 2016: 97)

[1] The preglottalized coda in the singular form in Maká is attested in the New Testament (e.g. Colossians 2:19; Mark 10:8).

Najlis 1984: 28, 41 (**tshan*)

***ʔéjaʔ (*-l) ‘mosquito’**

Mk *ije?(-l)*, (Towothli) <eye> (Gerzenstein 1999: 225; Hunt 1915: 251) || Ni *jija?*

[1] (Seelwische 2016: 385) || PCh *ʔéjaʔ (*-l) > Ijw ʔéjeʔ (-waʔ) [2]; I'w ʔéjeʔ; Mj ʔéjeʔ (-l) (Drayson 2009: 96; Gerzenstein 1983: 125; Carol 2018)

[1] The Nivaclé reflex is entirely irregular: one would expect **jeja*.

[2] The plural form attested in Iyojwa’aja’ is non-etymological.

***[j]éjxåts-han ‘to teach’ [1]**

Mk *[j]ixats<hen>* [2] (Gerzenstein 1999: 219–220) || Ni *[j]ejxats-xan* / -*ʔejxats-xan* [3] (Seelwische 2016: 123) || PCh *-[j]éjähås<an> [4] > Ijw *[j]ijasa’n* / -*ʔéjasa’n* [5]; I'w -*éjesan* [5]; Mj *[j]íjeesän* / -*ʔéjeesän* (Drayson 2009: 166; Gerzenstein 1983: 125; Carol 2018)

[1] The PM verb is obviously derived from the etymon of Ni *-k-’e’jxat* ‘news’ (Seelwische 2016: 123, 227).

[2] The expected reflex in Maká would be *[j]ijxats<hen>* / *-*ʔijxats<hen>*.

[3] The expected reflex in Nivaclé would be **[j]ejxåts-xan* / *-*ʔejxåts-xan*. The irregular change **å* > *a* must have counterfeited the palatalization of velars.

[4] In Chorote, **å* was unexpectedly epenthesized between **j* and **h*.

[5] PCh **åhå* was simplified to a single vowel in all dialects except Manjui (Ijw *a*, I'w *e*).

Possibly related to Proto-Guaicuruan *-iʔats’én ‘to know, to understand’ (Viegas Barros 2013b, #306; cf. Viegas Barros 2013a: 305).

Viegas Barros 2013a: 305 (*-*ejhats-han* ‘to know’)

***-ʔelå(’)k ~ *-ʔelá(’)k / *-ʔelkå- ~ *-ʔelkå- [1] ‘pus’**

Mk *-(i)lka (-l)* (Gerzenstein 1999: 199) || Ni *-(ʔe)kkå<ʔ> (-s)* (Seelwische 2016: 355) || PCh *-*ʔelåk* > Ijw *-ʔil'ák* / -*lák* (-is) (Drayson 2009: 155)

[1] Maká and Nivaclé would appear to have generalized the vocalic stem, and Chorote the

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consonantal one.

### *?éle(?) 'parrot'

Ni *?éle*(-) (-s) (Seelwische 2016: 122) || PCh *?éle? (*-wa?) > Ijw ?éle?, ?él-iwa?; I'w ?éle?, ?ále-wa? [1]; Mj ?éle? (-wa?) (Drayson 2009: 96; Gerzenstein 1983: 126; Carol 2018) || PW *?éle > LB *tele*; Vej *ele*; 'Wk ?éle? (-lis) (Nercesian 2014: 152; Viñas Urquiza 1974: 56; Claesson 2016: 20)

**Rejected:** Maká *ehe*?(-l) 'parrot' (Gerzenstein 1999: 142; Paraguay 2022: 5) cannot be related to PM *?ele for phonological reasons.

Compare Proto-Qom *elé (> Mocoví *elé*, Pilagá *ele*, Toba–Qom *ele*) 'parrot', which does not reconstruct to Proto-Guaicuruan and is thus a probable loan from a Mataguayan language, as well as Lule *ele* 'parrot', which is also obviously related (Viegas Barros 2013a: 300).

Najlis 1984: 16, 35 (**ele*); Gutiérrez 2015b: 253

### *-?et ~ *-?éet 'other'

Ni -?et (Seelwische 2016: 490) || PW *-?et ~ *-?éet > LB -?et; Vej -et; 'Wk -?et ~ -?éet (Nercesian 2014: 42; Viñas Urquiza 1974: 56; Claesson 2016: 20)

Viegas Barros (2013a: 314) compares the Wichí form with Kadiwéu *e:le* 'other'.

Najlis 1984: 40 (**ahl*)

### *-?í (*-l) 'liquid, juice'

Mk 3 *t*-'i?(-l) 'juice' (Gerzenstein 1999: 258) || Ni -?i?(-k) 'liquid, juice, broth, sap' (Seelwische 2016: 139, 287) || PCh *-?í? (*-l) > Ijw -?é? (-l); I'w 3 *t*-'é, *t*-é-*j* [1]; Mj 3 *t*-'éi? (Drayson 2009: 155; Gerzenstein 1983: 163; Carol 2018) || PW *-t-í (*-l^h) > LB/Vej -t-í; 'Wk -t'i? (-l) (Nercesian 2014: 197, 212; Viñas Urquiza 1974: 107; Claesson 2016: 97)

[1] The plain *t* in Gerzenstein's (1983) attestation of the Iyo'awujwa' plural form must be a mistranscription.

Possibly related to Proto-Guaicuruan *-?egi 'juice' (Viegas Barros 2013b, #669).

Najlis 1984: 16, 48 (**t'e* ~ **t'ε*)

### *[j]im 'to dry out, to be low (of water)'

Mk [j]im 'to go low (of rivers)' (Gerzenstein 1999: 186) || Ni [j]im (Seelwische 2016: 382) || PCh *'[j]ím-APPL / -?ím-APPL > Ijw '[j]ím-APPL / -?ém-APPL;

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Mj *ʔ[j]ím-APPL* / *-ʔéim-APPL* (Drayson 2009: 165, 166; Carol 2018) || PW **[j]im* > Vej *[j]im*; 'Wk *[j]im* (Viñas Urquiza 1974: 84; Claesson 2016: 125)

Viegas Barros (2013a: 308) notes the similarity with Proto-Qom **ʔim* ‘to be dry’.

Viegas Barros 2013a: 308 (*-(j)im)

***ʔis ( *-its) [1] ‘good’**

Ni *ʔis*, *-ʔis-is* (Seelwische 2016: 140) || PCh **ʔis* > Ijw *ʔés*, *ʔixf-ís*; I'w *ʔés*; Mj *ʔéis*, *ʔas-éis* (Carol 2014a: 84; Drayson 2009: 112, 161; Gerzenstein 1983: 127; Carol 2018) || PW **ʔis* ( *-is) > LB *ʔis*; Vej *is*; 'Wk *ʔis* (-is) (Nercesian 2014: 312; Viñas Urquiza 1974: 60; Gutiérrez & Osornio 2015: 34; Claesson 2016: 34)

[1] In absence of a known cognate in Maká, one could wonder whether this stem could be reconstructed as **ʔits*, with a regular **ts* > *s* in coda. This seems unlikely, given that the daughter languages maintain the fricative *s* even before vowel-initial suffixes, as in the Lower Bermejeño inchoative derivate *ʔis-ex* ‘to become good’ (Nercesian 2014: 262). This contrasts with the behavior of the roots which reflect *bona fide* PM **ts*-final roots: compare LB *qates*, *qatets-et* ‘star’ (Nercesian 2014: 112).

***ʔítå(χ), *ʔítå-ts ‘fire’**

Ni *ʔítåx*, *ʔítå-s* / *-β-itåx*, *-β-itå-s* (Seelwische 2016: 141, 362) || PCh **ʔítåh*, **ʔítå-s* > I'w *ʔéjt^jeʔ* ~ *ʔéjt^jiʔ* (-s) [1]; Mj *ʔéit^(j)e* (-s) (Gerzenstein 1983: 126, 199; Carol 2018) || PW **ʔítåχ*, **ʔítå-s* > LB *ʔitoχ*; Vej *itåh*, *itå-s* ‘fire, match’; 'Wk *ʔítåx*, *ʔítå-s* (Nercesian 2014: 295; Viñas Urquiza 1974: 61; Gutiérrez & Osornio 2015: 48; Fernández Garay 2006–2007: 213; Claesson 2016: 38)

[1] Gerzenstein’s (1983) attestation of a word-final glottal stop in the *lyo'awujwa'* reflex must be a mistranscription.

Najlis 1984: 16, 19 (*ithå*); Viegas Barros 2002: 144 (**itåχ*)

***[n]ixowáj / *-ʔixowáj ‘to be afraid’**

Mk *[n]ixiwej* / *-<ʔixi>wej* [1] (Gerzenstein 1999: 221) || Ni *[n(i)]xoβaj* / *-ʔixoβaj* (Campbell et al. 2020: 259) || PW **<n>owáj* [2] > LB *nuwaj*; 'Wk *nowáj?* (Nercesian 2014: 149; Claesson 2016: 278)

[1] Maká shows an irregular change **o* > *i*.

[2] We assume an irregular loss of the initial syllable in Wichí. It is also possible that **[n]owáj*

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was the original Proto-Mataguayan root, with Maká and Nivaclé showing an extra prefix.

### *-ʔo(?)¹, *-ʔó-l 'grave'

Ni 3 *t-’o?* (Campbell et al. 2020: 39) || PCh *-ʔó?(*-l) > Ijw -ʔɔʔ(-’l) (Drayson 2009: 156) || PW *-t-’o(?) > LB -t-’u(?) ; ’Wk -t-’o?, -t-’o-lis (Braunstein 2009: 60; Claesson 2016: 98)

### *ʔóφo?(*-ts) 'picazuro pigeon (*Patagioenas picazuro*)'

Mk *ofo?(-l)* [1] (Gerzenstein 1999: 281) || Ni ʔóφo (-s) (Seelwische 2016: 206) || PCh *ʔóhwo?(*-s) > Ijw ʔɔhwo?; I’w óf’o?(-s) [2]; Mj ʔɔhwo?(-s) (Carol 2014a: 142; Drayson 2009: 142; Gerzenstein 1983: 152; Carol 2018)

[1]The Maká plural form with *-l* does not match the Nivaclé and Chorote data.

[2]Gerzenstein (1983: 213) documents also the phonetic variant óxu?.

### *[j]om 'to be extinguished', CAUS *'[j]om-hat 'to extinguish'

Mk [j]om, [j]om-het (Gerzenstein 1999: 282) || PCh *'[j]óm-APPL, *'[j]óhm-at-APPL > Ijw [j]ó’m-e, [j]óhm-at-APPL; I’w CAUS -ohm-ate? ~ -owm-at-e?; Mj CAUS [j]óhm-at-APPL (Carol 2014a: 78; Drayson 2009: 166; Gerzenstein 1983: 153, 183; Carol 2018) || PW *'[j]om, *'[j]om-ét [1] > LB CAUS [j]um-ét; Vej [j]om [2]; ’Wk [j]om, [j]om-ét (Nercesian 2014: 295; Viñas Urquiza 1974: 84; Claesson 2016: 128)

[1]The Wichí causative *'[j]om-ét is not a reflex of PM *'[j]om-hat, but rather an independent formation.

[2]The absence of a glottal stop or glottalization in the root-initial position in Viñas Urquiza's (1974) attestation of the Vejoz reflex could result from mistranscription.

Viegas Barros (2013a: 307) compares this to Proto-Guaicuruan *-ʔem 'to be extinguished' (Viegas Barros 2013b, #672).

Hunt 1915: 239; Viegas Barros 2013a: 307 (*-om, CAUS *-om-hate)

### *[n]om 'to wake up' [1]

Mk [n]om-pha’m [1] (Gerzenstein 1999: 222, 282; Messineo 2015: 138) || PW *’<n>om > LB ’num; ’Wk ’nom (Nercesian 2021; Claesson 2016: 76)

[1]Morphologically, this verb looks like a middle voice derivation from the verb *'[j]om 'to be extinguished'.

[2]The absence of an underlying glottal stop in Maká, as seen in inflected forms such as

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*ts-om-pha’m* (as opposed to the expected form **ts-’om-pha’m*), must have come about through analogy with the third-person form *[n]’om-pha’m*, where glottalization is regularly lost in the word-initial position.

### *ʔóna(?)χ ‘my brother’

Ni ʔonax ‘my younger brother’ (Seelwische 2016: 207) || PCh *ʔónah > Mj ʔ́na (-wat) ‘my elder brother’ (Carol 2018)

**Rejected:** Najlis (1984: 20) considers the Nivaclé term related to Ni -sunxa ‘younger sister’ and reflexes of PW *-púnxʷa ‘brother’, which are all derived from PM *p’uhwá ‘sibling’ in her reconstruction. This is obviously a spurious comparison.

### *[j]óp’ale(?) ‘to hiccup’

Ni [j]op’aklé / -ʔóp’aklé ‘to choke’ (Seelwische 2016: 212) || PCh *[j]óp’ale-’n > Ijw [j]óp’ale? [1]; I’w -óppali-en [2]; Mj [j]óp’ele-ʔm / -óp’ele-ʔm [3] (Drayson 2009: 161; Gerzenstein 1983: 153; Carol 2018) || PW *[j]óp’le [1] > LB -ju’le; Vej [j]ople; ’Wk [j]ople-*<j>?* [4] (Nercesian 2014: 53; Hunt 1913a: 67, 113, 177; Claesson 2016: 128)

[1]Drayson (2009: 161) transcribes this as [j]óp’ali-’n, which does not match our field data.

[2]The geminate *pp* in the Iyo’awujwa’ reflex is probably a mistranscription of *p*.

[3]In Manjui, unstressed PCh *a irregularly yielded e.

[4]The ’Weenhayek reflex is likely ill-transcribed, as Claesson (2016: 218) marks it as an “early note”. The expected form would be *[j]op’le?.

Viegas Barros (2013a: 306) compares this to Proto-Guaicuruan *-t’ap’ela ‘to choke’ (Viegas Barros 2013b, #550).

Viegas Barros 2013a: 306 (*-op’ale)

### *-ʔo’t ~ *-ʔó’t ‘chest’

Ni -ʔo’t, -ʔot-is (Seelwische 2016: 355) || PCh *-ʔót > Ijw -ʔít; I’w -ót (-es) [1]; Mj -ʔít (Carol 2014a: 77, 85; Drayson 2009: 156; Gerzenstein 1983: 153; Carol 2018)

[1]The absence of a ? in Gerzenstein (1983) must be a mistranscription.

**Rejected:** Najlis (1984: 38, 42) compares the Chorote reflex to Ni -li’βte ‘heart’ and reflexes of

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PW *-t'ókʷe 'chest', but this is absolutely impossible for phonological reasons.

### *[j]uj 'to enter, to sink, to set (of sun)'

Mk [j]uj / -?wi 'to enter, to sink' (Gerzenstein 1999: 374) || Ni [j]uj / -?uj (Seelwische 2016: 390) || PCh *-[j]új? 'to enter' > Ijw [j]ú / -?ó? [1]; I'w -oj-i [2]; Mj [j]új? / -?új? (Carol 2014b; Carol 2014a: 77, fn. 4; Drayson 2009: 166; Gerzenstein 1983: 152; Carol 2018) || PW *-[j]uj 'to sink, to set (of sun)' > Vej [j]uj [3]; 'Wk [j]uj? 'to set (of sun)'; [j]új-APPL 'to enter'; *-[j]ú-k'ē 'to enter, to wear', *-<j>ú<k'ē> (*-lis) 'shirt' > LB [j]e-tse; Vej [j]u-tse [3]; 'jutse (-lis); 'Wk [j]ú-k'ē?; júk'ē? (-lis) (Nercesian 2014: 152; Viñas Urquiza 1974: 84; Gutiérrez & Osornio 2015: 51, 66; Claesson 2016: 129–131)

[1]Drayson (2009) mistranscribes this as [j]ú.

[2]The absence of a ? in Gerzenstein (1983) must be a mistranscription.

[3]Viñas Urquiza (1974: 84) mistranscribes [j]- as [jj]-.

### *?úl?åh, *?úl?å-ts 'dove (*Columbina* sp.)'

Ni ?ukl?å (-s) 'Picui dove' (Seelwische 2016: 306) || PCh *?úl?åh, *?úl?å-s > I'w ólaha (-s); Mj ?úl(a)?a (-s) 'scaled dove' (Gerzenstein 1983: 152; Carol 2018)

### *-?uka 'to swell'

Ni [t]’uka<’n> 'to swell', -?uka<’x>, -?uka<x>-is 'swelling' [1] (Campbell et al. 2020: 247) || PCh *[t]’ká<’n> 'to swell' [1 2] > Ijw [t]’ik’é’n (Drayson 2009: 155) || PW *-<t>’ukʷa? 'to swell' [3] > LB t’ikʷa [2]; 'Wk t’uka? (Nercesian 2021; Claesson 2016: 449)

[1]Nivañe and Chorote have fossilized a verbalizing suffix; in addition, Nivañe reflects a nominalization of the erstwhile verb.

[2]Chorote and Lower Bermejeño Wichí show unusual reflexes of the root-initial vowel; one would expect to find *u* in Iyojwa’aja’ and *e* in Lower Bermejeño Wichí.

[3]Wichí, or at least 'Weenhayek, has fossilized the erstwhile third-person prefix as a part of the root (Claesson 2016: 99).

### *-?úl 'to urinate'

Mk uł / -?uł (Gerzenstein 1999: 354) || Ni [j]uł / -?uł (Seelwische 2016: 306) || PCh *[t]’úł > Ijw [t]’ół; I'w -ół [1]; Mj [t]’úł (Drayson 2009: 155; Gerzenstein 1983: 152; Carol 2018) || PW *[t]’úł > LB [t]’eł; Vej [t]uł [2]; 'Wk [t]’úł

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(Nercesian 2014: 238; Braunstein 2009: 59; Viñas Urquiza 1974: 77; Claesson 2016: 449)

[1] The absence of an initial glottal stop in Gerzenstein's (1983) attestation of the word could result from mistranscription.

[2] The plain stop *t* in Viñas Urquiza's (1974) attestation of the Vejoz reflex must be a mistranscription.

Gutiérrez 2015b: 254–255

***-?úlu(?) 'urine'**

Ni -?úlu (Seelwische 2016: 307) || PCh *-?úlu? > Ijw -?éhllu? [1]; I'w -óhlu? (-s) [2]; Mj <tsojliu> ~ <sojliu> (Drayson 2009: 155; Gerzenstein 1983: 153; Lehmann-Nitsche 1910–1911: 118) || PW *-t-’úlu > Vej -t-ulu [3]; ’Wk -t-’úlu? (Viñas Urquiza 1974: 77; Claesson 2016: 99)

[1] Iyojwa’aja’ *e* (underlying /i/) is not a regular reflex of PCh **u*.

[2] The absence of an initial glottal stop in Gerzenstein's (1983) attestation of the word could result from mistranscription.

[3] The plain stop *t* in Viñas Urquiza's (1974) attestation of the Vejoz reflex must be a mistranscription.

Najlis 1984: 21 (*t'uhlu*)

***?uwále(?)χ ~ *C'uwále(?)χ [1] 'puma'**

Ni <xum>*p'upálex*, <xum>*p'uβatxe-s* (Seelwische 2016: 158) || PCh **k'uwáhlah*, **k'uwáhla-s* > Ijw *k'iwáhla*; I'w *iwáhla* (-s); Mj *?iwáhla* (-s) (Carol 2014a: 99; Drayson 2009: 138; Gerzenstein 1983: 132; Carol 2018) || PW **?owálaχ* ~ **C'owálaχ*, **?owála-s* ~ **C'owála-s* [1 2] > LB *p'uwałax*; Southeastern (Pozo Yacaré) *puwałox*; Guisnay (Alto de la Sierra) *powałah*; Vej *owałah*; ’Wk *t'owálaχ*, *t'owála-s* (Braunstein 2009: 55; Lunt 2016: 71; Viñas Urquiza 1974: 69; Gutiérrez & Osornio 2015: 22; Claesson 2016: 448)

[1] Nivañe and Lower Bermejeno point to PM **p'uwałex* > PW **p'owálaχ*; Weenhayek to PM **t'owálaχ* > PW **t'owálaχ*, Vejoz to PM **?owálaχ* > PW **?owálaχ*, and Chorote to

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PM **k'uwálex*.

[2] The lowering of PM **u* to PW **o* is irregular.

Najlis 1984: 20 (**t'øahlə*); Campbell & Grondona 2007: 19

### **Vláʔah*, **Vláʔa-ts* [1] ‘lesser grison’

Mk *ile* (-j) (Gerzenstein 1999: 198) || Ni *ʔakláʔa* (-s) (Seelwische 2016: 38) ||  
PCh **ʔeláʔah* ~ **ʔaláʔah*, **ʔaláʔa-s* > Ijw *ʔeláʔa*, *ʔeláh-as*; I'w *aláah* (-as);  
Mj *ʔaláʔa* (-s) (Drayson 2009: 96; Gerzenstein 1983: 119; Carol 2018) ||  
PW **ʔiláʔah* > Vej *ilaʔa-tah*; 'Wk *ʔiláʔah* ‘southern river otter’ (Viñas Urquiza 1974: 60; Claesson 2016: 29)

[1] Maká points to PM **ʔeláʔah*, **ʔeláʔa-ts* or **ʔiláʔah*, **ʔiláʔa-ts*, Iyojwa’aja’ to PM **ʔeláʔah*, **ʔeláʔa-ts*, Wichí to **ʔiláʔah*, **ʔiláʔa-ts*, whereas Nivaclé, Iyo’awujwa’, and Manjui point to PM **ʔaláʔah*, **ʔaláʔa-ts*.

Najlis 1984: 36 (**elaatha* ‘neotropical otter’)

## 10.2 Derivational affixes (nouns)

### *-äk, *-h-aj^h ‘participle, resultative nominalization’

Mk *wit...-ek* (Gerzenstein 1994: 225) || Ni *-atʃ* [1] (Seelwische 2016: 37) ||  
PCh *-ek, *-h-aj^h > Ijw *-ik*, *-h-a?* [1]; Mj *-ek*, *-h-aj* (Carol 2014b,a, 2018) ||  
PW *-eq, *-h-aj^h > LB *-eq*, *-h-aç*; 'Wk *-ek*, *-h-aç* (Nercesian 2014: 150, 192;  
Alvarsson & Claesson 2014: 444)

[1] Iyojwa’aja’ -? in the plural form is not the regular reflex of PCh *-j^h.

Obviously related to Proto-Guaicuruan *-ek ‘result or action nominalizer’ (Viegas Barros 2013b, #719; cf. Viegas Barros 2013a: 317).

Viegas Barros 2013a: 317 (*-ek ~ *-ik)

### *-ax ‘nominalizer (abstract nouns)’ [1]

Mk *-aχ* (-its) (Gerzenstein 1994: 219; Gerzenstein 1999: 194, 221, 368) || Ni *-ax* (Campbell et al. 2020: 108)

[1] Viegas Barros (2013a: 317) reconstructs this nominalizer as *-tsah ~ *-ah, as if these were two allomorphs of the same suffix. In our reconstruction, these two morphemes have different

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vowels (*-aχ vs. *-tseχ) and are hardly related to each other.

Viegas Barros 2013a: 317 (*-ah ‘nominalizer’)

### *-e? ‘feminine’ (not productive)

Mk -i? (Gerzenstein 1994: 152) || Ni -e? (Campbell et al. 2020: 107) || PCh *-e?  
 > Ijw/I’w/Mj -e? (Carol 2014b,a, 2018) || PW *-e > LB/Vej -e; ’Wk -e? (see  
 PM *-áse? ‘daughter’)

Possibly related to Proto-Guaicuruan *-ié ‘feminine’ (Viegas Barros 2013b, #741; cf. Viegas Barros 2013a: 317).

Viegas Barros 2013a: 317 (*-e)

### *-phah, *-pha-ts ‘companion’

Mk -fe [1] (-ts) (Gerzenstein 1999: 142, 162, 210, 230, 286, 302–303, 386, 393)  
 || Ni -pha (-s) (Seelwische 2016: 127; Fabre 2014: 105) || PCh *-hwah, *-hwa-s >  
 Ijw -hwa (-s); I’w -fʷa (-j) [1]; Mj -hwa, -hwaa-j [1] (Drayson 2009: 132; Gerzenstein 1983; Carol 2018) || PW *-xʷah, *-xʷa-s > LB -fʷa (-j) in -tʃ'e<fʷa> (-j)  
 ‘spouse’ [2]; ’Wk -xʷah, -xʷa-s (Nercesian 2014: 163; Claesson 2016: 162)

[1] Gerzenstein (1999) documents two variants of this suffix, -fe (in -xeſe ‘compatriot, fellow Indigenous person’, -kife ‘neighbor’) and -fe? (-eku-fe? ‘eating companion’, -tſeti-fe? ‘compatriot’, -?exuhi-fe? ‘enemy’). In the New Testament, this suffix is always attested as -fe: *j-eku-fe* ‘the one who eats with me’ (Mark 14:18), *ji-tſeti-fe* ‘my compatriot’ (Romans 16:11), *t-?exuhi-fe* ‘his enemy’ (1 Corinthians 15:26).

[2] The plural form in Lower Bermejeño Wichí is non-etymological.

Possibly related to Proto-Guaicuruan *-awa ~ *-aqawa ‘companion’ (Viegas Barros 2013b, #711).

Najlis 1984: 15 (*ce(h)l-hwa ‘spouse’)

### *-(ha-)ja x [1] ‘nominalizer (abstract nouns)’

Mk -(he-)je x / -e x [2] / -he-ji(’)x [3] (Gerzenstein 1994: 220) || Ni -(xa-)jaʃ / -aʃ  
 [4] (Campbell et al. 2020: 136–137) || PCh *-(ha-)jah > Ijw/Mj -(ha-)je (Carol 2014b, 2018) || PW *-(ha-)jaχ > LB -(ha-)jaχ (-aj); ’Wk -(ha-)jax, -(ha-)jah-aj (Nercesian 2014: 161, 204–205, 421–422; Alvarsson & Claesson 2014: 442)

[1] The element *-ha- occurs in some nominalizations but not in others. At least in Chorote, it is possible that the allomorph *-jah is phonologically conditioned, occurring after stems that

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end in low vowels. This allomorphy pattern awaits further study.

[2] The allomorph *-e'x* in Maká is found after *j*.

[3] The preglottalized coda in Maká is attested in the New Testament: *wit-'ijin-heje'x* 'demand' (1 Timothy 4:5), *wit-'ik-heji'x* 'path' (Romans 3:17). The latter noun is also attested as *-?ik-hejix*, though (Luke 13:33; cf. also *Unu'neiki Patricia 2011: 17*).

[4] The allomorph *-af* in Nivaclé occurs after consonants.

### ***-ha't, *-hat-ets ~ *-hat-its 'instrument nominalizer'**

Mk *-he't* [1], *-het-its* (Gerzenstein 1999: 362, 363, ...) || Ni *-xat* (*-es ~ -is*) (Fabre 2014: 100–101; Campbell et al. 2020: 118) || PCh **-hat* (**-is*) > Ijw *-hat* (*-is*); I'w *-hat* (*-es*); Mj *-hat* (*-es ~ -is*) (Carol 2014b; Gerzenstein 1983: 135, 147; Carol 2018)

[1] The preglottalized coda in the Maká singular form is attested in the New Testament in derivatives such as *wit-eqhun-he't* 'medicine' (Revelations 3:18).

Obviously related to Proto-Guaicuruan **-aqate* 'instrument nominalizer' (Viegas Barros 2013b, #714; cf. Viegas Barros 2013a: 317).

Viegas Barros 2013a: 317 (*-hate)

### ***-kat 'collective of plants'**

Mk *-ket*, *-et* (after *k*) (Gerzenstein 1994: 151–152) || Ni *-tfat* / *-kat* (after *V_[+back](C_[+grave])*) (Fabre 2014: 77) || PCh **-kat* > Ijw *-k'et*; I'w *-ket* ~ *-k'et*; Mj *-k'et* (Carol 2014b; Gerzenstein 1983: 119–120, 145, 151, 158, 173; Carol 2018) || PW **-k'at*, **-at* (after **k^w*, **q*) > LB *-tfat*, *-at* (after *k^w*, *q*); 'Wk *-k'at*, *-at* (after *k*) (Nercesian 2014: 193; Claesson 2016: 19, 139, 152, 186, 225, 326, 466)

Possibly related to Proto-Guaicuruan **-tfate* 'collective (of trees; suffix)' (Viegas Barros 2013b, #751).

### ***-ke?(*-j^h) 'feminine'**

Mk *-ki?* (*-j*) (Gerzenstein 1994: 152; Gerzenstein 1999: 137, 142) || Ni *-tfe* / *-ke* (after *V_[+back](C_[+grave])*) (*-j*) (Fabre 2014: 104–105) || PCh **-ke?* (**-j^h*) > Ijw *-ki?* (*-wa*), *-jis*, *-?i* [1]; I'w *-ki?*, *-ki-jh*; Mj *-ki?* (*-jh*) (Carol 2014b; own field notes; Carol 2018) || PW **-k'je* (**-j^h*) > LB *-tfe* (*-j*) in *?af^wen<tf>* (*-j*) 'bird'; 'Wk *-k'je?* (*-ç*) in *?ax^wén<k'je>* (*-ç*) 'bird' (Nercesian 2014: 196, 253; Claesson

## 10.2 Derivational affixes (nouns)

2016: 10)

[1] The plural allomorphs in Iyojwa'aja' are non-etymological.

Campbell &amp; Grondona 2007: 16; Gutiérrez 2015b: 64

***-[?]mat 'negative quality, physical defect'**Mk -[?]met [1] 'physical defect' (Gerzenstein 1999: 216, 328) || Ni -[?]mat (Fabre 2014: 226) || PCh *-[?]mat in *-<hwá>[?]mat 'disease' (see PM *-[?]phá-[?]mat)[1] The preglottalization in the initial consonant of the Maká reflex is attested in the New Testament in derivatives such as *eqfe-*[?]met 'ill' (Revelations 8:12), *[i]jtawxe-*[?]met 'to worry' (literally 'to be bellyless/spiritless').***-(ha-)na[?]χ, *-(ha-)nha-ts 'agent nominalizer' ('the one who typically does X')**Mk -(he-)*na*[?]χ [1], -(he-)*nhe-ts* (Gerzenstein 1994: 222) || Ni -(xa-)*nax*, -(xa-)*nxa-s* (fem. -(xa-)*nxa*, -(xa-)*nxa-j*) (Fabre 2014: 111; Campbell et al. 2020: 116–117)[1] The preglottalized coda in the Maká singular form is attested in the New Testament in derivatives such as *eku-na*[?]χ 'glutton' (Luke 7:34).Viegas Barros (2013a: 315) compares this prefix to Proto-Guaicuruan *-[?](*)naga* 'the one who has a lot of X' (Viegas Barros 2013b, #709).Viegas Barros 2013a: 317 (*-*nah* ~ *-*hanah*)***-[?]p 'season'**Mk -[?]p [1], -*p-its* (Gerzenstein 1999: 121, 202, 389; Paraguay 2020: 23–25) || Ni -[?](*p*) (Fabre 2014: 118) || PCh *-*p* > Ijw -(i)*p*; Mj -(e)*p* (Carol 2014b,a, 2018) || PW *-*p* in **kjé-t-kju-p* 'fall season', *^x*náwo*<*p* 'spring'[1] In the New Testament, the coda in the Maká singular form is attested as preglottalized in *xinawa-*[?]*p* 'spring' (e.g. Mark 13:28), but not in *ininqa-*[?]*p* 'summer, year' (e.g. Acts 18:11) and *lo-*[?]*p* 'winter' (John 10:22). This must be a mistranscription, as the forms *xinawa-*[?]*p*, *ininqa-*[?]*p*, *lo-*[?]*p*, *anheji-*[?]*p*, *kele-jku-*[?]*p* (misspelt as <keleku'p>) are documented in Paraguay (2020:23–25).***-*qá-* (before C) / *-*q-* (before V) 'indirect possession'**Mk -*qe-* / -*qa-* / -*qo-* / -*q-* (Gerzenstein 1994: 149) || Ni -*ka-* / -*k-* (Fabre 2014: 86–88; Seelwische 2016: 53) || PCh *-*qá-* / *-*q-* > Ijw/I'w/Mj -*ká-* / -*k-* (Carol

## 10 Dictionary

2014b; Gerzenstein 1983: 136–137; Carol 2018) || PW *-qá- / *-q- > LB -qa-; 'Wk -qá- / -q- (Nercesian 2014: 168; Claesson 2016: 88, 305)

Viegas Barros (2013a: 315) compares this prefix to Proto-Guaicuruan *q'o(?)m) 'person' (Viegas Barros 2013b, #540).

Viegas Barros 2013a: 317 (*q'a-)

### *-taχ, *-ta-ts 'pseudo-, augmentative'

Mk -taχ, -te-ts (Gerzenstein 1999: 142, 174, 236, 278, 281, 294, 331, 386) || Ni -tax, -ta-s (Fabre 2014: 103–104; Seelwische 2016: 249) || PCh *-tah, *-ta-s > Ijw/I'w/Mj -ta (-s) (Carol 2014a: 99; Gerzenstein 1983: 120, 161; Carol 2018) || PW *-taχ, *-ta-s > LB -taχ, -ta-s; 'Wk -tax, -ta-s (Nercesian 2014: 196; Alvarsson & Claesson 2014: 441)

Viegas Barros 2002: 144 (*-taχ)

### *-tsex, *-tse-ts 'notable quality'

Mk -tsaχ, -tsi-ts (Gerzenstein 1994: 223; Gerzenstein 1999: 122, 223, 225, 307) || Ni -tsex, -tse-s (Fabre 2014: 223–224) || PW *-tsaχ, *-tse-s > LB -tsaχ, -tse-s; 'Wk -tsax, -tse-s (Nercesian 2014: 210–211; Alvarsson & Claesson 2014: 441)

[1] Viegas Barros (2013a: 317) reconstructs this nominalizer as *-tsah ~ *-ah, as if these were two allomorphs of the same suffix. In our reconstruction, these two morphemes have different vowels (*-aχ vs. *-tsex) and are hardly related to each other.

Possibly related to Proto-Guaicuruan *-ts'aqa 'the one who has or does X a lot' (Viegas Barros 2013b, #770; cf. Viegas Barros 2013a: 317).

Viegas Barros 2013a: 317 (*-tsah ~ *-ah 'nominalizer')

### *-(j)u^wk, *-(j)ku-j^h 'tree' [1]

Mk -(j)u^wk, -(j)kw-i (Gerzenstein 1999; Paraguay 2022: 7) || Ni -(j)uk, -ku-j^h (Fabre 2014: 116) || PCh *-(j)uk, *-(j)ku-j^h > Ijw -uk / -(j)ik, -k^ju? / -t^ju?; I'w -uk / -(j)ik, -ki? / -si?; Mj -uk / -(j)ik, -ki? / -si? (Carol 2014b; Gerzenstein 1983; Carol 2018) || PW *-(j)uk^w, *-k^ju-j^h > LB -jek^w, -t^jfe-j; 'Wk -(j)uk, -k^ju-ç (Nercesian 2014: 192; Claesson 2016: 162, 187)

[1] In most languages, the PM sequence *-a-juk suffers contraction of *-aju- into *e.

Obviously related to Proto-Guaicuruan *-iko 'tree (suffix)' (Viegas Barros 2013b, #706; cf. Vie-

### 10.3 Valence and spatial suffixes

gas Barros 2013a: 317).

Viegas Barros 2013a: 317 (*-uk)

#### *-⁷w- ‘relationalizing prefix’

Mk -⁷w- [1] (Gerzenstein 1999: 251, 370) || Ni -⁷β- (Fabre 2014: 89–90) || PCh *-⁷w- > Ijw -⁷w-; Mj -w- [3] (Drayson 2009: 94, 127; Carol 2018)

[1] Identifiable in the pair *efu* ‘woman’ / -⁷w-*efu* ‘female’ and possibly in -⁷w-*extits-i?* ‘lie’ / *extitsax* ‘liar’. The preglottalization is attested in the New Testament (*te-⁷w-*extits-i?**; Ephesians 6:11).

[2] The prefix can be seen in the pair *Yálisa* ‘caraguatá’ / -⁷w-*álisa* ‘caraguatá of’.

[3] The absence of glottalization in Manjui is irregular. The prefix can be seen in the pair *Yálasa* ‘caraguatá (of an unspecified plant)’ / -w-*álasa* ‘caraguatá of’.

## 10.3 Valence and spatial suffixes

#### *-ah ‘towards (often metaphoric)’

Ni -a (Fabre 2014: 159–161) || PCh *-ah > Ijw/I’w/Mj -ah (Carol 2014b; own field notes; Carol 2018) || PW *-ah > LB -a ‘near’; ‘Wk -eh [1] (Nercesian 2014: 249; Alvarsson & Claesson 2014: 450)

[1] The reflex in ’Weenhayek is irregular; one would expect *-ah.

#### *-(a)⁷m ~ *-(ä)⁷m ‘for (benefactive)’

Mk -(e)⁷m [1] (Gerzenstein 1994: 126) || Ni -(a)m (Fabre 2014: 179–180)

[1] The preglottalized coda in the Maká reflex is documented in the New Testament, as in the forms of the verb ‘to tell’: *ni-fel-i-⁷m*, *he-n-fel-e⁷m* (Luke 1:73; Luke 4:18).

Viegas Barros (2013a: 316) compares this suffix to Proto-Guaicuruan *-ma ‘benefactive’ (Viegas Barros 2013b, #337).

Viegas Barros 2013a: 316 (*-m)

#### *-ej^h [1] ‘far (distal)’

Mk -ij (Gerzenstein 1999: 342) || Ni -ej (Campbell et al. 2020: 281) || PCh *-ej^h > Ijw -e, Mj/I’w -ej^h (Carol 2011: 55, 2014b, 2018) || PW *-ej^h > LB -ej (Nercesian

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2014: 276)

[1]The vowel *-e- in this suffix is likely a third-person suffix.

### *-ex [1] ‘instrumental’

Mk -ix (Gerzenstein 1999: 127–128) || Ni -eʃ (Campbell et al. 2020: 386–391) || PCh *-eh > Ijw/I'w/Mj -e (Carol 2011: 55, 2014b; own field notes) || PW *-eχ > LB -eχ; 'Wk -ex (Nercesian 2014: 134; Alvarsson & Claesson 2014: 450)

[1]The vowel *-e- in this suffix is likely a third-person suffix.

### *-phih / *-qphih / *-kåphih [1] ‘below, beneath’

Mk -fi (Gerzenstein 1999: 123) || Ni -<?a>kphi ~ -<?a>kxi ~ -<?å>kphi ~ -<?å>kxi  
[2] (Fabre 2014: 169; Seelwische 2016: 36; Campbell et al. 2020: 8) || PCh *kåh-wih / *-kåhwih ‘inside, below, beneath’ > Ijw *kjahwéh* / -*kjáhwe*; *qihwih / *-qihwih > I'w -*kifwí*; Mj *kihwíj* / -*kéihwi* (Carol 2014b; Drayson 2009: 135; Gerzenstein 1983: 127; Carol 2018; Hunt 1994) || PW *-qxfih / *-k'åxwih > LB [?i]qfwi / =qfwi [3] / =tsefwi [4]; Vej *tsuhwí* [4] ‘inside’; 'Wk -k'åxwih (Nercesian 2014: 249, 276; Viñas Urquiza 1974: 53; Claesson 2016: 218; Alvarsson & Claesson 2014: 450)

[1]PM *-phih is preserved in Maká, *-qphih in Nivaclé and Lower Bermejeño Wichí, *-kåphih in Chorote and Wichí.

[2]The variants with φ are found in the Shichaam Lhavos dialect; -?åkxi (~ -βåkxi) is documented by Campbell et al. (2020: 285–286) for the Chishamnee Lhavos dialect; -?akxi is attested by Seelwische (2016: 36) for Yita' Lhavos.

[3]Nercesian (2014) actually gives LB =fwi, but in all her examples the clitic is preceded by a q.

[4]LB *e* and Vej *u* are not the regular reflex of PW *å.

### *-phiVk'e(?) [1] ‘outside’

Mk -fik'i (Gerzenstein 1994: 117) || Ni -φatf'e? (Fabre 2014: 169)

[1]Maká points to *-φek'e or *-φik'e; Nivaclé to *-φak'e? or *-φäk'e?.

Viegas Barros (2013a: 316) compares this suffix to Proto-Guaicuruan *-ek'e ‘outwards’ (Viegas

### 10.3 Valence and spatial suffixes

Barros 2013b, #725).

Viegas Barros 2013a: 316 (*(-)h^wek'e)

#### ***-hat ‘(direct) causative’**

Mk -het (Gerzenstein 1999: 107) || Ni -xat (Fabre 2014: 216–217; Seelwische 2016: 146) || PCh *-hat > Ijw/I'w/Mj -hat (Carol 2014b; own field notes) || PW *-hat > LB -hat; 'Wk -hat (Nercesian 2014: 253–254; Claesson 2016: 146)

Viegas Barros (2013a: 317) compares this suffix to Proto-Guaicuruan *-aq-atV ~ *-atV ‘instrumental transitivizer’.

Viegas Barros 2013a: 318 (*-qVt ~ *-hVt ~ *-Vt)

#### ***-han ‘(indirect) causative; antipassive’ [1 2]**

Mk -hen<in>; -<ts>hen ‘causative’ (Gerzenstein 1999: 106) || Ni -xan (Fabre 2014: 310) || PCh *-han > Ijw/Mj -han (Carol 2014b; own field notes)

[1] This suffix is preserved in Wichí only in fossilized derivations (as in PW *[ʔi]k'ún<han> ‘to feed’, which goes back to PM *[ʔi]kún-han but is no longer analyzable).

[2] It is possible that *-han ‘(indirect) causative’ and *-han ‘antipassive’ were originally two distinct morphemes. Only the former, but not the latter, might have been a reduced allomorph of a longer suffix *-hajin, with reflexes in Nivaclé (Fabre 2014: 217) and Chorote (after low vowels, with *...a-ha.../...a-ha... yielding *a / *a, as in PCh *[ʔi]má-jin ‘to make sleep’ and *-já-jin-APPL ‘to give to drink’).

This suffix could be related to Proto-Guaicuruan *-agen ‘agentive transitivizer’ (Viegas Barros 2013b, #727).

#### ***=haju? ‘prospective; desiderative’**

Mk -hiju? / -heju? [1] (Gerzenstein 1994: 109–111) || Ni =xaju (Fabre 2014: 219; Campbell et al. 2020: 313–314) || PCh *-haju? > I'w -má-ju? ‘to want to sleep’; Mj -haju? ~ -haji? ~ -hee? (Carol 2014b; Gerzenstein 1983: 105; Carol 2018)

[1] The suffix-final glottal stop is not represented in Gerzenstein (1994), but it found in most available examples in Gerzenstein (1999). Other some consonants the *h* is lost. After vowels other than *i*, one finds the allomorphs -ju-/jo, and after *j* the suffix may be simply -u in Maká. The alternation *i* / *e* is irregular.

#### ***-käj ‘antipassive’**

Mk -kij [1] (Gerzenstein 1994: 119) || Ni -tſaj (Fabre 2014: 198–199) || PCh *-kej?

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> Ijw [ta]k(á)-...-kiʔ; Mj [ti]k(á)-...-kijʔ (Carol 2014b, 2018)

[1]The Maká reflex is irregular; one would expect -kej.

### *-k^je 'along; distributive, plural object' [1]

Mk -k'i (Gerzenstein 1994: 125) || Ni -tf'e(?) / -k'e(?) (Fabre 2014: 165–167; Campbell et al. 2020: 112, 278–279) || PCh *-k'e? > Ijw -k'iʔ; Mj -ʔiʔ (Carol 2014b,a, 2018) || PW *-k'e [2] > LB -tf'e; 'Wk -k^je? (Nercesian 2014: 134; Alvarsson & Claesson 2014: 439; Claesson 2016: 186)

[1]We refer the reader to Fabre's (2018) study on the functions of this suffix.

[2]The initial consonant irregularly deglottalized in Wichí.

### *k'ojə(?) / *-k'ója(?) 'before, for'

Ni -k'ója 'before, for, than' (Fabre 2014: 184–186; Seelwische 2016: 88; Campbell et al. 2020: 284) || PCh *k'ojá? / *-k'ója? 'for' > Ijw k'ijé / -k^jóje [1]; Mj ʔijé? / -ʔóje? (Carol 2014a: 90; Drayson 2009: 138; Carol 2018) || PW *-k'ója > LB -tf'uja 'sensorially'; Vej -tf'oje 'inside' [2]; 'Wk -k^joje? 'invisible, absent' [2] (Nercesian 2014: 313–315; Viñas Urquiza 1974: 53; Gutiérrez & Osornio 2015: 35; Alvarsson & Claesson 2014: 450)

[1]Ijw *k'ijé* / *-k^jóje*, which lacks a word-final glottal stop and thus ends in an underlying /h/, is irregular. One would expect **k'ijé*? / *-*k^jóje*?

[2]Vej/'Wk *e* is not the regular reflex of PW **a*.

### *-taxam ~ *-ä- 'into, entering'

Mk -texem (Gerzenstein 1994: 118) || Ni -taʃam (Fabre 2014: 176–177)

### *-wä't 'reflexive' [1]

Mk -wet- ~ -t- [2] (Gerzenstein 1994: 117) || Ni -βat- / -βa^ʔt- (Campbell et al. 2020: 297–298) || PCh *-wét 'reflexive/reciprocal' > Ijw wit-á'm [3] 'reciprocal (with an object as the antecedent)'; I'w -wét; Mj -wét 'reflexive/reciprocal' (Carol 2014b; Drayson 2009: 157; Gerzenstein 1983: 169–170; Carol 2018)

[1]At least in Iyo'awujwa' and Manjui the reflexes of this marker (which precedes the verb) are phonologically independent from the verb. The hyphen on the left indicates the slot that corresponds to the subject (agent), not to the verb.

[2]The Maká reflex unexpectedly lacks a preglottalized coda, as attested in the New Testament

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(e.g. *wet-fel* ‘to greet’; Philemon 1:23).

[3] Ijw *-á'm* corresponds to the applicative PCh **-håm* ‘through’. The lack of palatalization in *t* is unexpected after a pretonic PCh **e > i*. The palatalization process may have been inactive when **wét* lost its stress and changed to *wit*, or maybe both morphemes merged when palatalization was inactive.

#### ***-xA'm [1] ‘general locative’**

Mk *-xe'm* [2] ‘through’ (Gerzenstein 1994: 119–120) || Ni *-fa'm* / *-xa'm* (after  $V_{[+back]}(C_{[+grave]})$ ) (Fabre 2014: 169–170; Campbell et al. 2020: 286–288) || PCh **-hå'm* > Ijw/I'w/Mj *-ha'm* (Carol 2014b; own field notes)

[1] Maká points to PM **-xa'm* or **-xä'm*; Iyojwa'aja' to PM **-xä'm*, whereas Nivaâle, Iyo'awujwa', and Manjui are ambiguous in this sense.

[2] The preglottalized coda in the Maká reflex is attested in the New Testament (e.g. *tux-xe'm* ‘to burn’; Ephesians 6:16).

Gutiérrez 2015b: 64

#### ***-xi? ‘inside a recipient’**

Mk *-xi?* (Gerzenstein 1994: 119) || Ni *-fi* / *-xi* (after  $V_{[+back]}(C_{[+grave]})$ ) (Campbell et al. 2020: 289–290) || PCh **-hi?* > Ijw/I'w *-hi?*; Mj *-hij?* (Carol 2011: 55, 2014b; own field notes; Carol 2018) || PW **-hi?* > LB *-hi*; 'Wk *-hi?* (Nercesian 2014: 148; Claesson 2016: 148)

Viegas Barros (2013a: 316) compares it to the Proto-Guaicuruan locative suffix **-gi* (Viegas Barros 2013b, #790).

Viegas Barros 2002: 143 (**-xij*); Viegas Barros 2013a: 316 (**-hij*); Gutiérrez 2015b: 64

#### ***-xop ‘next to, surrounding’**

Mk *-xup* (Gerzenstein 1994: 129) || Ni *-xop* (Fabre 2014: 174–175) || PCh **-hop* [1] > Ijw *-hap*; I'w *-hop*; Mj *-hap* (own field notes)

[1] We reconstruct PCh **-hop* based on the regular correspondence between I'w *-hop* (attested in our field notes with person prefixes) and Nivaâle. The Ijw/Mj reflex *-hap* (underlying */-håp/* in Ijw) is irregular.

Viegas Barros (2013a: 320) compares this to Proto-Guaicuruan **-atf'ap* ‘near, next to’ (Viegas

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Barros 2013b, #154), which could be spurious.

Viegas Barros 2002: 142 (*-xop); Viegas Barros 2013a: 320 (*-hVp ‘near’)

### *-xo? ‘down / inwards’

Mk -xu? ~ -xo? ‘down’ (Gerzenstein 1994: 118) || PW *-ho > LB -hu ‘inwards, entering, for’; ’Wk -ho? ‘entering, exiting, for’ (Nercesian 2014: 249, 259; Claesson 2016: 151; Alvarsson & Claesson 2014: 450)

### *-xu’l ‘in front of, approaching’

Mk -xu’l ‘in front of’ [1] (Gerzenstein 1994: 128) || Ni -xu’l ‘approaching; same as’ (Fabre 2014: 182–184)

[1] The preglottalized coda in the Maká applicative suffix is attested in the New Testament (e.g. [t]’eku’m-ixu’l ‘to grab something from one’s front’; Luke 24:43).

### *?apé(-?e?) / *-tápe(-?e?) ‘on, on top of’

Ni =?ape<?e> / -tape<?e> (Fabre 2014: 167–168; Seelwische 2016: 47; Campbell et al. 2020: 337–338) || PCh *?apé<?e?> / *-tépe<?e?> [1] > Ijw ?apé?e / -tépe?e [2]; I’w apé?e [2]; Mj ?apé?e? / -tépe?e? (Carol 2014b; Drayson 2009: 94; Gerzenstein 1983: 126; Carol 2018) || PW *-?pe? / *-t(a)pe? [3] > LB =pe?; Vej -nu-pe ‘to surpass’; ’Wk -?pe? / -t(a)pe? (Nercesian 2014: 276; Viñas Urquiza 1974: 69; Alvarsson & Claesson 2014: 450)

[1] Chorote appears to have undergone some sort of vowel harmonization.

[2] Ijw ?apé?e / -tépe?e and I’w apé?e, which lack a word-final glottal stop and thus end in an underlying /h/, are irregular (in fact, this could be a mistranscription for ?apé?e? / -tépe?e?).

[3] PW *-?pe? unexpectedly lack a vowel between *? and *p.

## 10.4 Demonstratives

### *h- ‘that (outside the speaker’s sight)’

Mk M ha?, PL he? (Gerzenstein 1994: 166) || Ni M xa?, F t-xa?, PL.H xa-pi?, PL.NH xa-βa? ‘absent at utterance time; firsthand evidence available’ (Gutiérrez 2015a: 415; Campbell et al. 2020: 175) || PCh M *há? ~ *há?, F *hla-há? ~ hlá-há?, PL.H *ha-pú? ~ *há-pú?, PL.NH *ha-wá? ~ *há-wá? > Ijw M há?, F hla-há?, PL.H ha-pó?, PL.NH ha-wá? ‘that (outside the speaker’s sight but

## 10.4 Demonstratives

seen before)'; Mj M *ha*, F *la-ha*, PL.H *ha-pv*, PL.NH *ho-wa* (Carol 2014a: 78, 2014b; Drayson 2009: 169; Carol 2018)

***k-** ‘that (outside the speaker’s sight)’

Mk M *ka?*, F *ke?*, PL *ke-khewe?* ~ *ke?* ‘that (outside the speaker’s sight but seen before)’ (Gerzenstein 1994: 166) || Ni M *ka?*, F *t-ka?*, PL.H *ka-pi?*, PL.NH *ka-βa?* [1] ‘no longer in existence, deceased, or moving across one’s field of vision about to move out of sight; firsthand evidence available’ (Gutiérrez 2015a: 415; Campbell et al. 2020: 175) || PCh M **ká?*, F **ha-ká?* ~ **hå-kå?*, PL.H **kå-pú?*, PL.NH **ko-wá?* > Ijw M *k'á?* ~ *k<í?*, F *ha-k'á?*, PL.H *k'a-pó?*, PL.NH *ki-wá?* ~ *k'ju-wá?*; Mj M *kjé*, F *ha-kjé*, PL.H *kj'e-pv*, PL.NH *kj'o-wá* (Carol 2014b; Drayson 2009: 169; Carol 2018)

[1] The failure of PM **k* to palatalize in Nivaclé before an *a* is unexpected. If the gender distinction seen in Maká goes back to Proto-Mataguayan, we might be dealing with contamination of PM **kå?* (masculine) and **ka?* (feminine), whose expected reflexes in Nivaclé would be **kå?* and **tfa?*, respectively.

[2] Possibly related to Proto-Guaicuruan **k'a* ‘absent, [-visible]’ (Viegas Barros 2013b, #337; cf. Viegas Barros 2013a: 313), though the semantic match is imperfect.

Viegas Barros 2013a: 313 (**ka?* ‘this’)

***-kha?** ‘emphatic/pronominal base’ [1 2], as of **n-V-kha?*; **n-V-kha?*; **ts-V-kha?*; **h-V-kha?*; **k-V-kha?*; **p-V-kha?*

Mk M *n-a-kha?*, F *n-e-khe?*, PL *n-e-khe-we?*; M *tsa-kha-*, F *tse-khe-*; M *ha-kha?*, F *ki-khe?*, PL *he-khe-we?*; M *ka-kha?*, F *ke-khe?*, PL *ke-khe-we?*; M *pa-kha?*, F *pe-khe?*, PL *pe-khe-we?*; (Gerzenstein 1994: 170–172) || PCh **-hqa* [3] > Ijw *'ná-ka*; *ná-ka*; *sé-ka*; *há-ka*; *k'á-ka*; *pá-ka*; I'w/Mj *'ná-hak*; *ná-hak*; (*sí-hik*); *há-hak*; *k'é-hek*; *pá-hak* [4 5 6] (Carol 2014b, own field notes, 2018)

[1] In Chorote, demonstratives with this suffix are usually translated into Spanish as adnominal or pronominal demonstratives, whereas the corresponding forms without this suffix tend to be translated as articles. In Maká, this suffix is added to demonstrative bases to form emphatic and indefinite demonstratives (Gerzenstein 1994: 170–172). Furthermore, a form *-akha?* probably related, forms personal and possessive pronouns with personal prefixes, e.g. *j-akha?* ‘I, mine’ (Gerzenstein 1994: 174–177).

[2] The Chorote reflex of the vowel does not allow to decide between PM **a* and **å*, and the Maká reflexes F *-khe-* alongside M *-kha-* suggest both. The vowel of the Maká suffix seems to copy the gender vowel of the base. However, in the Maká plural, where no gender distinction

## 10 Dictionary

is involved, only the allomorph *-khe-* occurs, which suggests this is the basic one. Therefore, we reconstruct **-kha* rather than **-khå*.

[3] For simplicity, in Chorote only masculine singular forms are given. Notice however that, unlike Maká, the plural suffix precedes the emphatic one: Ijw *ni-wá-ka*, I'w/Mj *nu-wá-hak* 'these ones (non-human)', etc.

[4] The form *sí-hik* is not attested for Iyo'awujwa' in our material.

[5] Iyo'awujwa' and Manjui show an irregular metathesis: **-hqa* > *-hak*.

[6] Most probably related are Manjui forms *Cá-hka-ta* such as *ná-hka-ta* 'this only one'.

### **ɬ*- 'F (in demonstratives)', as of **ɬ-n-*...; **ɬ-ts-*...; **ɬ-h-*...; **ɬ-k-*...; **ɬ-p-*...

Ni *-*; *-*; *ɬ-xa?*; *ɬ-ka?*; *ɬ-pa?* (Gutiérrez 2015a: 414–415; Campbell et al. 2020: 175) || PCh **ha-ná?* ~ **hå-ná?*; **ha-sé?* ~ **hå-sé?*; **hla-há?* ~ **hlå-hå?*; **ha-kå?* ~ **hå-kå?*; **ha-på?* ~ **hå-på?* ~ **hå-på?* [1] > Ijw *ha-ná?*; *ha-sé?*; *hla-hå?*; *ha-kå?*; *ha-på?*; Mj *ha-na*; *ha-sí?* ~ *ha-sr*; *la-ha*; *ha-kjé*; *ha-pá* (Carol 2014b; Drayson 2009: 169; Carol 2018)

[1] We have no convincing explanation for the fact that all contemporary Chorote varieties have *a* instead of the expected *i* in this prefix (except of **hla-há?* ~ **hlå-hå?*, where a low vowel was copied from **há?* ~ **hå?* by means of translaryngeal harmony early enough so as to prevent **hl-* from changing to **h^o*).

### **ɬa?* 'this.F (within one's hands' reach)'

Ni *ɬa?* 'present at utterance time; firsthand evidence available (feminine)' (Gutiérrez 2015a: 415; Campbell et al. 2020: 175) || PCh **hla?<ah>* > Ijw *hla?ta*; I'w *s'ú-hla*; Mj *hla?ta* (Carol 2014b; Drayson 2009: 169; Gerzenstein 1983: 160; Carol 2018)

### **n-* 'this (outside one's hands' reach)'

Mk M *na?*, F *ne?*, PL *ne-khe-we?* ~ *ne?* (Gerzenstein 1999: 166) || PCh M **ná?*, F **ha-ná?*, PL.H **na-pú?*, PL.NH **no-wá?* > Ijw M *ná?* ~ *n<í?*, F *ha-ná?*, PL.H *na-pó?*, PL.NH *ni-wá?* ~ *n^ju-wá?*; Mj M *ná*, F *ha-ná*, PL.H *na-pé?*, PL.NH *no-wá* (Carol 2014b; Drayson 2009: 169; Carol 2018) || PW **=nah* 'this (within one's hands' reach)' > LB/Vej *=na*; 'Wk *-nah*; (?) **=n<ih>* 'this (outside one's hands' reach, vertical)' > LB *=ni*; 'Wk *-nih* ~ *-nåh* ~ *-noh* (Nercesian 2014: 177–178; Gutiérrez & Osornio 2015: 70; Alvarsson & Claesson 2014: 446)

Possibly related to Proto-Guaicuruan **na* 'proximal, in movement' (Viegas Barros 2013b,

## 10.4 Demonstratives

#420; cf. Viegas Barros 2013a: 313).

Viegas Barros 2013a: 313 (**na?* ~ **na?*) ‘this’

***’na?** ‘this.m (within one’s hands’ reach)’

Mk M *ha?-ne?*, F *e-ne?*, PL *e-ne-we?* (Gerzenstein 1994: 166) || Ni M *na?*, PL.H *na-pi?*, PL.NH *na-βa?* ‘present at utterance time; firsthand evidence available (masculine)’ (Gutiérrez 2015a: 415; Campbell et al. 2020: 175) || PCh M *’*ná?*, PL.H *’*na-pú?*, PL.NH *’*no-wá?* > Ijw M ’*ná?* ~ ’*n-i?*, PL.H ’*na-pó?*, PL.NH ’*ni-wá?* ~ ’*n-u-wá?*; I’w M *s’úh-na*, PL.H *s’úh-na-po*, PL.NH *s’úh-nu-wa*; Mj M ’*ná*, PL.H ’*na-pú*, PL.NH ’*no-wá* (Carol 2014b; Drayson 2009: 169; Gerzenstein 1983: 161; Carol 2018)

***pa?** ‘that (outside the speaker’s sight and never seen before)’

Mk M *pa?*, F *pe?*, PL *pe-khe-we?* ~ *pe?* (Gerzenstein 1994: 166) || Ni M *pa?*, F **pa?*, PL.H *pa-pi?*, PL.NH *pa-βa?* ‘absent at utterance time; firsthand evidence unavailable’ (Gutiérrez 2015a: 415; Campbell et al. 2020: 175) || PCh M *’*pá?* ~ *’*pá?*, F *’*ha-pá?* ~ *’*hå-pá?* ~ *’*hå-pá?*, PL.H *’*pa-pú?* ~ *’*på-pú?*, PL.NH *’*po-wá?* > Ijw M *pá?* ~ *p-i?*, F *ha-pá?*, PL.H *pa-pó?*, PL.NH *pu-wá?*; Mj M *pá?*, F *ha-pá*, PL.H *pa-pú*, PL.NH *po-wá* (Carol 2014b; Drayson 2009: 169; Carol 2018) || PW *’*=pa-h>* > LB =*pa*; ’Wk =*pah* ‘hearsay evidential’ (Nercesian 2014: 186; Claesson 2016: 287)

***ts- ‘that (within the speaker’s sight)’**

Mk M *tsa?*, F *tse?*, PL *e-tsi-we?* (Gerzenstein 1994: 166) || PCh M *’*sé?*, F *’*ha-sé?* ~ *’*hå-sé?*, PL.H *’*se-pú?*, PL.NH *’*so-wá?* > Ijw M *sé?* ~ *s-i?*, F *ha-sé?*, PL.H *s’i-a-pó?*, PL.NH *s’i-u-wá?*; I’w M *s’ú-xtse?*, F *s’ó-ho-se?*, PL.H *s’ú-xsa-po*, PL.NH *s’ú-xsu-wa*; Mj M *sí?* ~ *si*, F *ha-sí?* ~ *ha-si*, PL.H *se-pú*, PL.NH *so-wá* (Carol 2014b; Drayson 2009: 169; Gerzenstein 1983: 160–161; Carol 2018) || (?) PW *’*=ts-oh>* ‘that (moving away); the one just mentioned’ > LB =*tsu*; ’Wk -*tsoh*; (?) *’*=ts-ih>* ‘this (outside one’s hands’ reach, horizontal)’ > LB =*tsi*; ’Wk -*tsih* ~ -*tsåh* (Nercesian 2014: 180; Alvarsson & Claesson 2014: 446)

***-wa?** ‘plural (non-human, demonstratives)’

Mk -*we?* (Gerzenstein 1994: 165–166) || Ni -*βa?* (Gutiérrez 2015a: 414–415; Campbell et al. 2020: 184) || PCh *’*-wá?* > Ijw -*wá?*; I’w *s’úhnu-wa* ‘these’; Mj -*wá?* (Carol 2014b; Drayson 2009: 169; Gerzenstein 1983: 160; Carol 2018)

[1] The absence of a word-final glottal stop in Gerzenstein’s (1983) attestation of this suffix

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must be a mistranscription.

Obviously related to Proto-Guaicuruan **-wa* ‘dual’ (Viegas Barros 2013b, #754; cf. Viegas Barros 2013a: 316).

Viegas Barros 2013a: 316 (**-wa*)

### 10.5 Inflectional prefixes

****ha-* (before C) / **h-* (before V) / **k-* (coalescing with **?...*) ‘1.A/S_A (realis)’**

Mk *he-* / *ha-* / *ho-* / *h-* / *k-*... (Gerzenstein 1994: 98; Messineo 2015: 132) || Ni *xa-* / *x-* / *k-*... (Fabre 2014: 145; Seelwische 2016: 143) || PCh **?a-* / **∅-* > Ijw *?a-* / *∅-*; I’w *a-* / *a-* ~ *∅-*; Mj *?a-* / *∅-* (Carol 2014b; Drayson 2009: 168; Gerzenstein 1983: 73; Carol 2018) || PW **?a-* > ’Wk *?a-* (“informal sociolect”) (Alvarsson 2012b: 58)

Viegas Barros (2013a: 314) compares this prefix to Proto-Guaicuruan **tʃV-* ~ **tʃ-* ‘1.A/S_A’.

Viegas Barros 2002: 144 (**χa-*); Viegas Barros 2013a: 314 (**ha-*).

****ji-* (before C) / **j-* (before V) / **?j-* (coalescing with **?...*) ‘1.Poss’ (also ‘1.A/S_{A.IRR}’) [1]**

Mk *ji-* / *j-* (Gerzenstein 1999: 142) || Ni *ji-* / *j-* (Fabre 2014: 80; Seelwische 2016: 379) || PCh **?i-* / **j-* / **?j-* [2] > Ijw *?i-* / *j-* / *?j-*; I’w *i-* / *j-*; Mj *?i-* / *j-* / *?j-* (Carol 2014b; Drayson 2009: 168; Gerzenstein 1983: 65; Carol 2018) || PW **?i-* / **ji-* [2] / **j-* > ’Wk *?i-* / *ja-* / *j-* ‘vocative prefix’ (Alvarsson & Claesson 2014: 445)

[1] This affix can also occur before applicatives to express a first-person singular participant in Maká (Messineo 2015: 136), Nivaclé (Fabre 2014: 194), and Chorote (with a subset of applicative; cf. Carol 2014b).

[2] The allomorph PW **ji-* > ’Wk *ja-* is found preceding uvular and glottal consonants.

Obviously related to Proto-Guaicuruan **j-* ~ **ej-* ~ **ji-* ‘1.Poss’, **i-* ‘1.S (stative and middle diathesis)’ (Viegas Barros 2013a: 314).

Hunt 1915: 241; Viegas Barros 2013a: 314 (**j(i)-*), 315 (**jV-* ‘1.S_P’)

****ji-* (before C) / **j-* (before V) / **?j-* (coalescing with **?...*) ‘3.A/S_I (realis)’**

Mk (*j)i-* / *j-* (Gerzenstein 1994: 98; Messineo 2015: 132) || Ni *ji-* / *j-* (Fabre 2014: 145; Seelwische 2016: 375) || PCh **?i-* / **j-* / **?j-* > Ijw *?i-* / *ja-* [1] / *j-* / *?j-*; I’w *i-* /

## 10.5 Inflectional prefixes

*j-*; Mj *ʔi-* / *j-* / *ʔj-* (Carol 2014b; Drayson 2009: 168; Gerzenstein 1983: 75; Carol 2018) || PW **ʔi-* / **ji-* [1] **hi-* [2] / **j-* / **ʔj-* [3] > LB *ʔi-* / *ji-* / *hi-* / *j-* / *ʔj-*; 'Wk *ʔi-* / *ja-* / *hi-* / *j-* / *ʔj-* (Nercesian 2014: 241–242; Alvarsson & Claesson 2014: 449)

[1] The allomorph *Ijw ja-* is found before /k/ (< PM **q*). Similarly, the allomorphs LB *ji-* / 'Wk *ja-* are found before uvular and glottal consonants. In the Rivadavia variety of Southeastern Wichí, verbs that took **ji-* in Proto-Wichí may now take *ja-* (if the agent acts with low intensity) or *ʔi-* (if the agent acts with high intensity), according to Terraza (2009b: 135).

[2] The allomorph *hi-* is found before glottalized consonants in Wichí.

[3] As a result of Watkins' Law, the prefix in question is now found in persons other than the third person in Wichí and is now best analyzed as a verb class marker.

Obviously related to Proto-Guaicuruan **j(i)-* '3.A/S_A' and **-i* '1SG indirect object' (Viegas Barros 2013b, #779; see Viegas Barros 2013a: 315).

Viegas Barros 2013a: 315 (**j-* ~ **i-* (person prefix); **-ji* (with applicatives))

***I-** (before C) / ***I-** (before V) / ***I'-** (coalescing with **ʔ...*) '3.Poss'

Mk *te-* / *ta-* / *to-* [1] / *t-* / *t'-* (Gerzenstein 1994: 147) || Ni *ɬ-* / *t-* / *t'-* (Fabre 2014: 80; Seelwische 2016: 161) || PCh **h²-* / **hl-* / **t'-* > Ijw *hi-* / *hl-* / *t'-*; I'w *hi-* / *hl-* / *t'-*; Mj *hi-* / *hl-* / *t'-* [1] (Carol 2014b; Drayson 2009: 168; Gerzenstein 1983: 66; Carol 2018) || PW **ɬ-* / **t-* / **t'-* > LB *la-* / *t-* / <*t'-*> [2]; 'Wk *la-* / *ɬ-* / *t'-* (Nercesian 2014: 163–166; Alvarsson & Claesson 2014: 444–445)

[1] The allomorphs *te-* / *ta-* / *to-* in Maká are conditioned by vowel harmony.

[2] In Lower Bermejeño, the erstwhile allomorph *t'-* has been reanalyzed as part of the stems.

Viegas Barros (2013a: 315) compares this prefix to Proto-Guaicuruan **(e)ɬ-* '3.Poss'.

Hunt 1915: 241; Viegas Barros 2013a: 315 (**ɬ(V)-*); Gutiérrez 2015b: 255

***I-** (before C) / ***I-** (before V) / ***I'-** (coalescing with **ʔ...*) '2.A/S_A (realis)'

Mk *te-* / *ta-* / *to-* [1] / *t-* (Gerzenstein 1994: 98; Messineo 2015: 132) || Ni *ɬ(a)-* / *t-* / *t'-* (Fabre 2014: 145; Seelwische 2016: 161) || PCh **h²-* / **hl-* / **<h²>t'-* [2] > Ijw *hi-* / *hl-* / *hit'*; I'w *hi-* / *hl-*; Mj *hi-* / *hl-* / <*hi>t'-* (Carol 2014b; Drayson 2009: 168; Gerzenstein 1983: 74; Carol 2018) || PW **ɬ-* / **t-* / **<ɬ>t'-* [2] > LB *la-* / *ɬ-* [3]; 'Wk *la-* / *ɬ-* / *lat'* [3] (Nercesian 2014: 241; Alvarsson & Claesson 2014: 449)

[1] The allomorphs *te-* / *ta-* / *to-* in Maká are conditioned by vowel harmony.

[2] In Chorote and Wichí, one finds reflexes of **ɬ-* instead of **t-* before *ʔ*-initial stems, pos-

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sibly as a result of analogical extension (see Carol 2014b).

[3] In Lower Bermejeno, erstwhile *ʔ*-initial roots of transitive verbs extended the occurrence of a *j*'-initial allomorph (originally restricted to the third person) to the entire realis paradigm (Watkins' Law), and forms such as PW **ɬt-áχ* 'you beat' were replaced by the non-etymological LB *la-j-áχ* (Nercesian 2014: 241), as opposed to 'Wk *lat-áχ* (Claesson 2016: 116).

[4] In 'Weenhayek, this prefix is unique in triggering vowel lengthening in the subsequent syllable.

Najlis 1984: 9, 15, 53 (**hl-*)

### **n-* (before C) / **n-* (before V) / *[?]*n-* (coalescing with **ʔ...*) '2.Sp/P (realis)'

Mk <*ɬe>n-* / <*ɬa>n-* / <*ɬo>n-* [1] (Gerzenstein 1994: 89; Messineo 2015: 132) || Ni *na-* / *n-* (Fabre 2014: 141–142, 148; Seelwische 2016: 177) || PCh **n-* / **n-* / *[?]*n-* > Ijw *ʔin-* / <*ʔi(n)>n-* / (<*ʔi>*n-* [2]; I'w *in-* / *n-* / —; Mj *ʔin-* / <*ʔi>n- / (<*ʔi>*n-* [2] (Carol 2014b; Drayson 2009: 167, 169; Gerzenstein 1983: 77–78; Carol 2018)***

[1] The element *ɬe-* / *ɬa-* / *ɬo-* in Maká (with allomorphy conditioned by vowel harmony) is likely etymologically related to the 2.A/S_A prefix.

[2] In Iyojwa'aja' and Manjui, one finds both *n-* and *ʔi'n-* before *ʔ*-initial stems, and *ʔin-* before vowel-initial stems. The choice most likely depends on the position of the stress (*n-* is found in roots where the stress falls on the second syllable, and *ʔi'n-* is predominant in roots with initial stress), though there is some variation (and in Iyojwa'aja' this variation is apparently of subdialectal nature). Iyo'awujwa' preserves the more archaic pattern here.

### **n-* (before C) / **n-* (before V) / *[?]*n-* (coalescing with **ʔ...*) 'indefinite possessor'

Mk *n-* (Gerzenstein 1994: 147, fn. 41) || Ni *na-* / *n-* (Fabre 2014: 83) || PCh **n-* / **n-* / *[?]*n-* > Ijw *ʔin-* / <*ʔi>n- / *n-* [1]; I'w *in-* ~ *n-* / — / *n-* [2]; Mj *ʔin-* / <*ʔi>n- / *n-* [1] (Carol 2014a: 77, 2014b; Drayson 2009: 168; Gerzenstein 1983: 69; Carol 2018)**

[1] In Iyojwa'aja' and Manjui, one finds *ʔin-* before vowel-initial stems. No relevant data on Iyo'awujwa' have been attested for this specific environment.

[2] With stems that are known to start with a glottal stop, the prefix in question is attested as *n-* in Gerzenstein (1983: 69), which must be a mistranscription for *n-*.

Obviously related to Proto-Guaicuruan **en-* ~ **n-* 'indefinite possessor' (Viegas Barros 2013b,

## 10.5 Inflectional prefixes

#735).

***n- (before C) / *n- (before V) / *'n- (coalescing with *ʔ...) ‘3.A/S.IRR’**

Mk *ne-* / *na-* / *no-* [1] / *n-* (Gerzenstein 1994: 85–98) || Ni *na-* / *n-* (Fabre 2014: 145) || PCh **n-* / **n-* / *'n- > Ijw *ʔin-* / <*ʔi(n)*>*n-* / <*ʔi*>*'n-* ~ **n-* [2]; I'w (*e*)*n-* / <*i*>*n-* / —; Mj *ʔin-* / <*ʔi*>*n-* / — (Carol 2014a: 89, 2014b; Drayson 2009: 168; Gerzenstein 1983: 75–76; Carol 2018) || PW **ní-...-a?* / **n-'*...-*a?* / *'n-'...-*a?* > LB *ni-...-a?*; 'Wk *ní-...-a?* / *n-'*...-*a?* / **n-'*...-*a?* (Nercesian 2014: 316; Alvarsson & Claesson 2014: 458, fn. 36)

[1]The allomorphs *ne-* / *na-* / *no-* in Maká are conditioned by vowel harmony.

[2]In Iyojwa'aja', the third-person unrealis prefix usually coalesces with the stem-initial glottal stop as *ʔi'n-*, but in some verbs *'n-* is found instead: *ka'naháne* 'so that she/he knows'. The sequence *ʔi-* is also often omitted after particles that end in a low vowel.

***ni- / *n- (next to a vowel) ‘cislocative’**

Mk *ni-* / *-n-* (Gerzenstein 1994: 94) || Ni *ni-* / *n-* (Fabre 2014: 191–192) || PCh **n-* in *<*n*>*ám* 'to come here' (cf. [j]iám 'to go away.3IRR') > Ijw *ná'm*; Mj *nám* (Carol 2014b,a, 2018) || PW **n-* in *<*n*>*ám* 'to come here' > LB *nom*; Vej *nám*; 'Wk *náṁ* (Nercesian 2014: 145; Braunstein 2009: 53; Viñas Urquiza 1974: 68; Claesson 2016: 252)

Viegas Barros (2013a: 317) compares this to Proto-Guaicuruan **n-* 'middle diathesis' (Viegas Barros 2013b, #774).

Viegas Barros 2013a: 317 (**n-*) ‘cislocative, middle voice’

***ni- / *n- (next to a vowel) ‘middle voice’**

Ni *n-* [1] (Fabre 2014: 192) || (?) PCh *-*n-...-* [2] > Ijw *-ní-* 'reflexive' (Carol 2014b) || PW **ni-* > LB *ni-*; 'Wk *ni-* / *n-* (Terraza 2009b: 192–194; Alvarsson & Claesson 2014: 449)

[1]Campbell et al. (2020: 297) state that this prefix only occurs before vowel-initial stems. Fabre (2014) considers it to be a metaphorical extension of the cislocative prefix.

[2]We can think of no convincing way of accounting for an instance of [i] in a stressed syllable after a non-palatalized consonant in Iyojwa'aja', which in addition fails to trigger palatalization of following segments (even coronal ones). We have considered the possibility of positing a stressed syllabic **n* for Proto-Chorote, but this is problematic because the reflexive prefix

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surfaces as *-ní-* even after vowels in Iyojwa 'aja'.

Viegas Barros (2013a: 317) compares this to Proto-Guaicuruan **n-* 'middle diathesis' (Viegas Barros 2013b, #774).

Viegas Barros 2013a: 317 (**n-*) 'cislative, middle voice'

### ****ni-* / **n-* (next to a vowel) '3.S_N (realis)' [1]**

Mk *ni-* / *-n-* (Gerzenstein 1994: 89) || Ni *ni-* / *n-* (Fabre 2014: 142) || PCh **η-* / **n-* / **'n-* > Ijw *?in-* / *n-* / *?n-*; I'w *in-* / *-* / *-*; Mj *?in-* / *-* / *?n-* (Carol 2014b; Gerzenstein 1983: 79; Carol 2018) || see **ni-* / **n-* 'middle voice'

[1] This is probably the same prefix as 'cislative' and/or 'middle voice', which has become obligatory with some verbs and is no longer analyzable as a direction or voice marker.

### ****qats-* (before C) / **qats-* (before V) / **qats'* = (coalescing with **?*...) '1PL.Sp/P' or '1PL.Poss'**

Ni *kas-* ~ *katsi-* / *kats-* / *kats'* - '1PL.Poss' (Fabre 2014: 82) || PCh **qas=s²-* / **qas=s-* / **qas=ts'* - '1PL.Sp/P' > Ijw *kas=Ø-* / *kas=...s-* / *kas=...ts'* -; I'w *kasi-* / *kas-* / *kats-*; Mj *ka-fi-* / *ka-si-* / *ka-se-* [1] / *kas-s-* / *kas-ts'* - (Carol 2014a: 89, 2014b; Drayson 2009: 167, 169; Gerzenstein 1983: 79–80; Carol 2018)

[1] The allomorph *kasi-* ~ *kase-* appears in Manjui before a non-palatalized *k*.

Obviously related to Proto-Guaicuruan **qo²d-* / **qo-* '1PL.Poss', **qod-* / **qo-* '1PL.Sp/P' (Viegas Barros 2013b, #732, #764).

Viegas Barros 2013a: 315 (**kats'* - '1+2.Poss', **kats-* '1+2.S_P')

### ****t-* (before C) / **t-* (before V) / **t'* - (coalescing with **?*...) '3.S_T'**

Mk *te-* / *ta-* / *to-* [1] / *t-* / *t'* - (Gerzenstein 1994: 85) || Ni *t(a)-* / *t-* / *t'* - [2] (Fabre 2014: 135) || PCh **t²-* / **t-* / **t'* - > Ijw *ti-* / *ta-* [3] / *t-* / *t'* -; I'w *ti-* ~ *te-* / *t-*; Mj *ti-* / *t-* / *t'* - (Carol 2014a: 86–86, 91, 98, 2014b; Gerzenstein 1983: 75; Carol 2018) || PW **ta-* / *-t(á)-* [4] > LB *ta-* / *-t(a)-*; Vej *ta-* / *-t(a)-*; 'Wk *ta-* / *-t(á)-* (Nercesian 2014: 120–121, 237–240; Gutiérrez & Osornio 2015: 14; Alvarsson & Claesson 2014: 448)

[1] The allomorphs *te-* / *ta-* / *to-* in Maká are conditioned by vowel harmony.

[2] In Nivaclé, the morpheme in question is also found in the second-person form (between the person prefix and the root) and is now best analyzed as a verb class marker, though it is

## 10.5 Inflectional prefixes

absent from the first-person form. The allomorph *ta-* in Nivâcle is only found before *tf*-initial stems.

[3] The allomorph *ta-* appears in Iyojwa'aja' before /k/ < PM **q*.

[4] As a result of Watkins' Law, the prefix in question is now found in persons other than the third person in Wichí and is now best analyzed as a verb class marker.

***tsi- (before C) / *ts- (before V) / *ts'- (coalescing with *?...) '1.Sp/P (realis)'**

Mk *ts(?)i-* / *ts(?)-* (Gerzenstein 1994: 89; Messineo 2015: 132) || Ni *tsi-* / *ts-* / *ts'*- (Fabre 2014: 141–142, 148; Seelwische 2016: 300) || PCh **s²-* / **s-* / **ts'*- > Ijw *si-* / *s-* / *ts'*-; I'w *si-* ~ *tsi-* / *s-* / *ts-*; Mj *fi-* / *si-* ~ *se-* [1] / *s-* / *s'*- (Carol 2014a: 79, fn. 7, 2014b; ; Drayson 2009: 167, 169; Gerzenstein 1983: 76–77; Carol 2018)

[1] The allomorph *si-* ~ *se-* appears in Manjui before a non-palatalized *k*.

Viegas Barros (2013a: 315) compares this prefix to Proto-Guaicuruan **i-d-* '1.Sp/P' (Viegas Barros 2013b, #763).

Viegas Barros 2013a: 315 (**ts(?)i-*)

***wa- (before C) / *w- (before V) '3.S_{WA}'**

Mk *we-* (Tacconi 2015: 85) || Ni *βa-* / *β-* (Campbell et al. 2020: 236–238)

***xi- '1+2 (realis)'**

Mk *xi-* / *x-* '1+2.A/S_A/P (realis)'; *xi-n(i)-* / *xi-j(i)-* '1+2.Sp (realis)' (Gerzenstein 1994: 86–91, 100–102) || Ni *fi< n(a)>-* / *fi< n>-* '1+2.P/Sp (realis)' (Fabre 2014: 148)

Viegas Barros 2002: 142 (**xina-* '1+2')

***xt- (before C) / *xt- (before V) / *xt'- (coalescing with *?...) '1+2.A/S_A (realis)'**

Mk *xite-* / *xita-* / *xito-* / *xit-* / *xit'*- (Gerzenstein 1994: 85–86, 93, 96) || Ni *fta-* / *ft-* / *ft'*- (ShL *sta-* / *st-* / *st'*-) (Fabre 2014: 145)

[1] The allomorphs *xite-* / *xita-* / *xito-* in Maká are conditioned by vowel harmony.

Viegas Barros 2002: 142 (**xita-* '1+2.S')

***?a- (before C) / *∅- (before V or *?) '2.Poss' (also '2.A/S_A.IRR') [1]**

Mk *e-* / *a-* / *o-* / *∅-* (Gerzenstein 1994: 147) || Ni *?a-* / *∅-* (Fabre 2014: 80; Seelwische 2016: 35) || PCh **?a-* / **∅-* > Ijw *?a-* / *∅-*; I'w *a-* / *∅-*; Mj *?a-* / *∅-* (Carol

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2014a: 85, 100, 2014b; Drayson 2009: 168; Gerzenstein 1983: 65–66; Carol 2018) || PW **a*- / **ha*- [2] / *Ø- > LB/'Wk ?*a*- / *ha*- / Ø- (Nercesian 2014: 163–166; Alvarsson & Claesson 2014: 444–445)

[1] This affix can also occur before applicatives to express a second-person participant in Maká (Messineo 2015: 136), Nivaêle (Fabre 2014: 194), Chorote (Carol 2014b), and Wichi (variants -?am- and -?a-) (Nercesian 2014: 223; Alvarsson & Claesson 2014: 433, 449).

[2] The allomorph *ha*- is found before glottalized consonants in Wichi.

Viegas Barros (2013a: 315) compares this prefix to Proto-Guaicuruan *?*a*- ‘2.A/S_A’.

Hunt 1915: 241; Najlis 1984: 9, 17, 18 (**a*-); Viegas Barros 2013a: 315 (*?*a*- ~ *Ø- ‘2.IRR’)

### *?in- ‘1+2.Sp/P’ or ‘1+2.Poss’

Mk *in*- ‘1+2.Poss’ (Messineo 2015: 137) || PW *^x*n*<á>-1+2.Sp/P, *^x*n*-ám-*el*^h ‘we (inclusive)’ > LB *n*-am-*it* ‘we (hortative)’ [1]; Vej ?*n*-am-*el* [2]; 'Wk ?*in*<á>-1+2.Sp/P; hortative, ?*in*-ám-*el* ‘we (inclusive)’ (Nercesian 2014: 120–121, 237–240; Gutiérrez & Osornio 2015: 26; Alvarsson & Claesson 2014: 437, 445, 447)

[1] Southeastern Wichi has irregularly raised the vowel of the plural suffix. Lower Bermejeño Wichi does not preserve the pronoun in question in non-hortative usages, having replaced **n*-ám-*el*^h with *to-lam-it*; the Rivadavia subdialect shows a more conservative picture, where *n*-am-*it* varies with *to-lam-it* (Terraza 2009b: 100, 116).

[2] The Vejoz reflex is attested with a plain nasal, that is, as *n*-am-*el* in Viñas Urquiza (1974: 67), which must be a mistranscription.

## 10.6 Inflectional suffixes

### *-*a* ‘punctual, momentary’

Ni -*a* (Fabre 2014: 159–161) || PCh *-*a*? > Ijw/I'w/Mj -*a*? (Carol 2014b; own field notes; Carol 2018)

*-*áj*^h / *-*j*^h ‘PL’ → see examples in the main corpus (§10.1)

*-*él* / *-*l* ‘PL’ → see examples in the main corpus (§10.1)

Viegas Barros (2013a: 316) compares this suffix to Proto-Guaicuruan *-?*a*'l

## 10.6 Inflectional suffixes

‘distributive plural’ (Viegas Barros 2013b, #749).

Viegas Barros 2013a: 316 (*-(V)l)

***-e'ɬ ‘pronominal plural’**

Mk *j-e-khewe-l-i'l* ‘we (exclusive)’, *∅-e-khewe-l-i'l* ‘you (plural)’ [1] (Gerzenstein 1999: 143, 398) || Ni *-e'ɬ* / *-et* (Campbell et al. 2020: 69, 149–150, 262–263) || PCh *-et [2] > I'w -el / -Vl / -<w>el ['3] 2PL; Mj *-et* / *-i'l* / *-Vl* / -<w>et ['2] (Gerzenstein 1983: 105; Carol 2018) || PW *^x*n-ám-el^h* ‘we (inclusive)’; **?o-t-ám-el^h* / **j-ám-el^h* ‘we (exclusive)’; **∅-?ám-el^h* ‘you (plural)’; **t-ám-el^h* ‘they’ [4] > LB *n-am-i'lwe* (hortative) (*to-t-am-i'l* ‘we (exclusive)’); *n-t-am-it*; *∅-am-it*; *t-am-it* [5]; Vej *'n-am-el* [6]; *?o-t-am-el*; *∅-?am-el*; *t-am-el*; 'Wk *?in-ám-el*; *?o-t-ám-el* (“formal sociolect”) / *j-ám-el* (“informal sociolect”); *∅-?ám-et*; *t-ám-et* (Nercesian 2014: 335; Viñas Urquiza 1974: 50, 65, 67, 69; Gutiérrez & Osornio 2015: 26; Alvarsson & Claesson 2014: 437)

[1]The preglottalized coda in Maká is attested in the New Testament (e.g. John 7:34, 2 Corinthians 13:6).

[2]In Chorote, the suffix in question expresses extended plural of possessors and clause participants, except in the third person.

[3]The allomorph *-Vl* (*-Vl*) in Chorote results from translaryngeal harmony. The allomorph *-we'l* (*-wel*) occurs after vowels. The allomorph *-i'l* in Manjui occurs after *k* and *j*.

[4]Wichí irregularly reflects PM **ɬ* as **l^h* (this innovation may in fact be restricted to Vejoz and Guisnay, given that 'Weenhayek and Southeastern Wichí reflect PW **l^h* and **ɬ* as *ɬ* anyway).

[5]Southeastern Wichí has irregularly raised the vowel of the suffix.

[6]The Vejoz reflex of the first-person inclusive pronoun is attested with a plain nasal, that is, as *n-am-el* in Viñas Urquiza (1974: 67), which must be a mistranscription.

***-íts / *-ts ‘PL’ → see examples in the main corpus (§10.1)**

Viegas Barros (2013a: 316) compares this suffix to Proto-Guaicuruan *-Vdi / *-di ‘PL’ (Viegas Barros 2013b, #745).

Viegas Barros 2013a: 316 (*-(V)ts)

***-xä'n(e?) ‘downwards; verbal plural’**

Ni *-fa'ne?* / *-xa'ne?* (after *V_[+back](C_[-coronal])*) (Fabre 2014: 173–174, 208–210) || PCh *-he'n(e?) > Ijw -he'n; I'w -hen, -ne?; Mj -he'ne? (Carol 2014a: 78, 2014b;

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2018) || PW *-he[?]n > LB -hen; 'Wk -he[?]n (Nercesian 2014: 228–232; Claesson 2016: 148; Alvarsson & Claesson 2014: 449)

Najlis 1984: 42 (*-hne); Viegas Barros 2002: 142 (*-xe(ne))

### *-ʔeʔ 'loc'

Mk -ʔiʔ [1] (Gerzenstein 1994: 123–124) || Ni -ʔeʔ 'proximal locative' (Fabre 2014: 157–159) || PCh *-ʔeʔ > Ijw/I'w/Mj -ʔeʔ 'punctual locative' (Carol 2014b; own field data; Carol 2018) || (?) PW *-e [2] > LB -e 'distal locative'; 'Wk -eʔ (Nercesian 2014: 255; Alvarsson & Claesson 2014: 460)

[1] This applicative is actually represented as -i in Gerzenstein (1994). We assume this is a mistranscription for -ʔiʔ, as in the Wycliffe Bible translations one finds forms such as *i niʔ* (from *in* + -ʔiʔ 'it/she/he is in.

[2] We are unsure whether the Wichí applicative *-e is related to PM *-ʔeʔ.

## 10.7 MN only

In this section, we list the cognate sets with reflexes only in Maká and Nivaclé. Due to the absence of the diagnostic reflexes in Chorote and 'Weenhayek, it is often impossible to reconstruct the prosodic properties of the etyma listed in this section. For this reason, the reconstructions in this section are strictly segmental (for example, PM *sålål should be read as PM *sålål ~ *sålål ~ *sålål), unless specified otherwise.

### *-a'ɬ ~ *-ä'ɬ 'to burn' (MN)

Mk [n]e'ɬ-xuʔ [1] (Gerzenstein 1999: 151) || Ni [ji]<n>a'ɬ 'to burn'; *t-at-xen* 'to burn a field'; *-at-ef*, *-at-xe-s* 'burnt field' (Seelwische 2016: 42, 177, 250)

[1] The preglottalized coda in the Maká reflex is attested in the New Testament (e.g. Luke 1:10).

Viegas Barros (2013a: 304) compares this root to Proto-Guaicuruan *-a(?)leg 'to burn' (Viegas Barros 2013b, #28).

Viegas Barros 2013a: 304 (*-at)

### *-ata(?)x ~ *-ä- [1] 'food' (MN)

Mk -ete(?)x [1], -etex-its (Gerzenstein 1999: 159) || Ni -ataf, -ata-k (Seelwische 2016: 50)

[1] The uncertainty regarding the coda is due to the fact that the form is not attested in our

sources on Maká that distinguish between plain and preglottalized codas. In PM, the reconstruction of a preglottalized coda is possible only if the root has initial accent (in this case the deglottalization in Nivačle would be regular).

***ʔåɸína^χχ, *ʔåɸính-a-ts** ‘black howler’ (MN)

Mk *afina^χχ, afinhe-ts* (Gerzenstein 1999: 113; Paraguay 2022: 2) || Ni *ʔåɸinax, ʔåɸinxa-s* (Seelwische 2016: 210)

***[j]åɸti(?)t** [1] ‘to spin a thread’ [2] (MN)

Mk *[j]afti(?)t* [1] (Gerzenstein 1999: 113) || Ni *[j]åɸtił* (Seelwische 2016: 107)

[1]The uncertainty regarding the coda is due to the fact that the form is not attested in our sources on Maká that distinguish between plain and preglottalized codas. In PM, the reconstruction of a preglottalized coda is possible only if the root has initial accent (in this case the deglottalization in Nivačle would be regular).

[2]This verb is likely derived from PM **ti^χt* ‘to sew’.

***[j]åtsi(?)j** [1] ‘to spill’ (MN)

Mk *[j]atsij-xu?* (Gerzenstein 1999: 134) || Ni *[j]åtsij* (Campbell et al. 2020: 236; Seelwische 2016: 154)

[1]In PM, the reconstruction of a preglottalized coda is possible only if the root has initial accent (in this case the deglottalization in Nivačle would be regular).

Possibly related to Proto-Guaicuruan **-?otsi(-t'-i^χni)* ‘to fall’ (Viegas Barros 2013b, #699; cf. Viegas Barros 2013a: 307).

Viegas Barros 2013a: 307 (**-Atsi*)

***ɸánha?** ~ ***ɸänha?** (*-j^h) ‘locust’ (MN)

Mk *<e>fenhe?(-j)* [1] (Gerzenstein 1999: 141) || Ni *ɸanxa (-j)* (Seelwische 2016: 130)

[1]The identity of the element *e*- in Maká is unclear.

***ɸaxi(?)j** ~ ***ɸäxi(?)j** [1] ‘green ameiva (*Ameiva ameiva*)’ (MN)

Mk *fexij (-its)* (Gerzenstein 1999: 174) || Ni *ɸafij (-k)* (Campbell et al. 2020: 468; Seelwische 2016: 131)

[1]In PM, the reconstruction of a preglottalized coda is possible only if the root has initial

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accent (in this case the deglottalization in Nivaclé would be regular).

### **phinåk*, **phinħå-j^h* ‘tobacco’ (MN) [1]

Mk *finak*, *finha-j* (Gerzenstein 1999: 176; Braunstein 1987: 85) || Ni *phinåk*, *phinħå-j* (Seelwische 2016: 133)

[1] This noun could be derived from a verb meaning ‘to suck, to kiss’ (cf. Ni *[ji]phin*), but the hypothetical verb **[ji]phin* is not reconstructible. Campbell & Grondona (2007: 16) suggest that the Maká and Nivaclé words could have been diffused from one language to another rather than inherited, though there appears to be no valid reason to believe so.

Campbell & Grondona 2007: 16 (“diffused?”), 21

### *-*ɸ'i(?)* ‘foot’ (MN)

Mk *-fi?(-jej)* [1] (Gerzenstein 1999: 183) || Ni *-p'i<k'o>* ‘heel’ [2] (Seelwische 2016: 224)

[1] The Maká plural is mistranscribed as *-fi-jej* in Gerzenstein (1999: 183); the expected form *-fi-jej* is found in the Maká version of the New Testament (e.g. Luke 24:40).

[2] Nivaclé *-k'o* is a fossilized reflex of PM **-k'o*, **-k'ó-l* ‘bottom’.

**Rejected:** Najlis (1984: 55) claims that Ni *-p'ik'o* is a cognate of the reflexes of PM **-pák'o* (*-l) ‘heel’. Only the element **-k'o* could actually be cognate across Mataguayan in this case.

### *(-)*ɸ'ok* (*-*its*) ‘arrow’ (MN)

Mk *(-f)ok (-its)* ‘blunt-pointed arrow’ (Gerzenstein 1999: 184) || Ni *(-)p'ok (-is)* (Seelwische 2016: 225)

**Rejected:** Najlis (1984: 38) compares the Nivaclé reflex with a Wichí term for ‘earthenware field bottle’ (PW **-p'ok^w*) and reconstructs PM **p'ɔwk*. This is implausible for semantic reasons.

### **him* (*-*its*) ‘coati’ (MN)

Mk *him* (*-*its*) (Gerzenstein 1999: 188) || Ni *xim* (*-*is*) (Seelwische 2016: 148) Viegas Barros 2002: 143 (**χim*)

### **jinqå-(ju)’k*, **jinqå-ku-j^h* (tree); **jinqå’-p*, **jinqå-p-its* (season) ‘white algarrobo (*Prosopis alba*)’ (MN)

Mk *<in>inqa-’k* (-*wi*); *<in>inqa-’p* (-*its*) ‘summer, year’ [1] (Gerzenstein 1999: 202; Paraguay 2020: 23–25) || Ni *jinkå’p*, *jinkåp-is* ‘algarrobo season, year’

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(Seelwische 2016: 382)

[1] The coda is documented as plain (without preglottalization) in the New Testament (e.g. in Acts 18:11), which must be a mistranscription.

**Rejected:** Campbell & Grondona (2007: 16, 20) and Viegas Barros (2013a: 311) include reflexes of PCh *nałqá-p ~ *-å- (*-is) 'year' > Ijw/I'w *nahkáp* (-is); Mj *nalkáp* (-is) (Drayson 2009: 140; Gerzenstein 1983: 150; Carol 2018), but this must be derived from an unrelated root with the same suffix. Campbell & Grondona (2007) also include reflexes of PW *nekk'åm 'year' > LB *nektfom*; Vej *nektfam*; 'Wk *nekk'å?* (-lis ~ *nekk'åm-is*) (Braunstein 2009: 52; Viñas Urquiza 1974: 68; Claesson 2016: 262), which is obviously a spurious match.

Viegas Barros (2013a: 311) compares this root to Proto-Guaicuruan *inaqa 'algarrobo tree' (Viegas Barros 2013b, #288), *inaqá 'year' (Viegas Barros 2013b, #289).

Campbell & Grondona 2007: 16, 20; Viegas Barros 2013a: 311 (*in(a)qå-p) 'year'

### *(-)jipku? (*-l) 'hunger' (MN)

Mk (-)jipku? (-l) (Gerzenstein 1999: 399) || Ni *jipku?* / -jipku (-k) (Seelwische 2016: 382)

### *jiʔixåtaχ, *jiʔixåta-ts 'ocelot' (MN)

Mk *iʔihataχ*, *iʔihate-ts* (Gerzenstein 1999: 226) || Ni *jixåtax*, *jixåta-s* (Seelwische 2016: 382)

Campbell & Grondona 2007: 20

### *[ji]kåla'ɬ 'to fry' (MN)

Mk [j]<a>*kale'ɬ* [1] (Gerzenstein 1999: 114) || Ni *[ji]kaklåt* / -*kaklå'ɬ* [2] (Seelwische 2016: 56)

[1] The presence of a preglottalized coda in Maká is inferred based on the Nivaclé cognate; the verb is not attested in our sources that distinguish between plain and preglottalized codas.

[2] In Nivaclé, the vowels *a* and *å* were historically metathesized, but not before the palatalization of velars.

### *kómi? 'Chilean flamingo (*Phoenicopterus chilensis*)' (MN)

Mk *kómi?(-l)* [1] (Gerzenstein 1999: 231) || Ni *komi* (-s) (Seelwische 2016: 71)

[1] The Maká reflex is attested as *qomi* in Braunstein (1987: 55), suggesting the reconstruction

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**qomi* instead.

### *-ku(?) 'cheek' (MN)

Mk *-ku-ki?* (-j) (Gerzenstein 1999: 233) || Ni *-ku?* (-l) (Seelwische 2016: 341)

### *[wa]kuma⁷χ 'to run' (MN)

Mk *[we]kuma⁷χ*, CAUS *[ji]kumk-et* (Gerzenstein 1999: 233) || Ni *[βa]kuma⁷χ* (Seelwische 2016: 79)

[1] The preglottalized coda in the Maká reflex is attested in the New Testament (e.g. Luke 19:4).

### *[t]k'an ~ *[t]k'än 'to obey' (MN)

Mk *[te]k'en* 'to believe, to respect' (Gerzenstein 1999: 235) || Ni *[t(a)]tf'an* (Seelwische 2016: 248)

### *[t]k'ij 'to spit' (MN)

Mk *[te]k'ij* (Gerzenstein 1999: 236) || Ni *[t]<'a>tf'ij ~ [t]<'a>tf'i* (Seelwische 2016: 282)

### *-k'unhate? 'tooth'; *k'unhate-nha? (*-j^h) 'pacu fish' [1] (MN)

Mk *-k'unheti?* (-j); *<i>k'unheti-nhe?* (-j) (Gerzenstein 1999: 196) || Ni *k'unxate<nx>* (-j) 'pacu fish' (Seelwische 2016: 237)

[1] It is tempting to analyze this root as a *nomen instrumenti* of PM *-kun ~ *-kún 'to eat (intr.)', but the discrepancy in the glottalization of the root-initial consonant would be problematic for such analysis.

Campbell & Grondona 2007: 17 ('pacu fish')

### *lama(h) ~ *läma(h) (*-m) 'to be smooth' (MN)

Mk *le:me, leme-m* (Gerzenstein 1999: 241) || Ni *kläma<m>* [1] (Seelwische 2016: 115)

[1] Nivaclé appears to have generalized the erstwhile plural form.

Viegas Barros (2013a: 307) compares the root with Proto-Guaicuruan *-?a(?)le(?)m 'to be bald',

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which seems semantically far-fetched.

Viegas Barros 2013a: 307 (**leme(m)*); Gutiérrez 2015b: 253

**lasa(h)* ~ **läsa(h)* ~ **lasa?* ~ **läsa?* ‘to be thin’ (MN)

Mk <*e*>*lese-j* (Gerzenstein 1999: 145) || Ni *klasa-tf'e* (Seelwische 2016: 116)

**lätsiki-ju'k*, **lätsiki-ku-j^h* ‘willow’ (MN)

Mk *lätsiki-ju'k* [1] (Gerzenstein 1999: 240) || Ni *klätsiki-juk*, *klätsiki-ku-j* [2] (Seelwische 2016: 120)

[1] The preglottalized coda in the Maká suffix for tree names is attested elsewhere (Paraguay 2022: 7).

[2] The failure of PM **k* to palatalize in Nivaclé is unexpected.

Campbell & Grondona 2007: 16

*-*ti'wte?* ‘heart’ (MN)

Mk *-titi? (-j ~ -l)* (Gerzenstein 1999: 254) || Ni *-ti'βte* (Fabre 2014: 303; Campbell et al. 2020: 119)

**Rejected:** Najlis (1984: 38, 42) compares the Nivaclé reflex with reflexes of PCh *-*žöt* ‘chest’ and PW *-*t'ókʷe* ‘chest’, but this is absolutely impossible for phonological reasons.

**ma'la'l* ~ **mä-* ~ *-*lä'l* ‘agile’ (MN)

Mk *me'le'l* ‘to move (intr.)’ [1], CAUS *-me'le'l-hit* ‘to move’ (Gerzenstein 1999: 260) || Ni *makla'k* (Seelwische 2016: 172)

[1] The intransitive verb is documented in the New Testament (Hebrews 12:27; Matthew 28:2; Revelations 6:12; Revelations 8:4; Revelations 16:8). It could be etymologically identical to *melel* (-*its*) ‘deer’ (Gerzenstein 1999: 260), which is, however, attested with no glottalization in Braunstein (1987: 49).

*(-)*nawan* ~ *-*ä-* ‘hook’ (MN)

Mk *newen* (-*its*) (Gerzenstein 1999: 273) || Ni *-naβan (-ij)* (Seelwische 2016: 183)

**nijåtsek*, **nijåtshe-j^h* ‘fermented drink’ (MN)

Mk *nijatsik* [1], *nijatshi-j* (Gerzenstein 1999: 224; Unu'uneiki Patricia 2011: 18)

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|| Ni (-)nijåtsetf, (-)nijåtsxe-j (Seelwische 2016: 198)

[1] The singular form is attested both as *nijatsik* and *nijatshik* in Maká by Gerzenstein (1999: 224), of which only the former is etymological.

### *[n]xt'o? 'to wake up', CAUS [n]xt'o-tshan [1]

Mk CAUS [n]<i>xt'o-tshen (Gerzenstein 1999: 222) || Ni [n(i)]xat'o?, CAUS [n(i)]xat'o-tsyan (Campbell et al. 2020: 114; Seelwische 2016)

### *-pas ~ *-päs 'hand / finger' (MN)

Mk (Lengua) <hipès> 'hand', <hipecé> 'fingers' (Demersay 1860: 456) || Ni -pas-tse (-j) 'finger' (Seelwische 2016: 218; Campbell et al. 2020: 129)

### *qapa(?)p ~ *-ä- [1], *qapap-its ~ *-ä- 'dwarf' (MN)

Mk qep<ep>e(?)p [1], qep<ep>ep-its (Gerzenstein 1999: 308) || Ni kapap (-is) 'dwarf dog' (Seelwische 2016: 61)

[1] The uncertainty regarding the coda is due to the fact that the form is not attested in our sources on Maká that distinguish between plain and preglottalized codas. In PM, the reconstruction of a preglottalized coda is possible only if the root has initial accent (in this case the deglottalization in Nivaçle would be regular).

[2] The extra element -ep- in Maká appears to be an instance of partial reduplication.

Viegas Barros (2013a: 308) notes the similarity with Proto-Pilagá–Toba *qapí 'small', which could be spurious.

Viegas Barros 2013a: 308 (*qapap)

### *q'åxtåx 'palate' (MN) [1]

Mk -q'atax, -q'ate-ts (Gerzenstein 1999: 319) || Ni -k'åxtåx (-is) (Seelwische 2016: 89)

[1] The root could be related to PM -q'å(?)X₁₂ 'tongue' (ChW), but the vowels do not match.

Viegas Barros (2013a: 309) notes the similarity with Proto-Guaicuruan *-qot'e 'palate' (absent from Viegas Barros 2013b).

Viegas Barros 2013a: 309 (*-q'åtah)

### *sa'x ~ *-sä'x 'leaf' (MN)

Mk 3 t-e-se'x [1], t-e-sex-ets (Gerzenstein 1999: 251) || Ni -sa'ʃ, -saʃ-aŋ 'leaf, hair'

(Seelwische 2016: 63)

[1] The presence of a preglottalized coda in Maká is inferred based on the Nivaçle cognate; the singular form is not attested in our sources that distinguish between plain and preglottalized codas. The plural form is attested in the New Testament (e.g. Mark 11:13), but it is not revealing.

Viegas Barros 2002: 143 (**sex*)

**sámto?* ‘foreigner’ (MN)

Mk *sonto?* ‘non-indigenous person’ (Gerzenstein 1999: 327) || Ni *samto* ‘Argentinian criollo’ (Seelwische 2016: 230)

**samto-*’*k* ‘bamboo (*Guadua angustifolia*)’ (MN)

Mk *sontok* [1] (Gerzenstein 1999: 327; Braunstein 1987: 82) || Ni *samto*’*k* (Seelwische 2016: 230)

[1] The loss of preglottalization in the coda in Maká is unexpected.

**sålå(?)l* [1], **sålål-its* ‘middle-sized cicada’ (MN) [2]

Mk *sala(?)l* [1], *salal-its* (Gerzenstein 1999: 323) || Ni *såkl*⟨*åkl*⟩*åk* (-*is*) [3] (Seelwische 2016: 235)

[1] The uncertainty regarding the coda is due to the fact that the form is not attested in our sources on Maká that distinguish between plain and preglottalized codas. In PM, the reconstruction of a preglottalized coda is possible only if the root has initial accent (in this case the deglottalization in Nivaçle would be regular).

[2] *Iyojwa’aja*’ *s’áhla*, *Iyo’awujwa*’ *s’áhlala*, *s’áhlala-l* ~ *s’áhlal-is* ~ *s’éhlala-as* ‘cicada’ (Carol 2014a: 100; Gerzenstein 1983: 159) cannot be cognate for phonological reasons; it must be a borrowing instead.

[3] The extra element *-åkl-* in Nivaçle appears to be an instance of partial reduplication.

**sijå(?)χ* [1], **sijåχ-its* ‘fish sp.’ (MN)

Mk *sija(?)χ* [1], *sijåχ-its* ‘fish sp. (small, unedible, with a black stripe)’ (Gerzenstein 1999: 327) || Ni *sijåχ* (-*is*) (Seelwische 2016: 234)

[1] The uncertainty regarding the coda is due to the fact that the form is not attested in our sources on Maká that distinguish between plain and preglottalized codas. In PM, the reconstruction of a preglottalized coda is possible only if the root has initial accent (in this case the

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deglottalization in Nivâcle would be regular).

### ***(-)tak'ō(h) ~ *(-)täk'ō(h) ‘kind of utensil’ (MN)**

Mk *tok'ō (-l)* ‘plate, bucket, jar’ (Gerzenstein 1999: 341) || Ni *-tak'ō-tax*, *-tak'ō-txa-s* ‘piece of knife’ (Seelwische 2016: 247)

### ***tana(h) ~ *täna(h) ‘standing, vertical’ (MN)**

Mk *te:ne, tene-m* (Gerzenstein 1999: 333) || Ni *tana* (Seelwische 2016: 251)

### ***tex (*-its) ‘parrot sp.’ (MN)**

Mk *taχ (-its)nanday* parakeet (*Aratinga nenday*) (Gerzenstein 1999: 333; Braunstein 1987: 60) || Ni *tex (-is)scaly-headed parrot* (*Pionus maximiliani*) (Campbell et al. 2020: 96, 506)

### ***ti'j ‘to weave’ (MN)**

Mk *tij / -tij* (Gerzenstein 1999: 336) || Ni *ti'j ‘to weave; to model (with clay)’* (Seelwische 2016: 269)

### ***(-)ti'nåx (-its) ‘object made of leather’ [1] (MN)**

Mk *ti'nax (-its)* [2] ‘leather bag for travel’ (formerly ‘traditional bag made of rheia skin’) (Gerzenstein 1999: 338) || Ni *ti'nåx, tinåx-is* ‘leather strap, lash’ (Gutiérrez 2015b: 57, fn. 22; Seelwische 2016: 269; Campbell et al. 2020: 95)

[1]This noun is likely derived from PM *-?åx (*-its)* ‘skin, bark’ by means of an absolutizing prefix.

[2]The preglottalization in the stem-medial nasal in Maká is attested in the New Testament (e.g. Luke 10:4).

### ***tuχ-APPL ‘to burn (vi.)’ (MN)**

Mk *tux-xe'm ~ tux-xe'm* [1], *tux-e?* (Gerzenstein 1999: 344) || Ni *tux-a'm, tux-ej* (Seelwische 2016: 280)

[1]The root-final consonant is attested as *χ* in Gerzenstein (1999) and as *x* in the New Testa-

ment (e.g. Ephesians 6:16).

Possibly related to Proto-Guaicuruan *-a(?)legto burn (Viegas Barros 2013b, #28).

***[n]t'å ‘to gather fruit’ (MN)**

Mk [n]<a>t'å<?a>-kii / -t'å<?a>-kii (Gerzenstein 1999: 133) || Ni [n(i)]t'å (Seelwische 2016: 196)

Viegas Barros (2013a: 306) compares this verb to Proto-Pilagá–Toba *-n-åto ‘to gather, to collect’.

Viegas Barros 2013a: 306 (*-at'å?)

***t'åj ‘to sound, to have voice’ (MN)**

Mk t'aj ‘to sound’ (Gerzenstein 1999: 345) || Ni t'åj ‘to have voice’ (Seelwische 2016: 289)

***[ji]t'ex ‘to say’ (MN)**

Mk [ji]t'ix (Gerzenstein 1999: 212) || Ni [ji]t'ef / -e'f [1] (Seelwische 2016: 384)

[1]The allomorph -e'f is irregular and has no counterpart in Maká. It might have an entirely different origin.

***tsaqaq ~ *-ä- ‘plant sp.’ [1] (MN)**

Mk tseqeq ‘*Cissus palmata*’ (Gerzenstein 1999: 348; Braunstein 1987: 79) || Ni tsakak (-is) ‘São Caetano melon (*Cayaponia espelina*)’ (Seelwische 2016: 291)

[1]*Cissus palmata* and *Cayaponia espelina* have in common the trait that while their fruits are unsuitable for human consumption, they are eaten by animals (toucans and maned wolves, respectively).

*(-)tsa't, *(-)tsat-its (~ *-ä-) ‘village’ [1] (MN)

Mk -tset [2], -tset-its (Gerzenstein 1999: 161) || Ni <ji>tsa't, <ji>tsat-is [3] / -β-tsa't, -β-tsat-its (Seelwische 2016: 338, 385)

[2]This etymology has been first identified by Campbell (submitted).

[3]The Maká reflex unexpectedly lacks preglottalization in the coda in the singular form, as

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attested in the New Testament (John 1:44).

[4] We have no explanation for the element **ji-* in the absolute form in Nivaclé.

Campbell submitted (**w*itset)

### ***-xéle? ‘dirt’ (MN)**

Mk *-xili?* (-j) (Gerzenstein 1999: 389) || Ni *-sekle* (-k) (Seelwische 2016: 357)  
Viegas Barros 2002: 142 (**xele*)

### ***waɸ ~ *wäɸ ‘to be tired, to die’ (MN) [1]**

Mk *[ji]wef* ‘to be tired’ (Gerzenstein 1999: 365) || Ni *βaɸ* ‘to die’ (Seelwische 2016: 313)

[1] Najlis (1984: 29) claims to have discovered a cognate in Chorote (*wax* ‘dead’), but we are unaware of the existence of any similar lexeme in Chorote.

Viegas Barros (2013a: 314) compares the root to Abipón *-oaoa* ‘to die’ (Najlis 1966: 113), but this could be spurious.

Najlis 1984: 29 (**wahw*); Viegas Barros 2013a: 314 (*-*wah^w*)

### ***wa'j ~ *wä'j ‘to be wet, to get wet’ (MN)**

Mk *wej-xu?* (Gerzenstein 1999: 373) || Ni *βa'j* (Campbell et al. 2020: 259)

### ***waben ~ *wäpen ‘to be ashamed; “shame plant” [1]’ (MN)**

Mk *wepin* ‘to be ashamed; *Cassia patellaria, Mimosa chacoensis*’ (Gerzenstein 1999: 367) || Ni *βaben* ‘to be ashamed; *Bauhinia langdorffiana, Cassia flexuosa*’ (Seelwische 2016: 334–335)

[1] The plants designated by reflexes of this etymon are species whose leaves close when touched. Both the Maká and the Nivaclé rub their leaves against children’s faces so as to prevent them from being shameless.

### ***(')wawo(h) (*-l) ‘maned wolf’ (MN) [1]**

Mk *wowo* (-l) (Gerzenstein 1999: 380) || Ni *βaβo* (-k) (Seelwische 2016: 358)

[1] This etymology is very similar to **Xmáwoh* ‘fox’ (ChW), but the root-initial consonants do

not match. Najlis (1984) lumps these etymologies together.

Najlis 1984: 13, 44 (**mawo* ~ **wawo*)

***wå'm 'to disappear' (MN)**

Mk *wa'm* 'to die' (Gerzenstein 1999: 360; Braunstein 1987: 203) || Ni *βå'm* 'to disappear' (Seelwische 2016: 371)

***wå'mqå? [1] 'to wash oneself' (MN)**

Mk *wa'nqa?* (Gerzenstein 1999: 361) || Ni *βåmqå? / -βå'mqå* (Seelwische 2016: 371)

[1]The Maká form is attested as such in the New Testament (e.g. Matthew 15:2). Gerzenstein (1999: 361) gives simply *wanqa*.

***(')wåna'χ, *(')wånh-a-ts 'piranha' (MN)**

Mk *wana'χ, wanhe-ts* (Gerzenstein 1999: 361; Braunstein 1987: 67) || Ni *βåanax, βånxa-s* 'piranha; barn owl' (Seelwische 2016: 370)

***wåpi(')j [1] 'to unload' (MN)**

Mk *wapij* [2] 'to have a rest' (Gerzenstein 1999: 362) || Ni *βåpij* (Seelwische 2016: 372)

[1]In PM, the reconstruction of a preglottalized coda is possible only if the root has initial accent (in this case the deglottalization in Nivaçle would be regular).

[2]The Maká form is attested as such in the New Testament (e.g. Hebrews 4:10). Gerzenstein (1999: 362) gives *wapi?i*.

***(')wå's 'sky' (MN)**

Mk *wa's, was-its* (Gerzenstein 1999: 363; Braunstein 1987: 198) || Ni *βå's* (Seelwische 2016: 371)

***(')wåse? [1] 'cloud' (MN)**

Mk *wasi?(-l)* (Gerzenstein 1999: 363) || Ni *βåse?(-j)* (Seelwische 2016: 372)

[1]The stem is evidently derived from *(')wå's ~ *(')wå's 'sky', but the identity of the second

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element is unknown.

***-wǻt; *-wǻt-hajex ‘birthmark’ (MN)**

Mk -wat<hejax> (Gerzenstein 1999: 363) || Ni -βǻt ‘birthmark’; -βǻt-xajex ‘mole’ (Seelwische 2016: 372–373)

***(‘)wq’am ~ *(‘)wq’äm ‘white-eared opossum’ (MN)**

Mk weq’em (-its) (Gerzenstein 1999: 368; Braunstein 1987: 49) || Ni k’am<i>(-k) (Seelwische 2016: 85)

***(‘)wut ‘a bushy leguminous plant’ (MN)**

Mk wut ‘*Sesbania exasperata*’ (Gerzenstein 1999: 382) || Ni βut ‘*Acacia sp.*’ (Seelwische 2016: 374)

***’wé’l; *’wé’l=a? ‘one’ (MN)**

Mk <e>wi’l ‘one’; <e>wi’l-e? ‘alone’ (Gerzenstein 1999: 165; Braunstein 1987: 197) || Ni βé?l<a> / -’βé?l<a> (Seelwische 2016: 359)

[1] The Maká forms are attested as such in Braunstein (1987: 197) and in the New Testament (e.g. John 3:1; John 15:13). Gerzenstein (1999: 165) gives simply *ewił*, *ewile*.

Fabre (2014: 308) compares the Nivaclé word to the Wichí term for ‘one, only one’ (LB *ʔiwenjałá*; Vej *wenjałá*; ’Wk *ʔiwehjáłah*, Güisnay *weihałá* ~ *unjałá* (Nercesian 2014: 358; Viñas Urquiza 1974: 80; Gutiérrez & Osornio 2015: 27; Claesson 2016: 41) and with the Enlhet–Enenhet term for ‘only, just, just that’ – Enlhet *wa:młá*, Enxet *wanłá*, Enenhet–Toba/Guaná *wanłá?* (Unruh & Kalisch 1997: 655; Unruh et al. 2003: 338; Elliott 2021: 245; Kalisch 2023: 191) – but that is likely a spurious comparison.

***xoxaw-u’k ~ *xoxi-ju’k, *-ku-j^h [1] ‘*Tabebuia nodosa* tree’ (MN)**

Mk xoxew-u’k [2], xoxew-kw-i (Gerzenstein 1999: 392) || Ni xoxi-juk, xoxi-ku-j (Seelwische 2016: 149)

[1] The Maká form points to *xoxaw-u’k, the Nivaclé one to *xoxi-ju’k.

[2] The preglottalized coda in the Maká suffix for tree names is attested elsewhere (Paraguay

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2022: 7).

Viegas Barros 2002: 142 (**xoxewuk*)

### *-?aɸk'u't 'bile' (MN)

Mk -?aftuk, -?afthu-j [1] (Gerzenstein 1999: 114) || Ni -?aɸk'u't, -?aɸk'ut-es (Campbell et al. 2020: 143, 154)

[1] Maká suffered an irregular metathesis of PM **k* and **t* and loss of glottalization in both consonants. The coda is attested as plain (with no glottalization) in the New Testament (Matthew 27:34).

**Rejected:** Campbell & Grondona (2007: 15) list reflexes of PCh *-témek, PW *-témeq under this etymology, an obviously false comparison.

Campbell & Grondona 2007: 15

### *?a'nqo'k 'paralytic' (MN)

Mk *onqok* (-*its*) [1] (Gerzenstein 1999: 283) || Ni ?a'nko'k, -?ankoxo-j 'limp, paralytic' (Fabre 2014: 207; Seelwische 2016: 44)

[1] The Maká reflex unexpectedly lacks preglottalization in both codas, as attested in the New Testament (Mark 2:3).

Fabre 2014: 43, fn. 27

### *[t]aqsin [?] *[t]aq'asin [1] 'to sneeze' (MN)

Mk [t]aqsin-*kij* [1] (Gerzenstein 1999: 128) || Ni [t]ak'asin (Campbell et al. 2020: 241, 250)

[1] The Maká reflex points to *[t]aqsin, the Nivaclé one to *[t]aq'asin. A similar root is found in Chorote and Wichí (see *[t^o]nxát'itsaXan in §10.8), but the correspondences are entirely irregular.

### *[t]at'o 'to yawn' (MN)

Mk [t]ot'o-*kij* (Gerzenstein 1999: 287) || Ni [t]at'o (Seelwische 2016: 378)

Obviously related to Proto-Guaicuruan *-at'ó 'to yawn' (Viegas Barros 2013b, #132; cf. Viegas

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Barros 2013a: 305).

Viegas Barros 2013a: 305 (*-at'ō)

### *?åfte^l 'orphan' (MN)

Mk (-)afti^l [1], (-)aftil-ets (Gerzenstein 1999: 113) || Ni ?åfte^k, ?åftek^l-es ~ ?åftek^l-ej (ChL-Pi) (Gutiérrez 2015b: 254, 277)

[1] The presence of a preglottalized coda in the Maká singular form is inferred based on the Nivaclé cognate; the noun is not attested in our sources that distinguish between plain and preglottalized stops.

Campbell & Grondona 2007: 22; Gutiérrez 2015b: 253

### *?åthajex (fruit); *?åthaj-u^k, *?åthaj-ku-j^h (tree) (*-hä-) 'molle plant' (MN)

Mk athejax; athej-u^k [1] (-kw-i ~ -ku-ket) 'Sideroxylon obtusifolium' (Gerzenstein 1999: 131) || Ni ?åtxajex (-s); ?åtxaj-uk, ?åtxa-ku-j 'Schinus molle' (Seelwische 2016: 214)

[1] The preglottalized coda in the Maká suffix for tree names is attested elsewhere (Paraguay 2022: 7).

### *?åxtina^χ, *?åxtinha-ts 'marsh deer (*Blastocerus dichotomus*)' (MN)

Mk axtinax, axtinhe-ts [1] (Gerzenstein 1999: 138; Unu'uneiki Patricia 2011: 16, 17) || Ni ?åxtina^x, ?åxtinxa-s (Seelwische 2016: 211)

[1] The preglottalization in the singular form in Maká is attested in a narrative by Unu'uneiki Patricia (2011: 16, 17).

### *?omhatäk (fruit); *?omhatä-(ju)^k, *?omhatä-ku-j^h (tree) (~ *-hä-) 'queen palm (*Syagrus romanzoffiana*)' (MN)

Mk omhetek; PL omhet-kw-i (Gerzenstein 1999: 282; Unu'uneiki Patricia 2011: 17) || Ni ?omxatats; ?omxata-juk, ?omxata-ku-j (Seelwische 2016: 207)

### *?ujhVl [1] 'otter sp.' (MN)

Mk wihil (-ets) 'lobo pirí otter', wihil-te-ki? (-j) 'lobo pe otter (*Lontra longicaudis*)' (Gerzenstein 1999: 375; Braunstein 1987: 48) || Ni ?ujxak^l<å> (-j) 'lobo

## 10.8 ChW only

*pe otter (Lontra longicaudis)*’ (Seelwische 2016: 306)

[1] The Maká reflex points to *?ujhel or ?ujhil; the Nivaclé one to *?ujhal or ?ujhäl.

*?utsi(h) (*-l) ‘marbled swamp eel’ (MN)

Mk utsi (-l) (Gerzenstein 1999: 356) || Ni ?utsi (-k) (Seelwische 2016: 308)

## 10.8 ChW only

In this section, we list the cognate sets with reflexes only in Chorote and Wichí. Despite being technically reconstructible only for Proto-Chorote–Wichí, the reconstructions given in this section correspond to the Proto-Mataguayan level. This is done in order to facilitate the future search of cognates in other languages, but also because a detailed reconstruction of the Proto-Chorote–Wichí phonology is yet to be worked out.

*-á'l ‘light, brightness’ (ChW)

PCh 3 *hl-á'l > Ijw/Mj 3 hl-á'l (Drayson 2009: 130; Carol 2018) || PW *-t-ál^h  
 > 'Wk -<t>átl (Claesson 2016: 72)

*-á'm ‘pronominal formative’ (ChW)

PCh 1 *j-á'm; 2 *Ø-?á'm; 1+2 *s-á'm; 3 *hl-á'm, *hl-ám-is > Ijw 1 j-á'm;  
 2 Ø-?á'm; 1+2 s-á'm; 3 hl-á'm, hl-ám-is; Iw 1 j-ém; 2 Ø-ám;  
 1+2 s-ám; 3 hl-ám (-is); Mj 1 j-é'm, j-ém-et; 2 Ø-á'm, Ø-ám-et; 1+2 s-á'm,  
 sám-et; 3 hl-á'm, hl-ám-is (Carol 2014a: 90, fn. 20; Drayson 2009: 95, 130, 145,  
 158; Gerzenstein 1983: 120, 134, 157, 174; Carol 2018) || PW 1 *j-á'm; 2 *Ø-?á'm,  
 *Ø-?ám-el^h; 1+2 *n-ám-el^h; 3 *t-á'm, *t-ám-el^h > LB 1 ?o-t-am (-it); 2 Ø-?am  
 (-it); 1+2 to-t-am-it; 3 t-am (-it); HORT n-am-it [1 2]; Vej 1 ?o-t-am (-el);  
 2 Ø-?am (-el); 1+2 (')n-am-el; 3 t-am (-el); 'Wk 1 ?o-t-á'm, ?o-t-ám-et (“formal  
 sociolect”) / j-á'm, j-ám-et (“informal sociolect”); 2 Ø-?á'm, Ø-?ám-eç  
 Ø-?ám-ejaç ~ Ø-?ám-el; 1+2 ?in-ám-el; 3 t-á'm ~ t-ám, t-ám-et (Nercesian  
 2014: 335; Viñas Urquiza 1974: 50, 65, 67, 69; Gutiérrez & Osornio 2015: 13;  
 Alvarsson 2012b: 57; Claesson 2016: 12, 32, 45, 231)

[1] Lower Bermejeño Wichí and Vejoz have irregularly lost glottalization in the final nasal (PW *m > m).

[2] Lower Bermejeño Wichí has irregularly raised PW *e to i in the plural suffix.

Likely related to Proto-Guaicuruan *-’m, as in *ejé-’m ‘I’, *?a-’m ‘thou’, *q’o-’m ‘we’,

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*aq'a-^m-*ʔi* 'you all' (Viegas Barros 2013b, #103, 198, #541, #660; cf. Viegas Barros 2013a: 312).

Viegas Barros 2013a: 312 (1 **j*-*am*; 2 **am*; 3 **l*-*am*)

***-áme(?)*t* / *-ámte-*ts* 'word' (ChW)**

PCh *-ámt- > Ijw -ámt-*ik*, -ámt-*i-s*; I'w -ámt-*ik*, -ámt-*e-s*; Mj -ámt-*e?* (-*s*) 'word', -ámti(*j*)-*ik* 'discourse, meeting' (Drayson 2009: 129; Gerzenstein 1983: 121; Carol 2018) || PW *-*l*-ámet, *-*l*-ámt-*es* > LB -*l*-*omet*, -*l*-*omt-es*; Vej -*l*-ámet 'word', -*l*-ámt-*es* 'language' [1]; 'Wk -*l*-ámet, -*l*-ámt-*es* (Nercesian 2014: 166; Gutiérrez & Osornio 2015: 15; Claesson 2016: 70)

[1] The Vejoz reflex is mistranscribed as -*l*-*amet* 'word', -*l*-*amt-es* 'language' in Viñas Urquiza (1974: 65).

Najlis 1984: 17, 23 (**amthe*, 2 **a-amthe*)

***-áte(?) 'jar' (ChW)**

PCh *-áte? (*-*j^h*) > Ijw -*ate*, -*ati-wa* [1]; I'w -*ate?* (-*j*); Mj -*ate?* (-*j*) (Drayson 2009: 129; Gerzenstein 1983: 122; Carol 2018) || PW *<*xj*>áte (*-*j^h*) [2] > LB *jote*; Vej *jate* [3]; 'Wk ?*játe?* (-*ç*) (Nercesian 2014: 161, 163; Viñas Urquiza 1974: 83; Claesson 2016: 43)

[1] The absence of the stem-final glottal stop in the Iyojwa'aja' reflex could be a mistranscription on Drayson's (2009) part. The plural form in Iyojwa'aja' is non-etymological.

[2] We have no explanation for the element **xj-* in Wichí.

[3] The vowel *a* in Viñas Urquiza's (1974) attestation of the Vejoz reflex must be a mistranscription.

***-éle(?) ~ *-ále(?) (*-*j^h*) 'inhabitant, inner' (ChW)**

PCh *-éle? (*-*j^h*) 'inhabitant, intestine' > Ijw -*éle?* [1]; Mj -*éle-j* 'guts' (Drayson 2009: 130; Carol 2018) || PW *-*l*-éle (*-*j^h*) > LB -*l*-*ele* (-*j*); Vej -*l*-*ele* (-*j*) 'inhabitant'; 'Wk -*l*-éle? (-*ç*) 'inhabitant, inner, tumor, sprout' (Nercesian 2014: 154; Viñas Urquiza 1974: 66; Gutiérrez & Osornio 2015: 15; Claesson 2016: 73)

[1] In Drayson (2009: 130), a word-final glottal stop is missing from the Iyojwa'aja' term.

***φálawu'k 'strangler vine (*Morrenia odorata*)' (ChW)**

PCh **hwálok* 'Morrenia odorata, Morrenia variegata' > Ijw/I'w *hwálok* (Drayson 2009: 133; Scarpa 2010: 189) || PW **xwálawukw* > LB *f^walawekw*;

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Vej *h^walak* [1]; 'Wk *x^wálawuk* (Spagarino 2008: 60; Suárez 2014: 189; Gutiérrez & Osornio 2015: 17; Claesson 2016: 164)

[1] The loss of the sequence *-wu-* in Vejoz is irregular. Gutiérrez & Osornio (2015: 17) state explicitly that *-wu-* is preserved in the Pilcomayeño variety.

*[*ji*]*ɸá(t)s'un* 'to spit' (ChW)

PCh **[?i]hwáts'un*-APPL > Ijw *[?i]hw^wéts^juhn-e^jn* / *-hwáts^juhn-e^jn* [1]; I'w *[i]hjátsen-* / *-f^wátsuhn-en* ~ *-f^watsen-* [2]; Mj *[?i]hjéts'an*-APPL ~ *[?i]hjéts'on*-APPL / *-hwáts'an*-APPL ~ *-hwáts'on*-APPL [3] (Drayson 2009: 99; Gerzenstein 1983: 44, 129; Carol 2018) || PW **[?i]x^wáts'un* > LB *f^watsen-katsi* [2]; Vej *-h^wats'un*; 'Wk *[?i]x^wáts'uŋ* (Braunstein 2009: 42; Viñas Urquiza 1974: 58; Claesson 2016: 164)

[1] The palatalization in Iyojwa'aja' *ts^j* is irregular.

[2] The plain (non-ejective) *ts* in Gerzenstein's (1983) and Braunstein's (2009) attestations of the Iyo'awujwa' and Lower Bermejeño forms must be a mistranscription.

[3] The vowel of the second syllable of the stem is unexpectedly lowered in Manjui.

*-*ɸél* ~ *-*ɸäl* 'to wrap, to hug, to fold, to bend' [1] (ChW)

PCh **[?i]k'aw-hwél(...)-hop* 'to hug' [2] > I'w *-<k^ja>f^wél-ap* [3]; Mj *[?i]<t^je>hwéhl-ap* / *-<?a>hwéhl-ap* 'to raise with one's arms'; **[?i]k'aw-hwél(...)-eh* > Mj *[?i]<t^je>hwél-e* / *-<?a>hwél-e* 'to raise or hold with one's arms' (Gerzenstein 1983: 141; Carol 2018) || PW **[t]<tsu>x^wel^h* 'to hug, to contract one's muscles involuntarily' [4] > LB *[ta]tsef^welto* hug; 'Wk *[t(a)]tsúx^wel*-APPL 'to hug, to fight'; **[?i]<qá>x^w(e)l*-APPL / **[?i]<qá>x^wnh*-APPL > 'Wk *[ja]qáx^w(e)l*-APPL / *[ja]qáx^wet*-APPL / *[ja]qáx^wŋ*-APPL 'to wrap, to fold'; **[t]<k^jó>x^wel*-APPL / **[t]<k^jó>x^wnh*-APPL > 'Wk *[t(a)]k^jóx^wel-k^já?* / *[t(a)]k^jóx^wŋ*-APPL 'to be bent, curved, tortuous' (Nercesian 2014: 248; Claesson 2016: 193, 303–304, 359, 386)

[1] This morpheme can be alternatively described as a verbal root that requires an incorporated object or as a suffix with a highly lexical meaning.

[2] The Chorote reflex is a compound whose initial element is a reflex of the Proto-Mataguayan verb **[t]k'aw*-APPL 'to hold in one's arms, to hug'.

[3] Gerzenstein's (1983) attestation of the Iyo'awujwa' reflex must be a mistranscription for *-k^jaf^wéhlap*.

[4] The dialectal reflexes with different applicatives attested in Lunt (2016: 98) show the fol-

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lowing meanings: ‘to feel pain in the muscles’, ‘to shrink when feeling cold’, ‘to limp’, ‘to have brucellosis’.

### **ɸilå(?)X₁₂* ‘*Solanum sp.*’ (ChW)

PCh **hwílåh* > Ijw *hwélique?* [1] ‘*Solanum sp.*; *Argemone subfusiformis*’; Mj *hwíl(?)e* ~ *hwélique?* ‘*Solanum sisymbifolium*’ (Drayson 2009: 133; Carol 2018) || PW **xʷilåχ* > ’Wk *xʷilåχ* (Claesson 2016: 169)

[1] The Iyojwa’aja’ reflex is entirely irregular; one would expect *-*hwélique*.

### *-*ɸiħä(?)k* ‘**dream**’; *-*ɸiħan* ‘**to dream**’ (ChW)

PCh *-*hwíhlek*; *[*i*]*hwíhlan* > Ijw *-hwéhlik*, *-hwéhl-∅-a?* ~ *-hwéhl-ik-is*; [*i*]*hwíhlija?* / *-hwéhlija?* *n*; I’w *-fʷéhlik*; *-fʷéhlijen*; Mj *-hwíhlik*; [*i*]*hjíhlan* / *-hwíhlan* (Drayson 2009: 100, 119; Gerzenstein 1983: 130; Hunt 1994; Carol 2018) || PW *-*xʷíħeq*; *[*t*]*xʷíħan* > LB *-fʷiħeq*; [*t(a)*]*fʷiħan*; Vej *-hʷiħek*, *-hʷiħ-ej*; ’Wk *-xʷiħek*, *-xʷiħ-ač* ~ *-xʷiħ-eq*; [*t(a)*]*xʷiħaŋ* (Nercesian 2014: 150; Viñas Urquiza 1974: 123; Gutiérrez & Osornio 2015: 35; Claesson 2016: 61, 356)

Najlis 1984: 48 (**hwehle*)

### *-*ɸom* ‘**to throw, to push**’ (ChW)

PCh *-*hwóm-ah* ‘**to push**’ > I’w *-fʷóm-a*; Mj [*i*]*hjóm-a* / *-hwóm-a* (Gerzenstein 1983: 130; Carol 2018) || PW *[*t*]*xʷom* ‘**to throw**’ > LB [*ta*]*fʷum-eχ*; Vej *-hʷom*; ’Wk [*t(a)*]*xʷom* (Nercesian 2014: 47; Viñas Urquiza 1974: 59; Claesson 2016: 357)

Viegas Barros (2013a: 304) compares the verb with Proto-Guaicuruan *-a’*m-áqa* ‘**to push**’ (Viegas Barros 2013b, #46), which could be spurious.

Viegas Barros 2013a: 304 (*-*hʷam* ‘**to push**’)

### *-*ɸólXa’n* ‘**ankle**’ [1] (ChW only)

PCh *-*hwóhla’n* > Mj *-hwóhla’n* (Carol 2018) || PW *-*xʷónha’n* > Guisnay *-hʷonan*, *-hʷon-lis* (Lunt 2016: 33)

[1] This is a likely derivative of PM *-*ɸo(?)* ~ *-*ɸó(?)* ‘**foot**’.

### **ɸ(u)nájXV(?)j* [1] ‘**earthworm, amphisbaenian**’ (ChW)

PCh *?*hnáhjåj?* > Ijw *?ihnahja?*, *?ihnahjaj-is* ‘**earthworm** (*Pheretima hawayana*)’; Mj *?ihniéhej?* [2] (Drayson 2009: 98; Hunt 1994) || PW **xʷunájxij*

## 10.8 ChW only

> LB *f'inañij* ~ *f'inañaj* [3] ‘earthworm’; Vejoz or Guisnay *hunaçi* (-lis) [4] ‘earthworm’; ’Wk *xʷunáhi?* [5] (Nercesian 2021; Lunt 2016: 39; Claesson 2016: 176)

[1] It is unclear whether this etymon should be reconstructed with a stem-initial consonant cluster (assuming epenthesis in Wichí) or with PM **u* (assuming syncope in Chorote). Regarding the vowel of the stem-final syllable, Iyojwa’aja’ points to PM **å*, most Wichí varieties to **i*, and one dialectal reflex to **a*.

[2] Manjui *h* is not the expected reflex of PCh **hj*.

[3] The forms attested in Nercesian (2021) are irregular reflexes of PW **xʷunáxjij*. One would expect **f'enañij*.

[4] The Vejoz or Guisnay form attested in Lunt (2016) shows an irregular development of PW **xʷ* and an irregular loss of the stem-final **j*. One would expect the reflex **hʷunaçij*.

[5] The ’Weenhayek reflex attested in Claesson (2016) shows an irregular loss of both instances of PW **j*. One would expect the reflex **xʷunáçij?*.

### *[*ji*]’jáXin ‘to watch’ (ChW)

PCh **[?i]’jáan* > Ijw *[?i]’jé’n*; I’w *-jén-a* [1] ‘to look after’, *-jén-e* ‘to spy’; Mj *[?i]’jéen* (Alvarsson 2012b: 89; Drayson 2009: 118; Gerzenstein 1983: 134; Carol 2018) || PW **[?i]jáhin*, imp. *jáhin* > LB *[?i]jahin*, imp. *jahin*; Vej *-jahen* [2]; ’Wk *[?i]jáhip*, imp. *jáhiŋ* (Nercesian 2014: 148, 177; Viñas Urquiza 1974: 82; Claesson 2016: 521)

[1] The seemingly plain *j* in Iyo’awujwa’ could be a mistranscription on Gerzenstein’s (1983) part.

[2] Vejoz *e* is not the regular reflex of PW **i*.

### **ji’no*, **ji’nó-l* ‘man’ (ChW)

PCh **?i’nó?* (*-l) ‘man, person’ > Ijw *?i’nó?* (-l); I’w *in’ó?* ‘person’; Mj *?i’n(j)ó?* (-l) (Carol 2009–2010: 100; Drayson 2009: 117; Gerzenstein 1983: 131; Carol 2018) || PW **hi’no*, **hi’nó-l^h* > LB *hi’nu* (-l); Vej *hi’no* [1]; ’Wk *hi’no*, *hi’nó-l* (Nercesian 2014: 191, 196; Gutiérrez & Osornio 2015: 12; Claesson 2016:

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[1] Viñas Urquiza (1974: 57) mistranscribes the word as *hino*.

Najlis 1984: 13, 16 (*i'hno); Viegas Barros 2002: 144 (*χino?)

***ká'lah, *ká'la-ts 'lizard' (ChW)**

PCh *ká'lah, *ká'la-s > Ijw *kjé'la*; I'w/Mj *kjé'la* (-s) (Drayson 2009: 135; Gerzenstein 1983: 142; Carol 2018) || PW *k'á'lah, *k'á'la-s > LB *ts'a'la*; Vej *tsala* [1]; 'Wk *k'á'lah*, *k'á'la-s* (Nercesian 2014: 123; Viñas Urquiza 1974: 51; Gutiérrez & Osornio 2015: 20; Claesson 2016: 185)

[1] The sound change *l &gt; l in Vejoz is irregular.

**Rejected:** Ni *kaklä'matax* 'gray iguana' (Seelwische 2016: 57) is very similar to PM *ká'lah, but cannot be a reflex thereof for phonological reasons (one would expect *ka'kla). Formally, it could be a compound of -*kaklä?* 'leg', -*mat* 'physical defect', and -*tax* 'similar to'.

Najlis 1984: 47 (*cela); Campbell &amp; Grondona 2007: 17

***[ji]ká(?)t 'to be red' (ChW)**

PCh *[?i]ká(?)t > Ijw [?i]s'át; I'w [?i]s'át ~ [?i]s'ét; Mj [?i]fét / -k'ét (Carol 2014a: 76; Drayson 2009: 110; Gerzenstein 1983: 132; Carol 2018) || PW *[?i]k'á(?)t > LB [?i]tſot; Vej -tſát; 'Wk <?i>k'á(?)t [1] (Nercesian 2014: 312; Braunstein 2009: 40; Viñas Urquiza 1974: 52; Gutiérrez & Osornio 2015: 42; Claesson 2016: 27)

[1] The third-person prefix ?i- has fossilized to the root in 'Weenhayek.

Najlis 1984: 22 (3 *j-cát)

***[ji]kå? 'to be torn' (ChW)**

PCh *[?i]kå? > Ijw [?i]s'á? / -k'á?; I'w -k'é?e; Mj [?i]fé? / -k'é? (Drayson 2009: 110; Gerzenstein 1983: 141; Carol 2018) || PW *[?i]k'å? > LB [?i]tſo?; 'Wk [?i]k'å? (Nercesian 2014: 237; Claesson 2016: 27)

***-kéjå(?) 'granddaughter'; *-kéjåts 'grandson'; *-ké(j)tså-ts 'grandchildren' (ChW)**

PCh *-kéjå?; *-kéjås; *-kéjtsås [1] > Ijw -k'íja?; -k'íjas; -k'ífas; I'w -; -k'íjas ~ -k'íjes; -; Mj -k'íje?; -k'íjes; -k'íses (Carol 2014a: 122; Drayson 2009: 122; Gerzenstein 1983: 139, 210; Carol 2018) || PW *-k'éjå; *-k'éjås; *-k'étsås > LB -tſejo;

## 10.8 ChW only

-*tfejos*; –; Vej -*tfejå*; -*tfejås*; -*tfetsos* [1]; 'Wk -*k'éjå?*; -*k'éjås*; -*k'étsås* (Nercesian 2014: 194; Gutiérrez & Osornio 2015: 29; Claesson 2016: 64, 65)

[1] The cluster PCh **ts* is reconstructed based on the Iyojwa'aja' reflex with an affricate. Note that Chorote has no affricate /*ts*/, suggesting that we are dealing here with a cluster composed of /t/ and /s/.

[2] The Vejox reflexes are mistranscribed in Viñas Urquiza (1974: 52), who gives -*tfeja* and -*tfejas* for the former two items (the plural is not attested). Note that the vowel *o* in -*tfetsos* is not the regular reflex of PW **â*.

Najlis 1984: 49 (**c'ejås* 'grandson')

*(-)késoj ~ *(-)kăsoj 'skin disease' (ChW)

PCh *-késoj > Ijw -*kíso* (-'l) 'acne'; I'w -*kixsoj* (Drayson 2009: 122; Gerzenstein 1983) || PW *-k'ésøj > Vejox or Guisnay *tfsesoj* 'scabies; kind of leguminous plant with edible roots whose leaves burn one's skin' (Lunt 2016: 21)

*kójXa(?)t 'to be heavy' (ChW)

PCh *kóhjat-*APPL* > Ijw *k'óhjet-i*; I'w [a]*k'ówiht-i?* ~ *k'óhje(h)t-i?*; Mj *k'óhjiht-ij?* (Drayson 2009: 136; Gerzenstein 1983: 78, 143, 214; Carol 2018) || PW **k'ójhat* > LB *ni-tfujñat*; Vej -*tsoñat* [1]; 'Wk *k'óçet* [2] (Braunstein 2009: 53; Gutiérrez & Osornio 2015: 62; Claesson 2016: 196)

[1] Viñas Urquiza (1974: 115) mistranscribes the Vejox reflex as *tsojnajat*.

[2] 'Weenhayek *e* is not the regular reflex of PW **a*.

*kó 'l 'locust' (ChW)

PCh *kó 'l > Ijw *k'ó 'l*; I'w *k'ól*; Mj *k'ó 'l*, *k'ól-is* (Drayson 2009: 136; Gerzenstein 1983: 143; Carol 2018) || PW **k'ól^h* > LB *tfut*; Vej *tſot*; 'Wk *k'ół* (Nercesian 2014: 51; Viñas Urquiza 1974: 53; Gutiérrez & Osornio 2015: 20; Claesson 2016: 193) Najlis 1984: 52 (PL **cɔl-s*)

*kowä'x / *-kowä'x [1] 'hole' (ChW)

PCh **kowéh* / *-*kóweh* > Ijw -*k'ówe*, -*k'óhw-a'l* [2] 'center, inner part'; I'w -*k'ówe* 'in the middle of'; Mj *k'owéh*, *k'owé-jh* / -*k'ówe* (Drayson 2009: 122; Gerzenstein 1983: 143; Carol 2018) || PW **k'owex* / *-*k'owex* > LB *tswex* 'in the middle of'; Vej *tſoweh* 'well'; 'Wk *k'owex*, *k'om-áç* / -*k'ówex*, -*k'om-aç*

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(Nercesian 2014: 276; Gutiérrez & Osornio 2015: 48; Claesson 2016: 194)

[1] This term is likely an obscure compound, with PM *-wā'x as its second part.

[2] The Iyojwa'a'ja' plural form is non-etymological.

***kpéna(?)X₁₂ ~ *kpána(?)X₁₂, *kpénX₁₃a-ts ~ *kpánX₁₃a-ts 'orphan' (ChW)**

PCh *k<em>pénah, *k<em>pénha-s [1] > Iwj *kimpéna*, *kimpéhna-s*; I'w *kimpéna* (-s); Mj *kilpéna* [2] (Drayson 2009: 136; Gerzenstein 1983: 140, 202) || PW *kpénaχ, *kpénha-s > Guisnay *tsipenah* [2]; 'Wk *pénax*, *péña-s* (Claesson 2016: 292)

[1] We have no explanation for the element *-em- in Chorote (which irregularly yields -il- in Manjui).

[2] Lunt (2016: 21, 73) documents the variant *penah* alongside *tsipenah* in Wichí, but does not indicate the dialectal procedure of these variants (his dictionary includes Vejoz and Guisnay forms). Since Vejoz is otherwise known to simplify word-initial consonant clusters composed of two stops, we surmise that the variant *tsipenah* is Guisnay.

***ktá'nih, *ktá'ni-ts 'Chaco tortoise' (ChW)**

PCh *kitá'nih, *kitá'ni-s > I'w *kitjéne?*, *kitjéni-s* [1]; Mj *kití'ni* ~ *kití'ni-e* (-s) (Gerzenstein 1983: 140; Carol 2018) || PW *k^jítá'nih > LB *tsita'ni*; Vej *ta'ni* (-tajis); 'Wk *tá'nih* (Nercesian 2014: 52, 231; Gutiérrez & Osornio 2015: 22; Claesson 2016: 346)

[1] The plain reflex of PCh *^jn in Iyo'awujwa' as attested by Gerzenstein (1983) must be a mistranscription.

**Rejected:** Najlis (1984: 22, 51) compares the Chorote word with Ni *tf'at'a* (-s) 'Chaco tortoise' (Seelwische 2016: 110) and reconstructs *cethán. We reject this possibility; the expected reflex of PM *ktá'nih in that language would actually be *kta'ni.

***ktéta(?) ~ *ktáta(?) (fruit); *ktéta-(ju)k ~ *ktáta-juk (tree) 'Prosopis elata' (ChW)**

PCh *kitéta?; *kitéta-k, *kitéta-k^ju-j^h > Iwj *kitíta-k*; Mj *kitíta?*a (-s); *kitíta-k*, *kitíta-ku-j* (Drayson 2009: 136; Carol 2018) || PW *k^jítéta; *k^jítéta-k > South-eastern (Salta) *tsiteta*; *tsitete-k*; 'Wk *téta?*; *téta-k* (Suárez 2014: 291; Claesson 2016: 396)

***kutsá(?)X₁₂ ~ *kutsé(?)χ ~ *k'utsá(?)X₁₂ ~ *k'utsé(?)χ [1] 'cháguar**

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**(*Bromelia hieronymi*)' (ChW)**

PCh **k’usáh* > Ijw *k’iséh*; I’w *isáh* (-as); Mj *?isáh* (Drayson 2009: 137; Gerzenstein 1983: 131; Carol 2018) || PW **k’utsáχ* > LB *tfitsaχ* [2]; Vej *tfutsah*; ’Wk *kutsáx* [3] (Spagarino 2008: 59; Viñas Urquiza 1974: 53; Gutiérrez & Osornio 2015: 17; Claesson 2016: 178)

[1]The Chorote form points to PM **k*, and the Wichí one to PM **k*.

[2]LB *i* is not the expected reflex of PW **u*.

[3]The unpalatalized *k* in the 'Weenhayek form is entirely irregular.

**Rejected:** Najlis (1984: 26) compares the Wichí reflex with the reflexes of PW *[hi]k’út ‘old’, Ni *k’utsa’x* ‘old’, and Ijw *k’út* ‘little owl’ (Hunt 1915: 90), which cannot be related for phonological and/or semantic reasons.

***-k’*nt*(...) [1] ‘kidney’**

PCh *-*kánt’ijaa?* > Ijw -*k’ént’ije?* (-jis); I’w -*k’éntije?* (-jis); Mj -*k’ént’ijee?* (-l) (Drayson 2009: 122; Gerzenstein 1983: 142; Carol 2018) || PW *-*k’óntowaj* ‘kidney’ > Vej -*tfontowaj*; ’Wk -*k’óntowaj?*, -*k’óntowa-lis* (Viñas Urquiza 1974: 53; Claesson 2016: 65)

[1]The correspondences between Chorote and Wichí are so irregular that it is impossible to reconstruct the protoform.

***-k’*aló*(?) (*-ts) ‘cheek’ (ChW)**

PCh *-*k’aló?* (*-ts) > Ijw -*k’ólo?* (-s) [1]; I’w -*k’aló?* (-s) [2]; Mj -(*?e*)*ló?* (-s) (Drayson 2009: 123; Gerzenstein 1983: 141; Carol 2018) || PW *-*k’álo* (*-s) > LB -*tf’alu*; Vej -*tf’(’)alo* (-s); ’Wk -*k’álo?*(-s) (Nercesian 2014: 48; Viñas Urquiza 1974: 54; Gutiérrez & Osornio 2015: 60; Claesson 2016: 67)

[1]The Iyojwa’aja’ reflex is entirely irregular; one would expect *-*k’eló?* (*-s).

[2]The plain reflex of PCh/PW **k’j* in Iyo’awujwa’ and Vejoz as attested by Gerzenstein (1983) and Gutiérrez & Osornio (2015: 60) is unexpected.

**Rejected:** Najlis (1984: 35, 45) lists Ni -*ku?*(-l) ‘cheek’ as a member of this cognate set, but not a single segment of this root shows any regular correspondence with the Chorote and Wichí

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roots listed here.

Najlis 1984: 35, 37, 45 (**cáldz*; **cálonce* ‘jaw’); Campbell & Grondona 2007: 16

### *-k'óX_{2,3}te(?) ( *-j^h) ‘ear’ (ChW)

PCh *-k'óote? (*-j^h) > Ijw -k'óte? [1]; I'w -k'óte? (-j) [2]; Mj -ʔóote? (-jh) (Drayson 2009: 123; Gerzenstein 1983: 143, 211; Carol 2018) || PW *-k'óte (*-j^h) > LB -tʃ'ute (-j); Vej -tʃ'ote; 'Wk -k'óte? (-ç) (Nercesian 2014: 112, 164; Braunstein 2009: 40; Viñas Urquiza 1974: 54; Gutiérrez & Osornio 2015: 29; Claesson 2016: 68)

[1] The Iyojwa'aja' word is mistranscribed as -k'óte in Drayson (2009).

[2] The plain reflex of PCh *k' in Iyo'awujwa' as attested by Gerzenstein (1983) must be a mistranscription.

Possibly related to Proto-Guaicuruan *-k'et'élV ‘ear’ (Viegas Barros 2013b, #341; cf. Viegas Barros 2013a: 309).

Najlis 1984: 16, 44 (*c'ote); Viegas Barros 2013a: 309 (*-k'ote) ‘ear’

### *[ji]llá(?)t ‘to feel’ (ChW)

PCh *[?i]llát-ej^h > Ijw [?i]l'át-e / -lát-e; Mj [?i]l'ét-ej / -lát-ej (Drayson 2009: 101; Carol 2018) || PW *[?i]llát > LB [?i]lot; Vej -lát ‘to hear’; [hi]llát-e ‘to smell’; 'Wk [?i]llát (Nercesian 2014: 315; Viñas Urquiza 1974: 64; Gutiérrez & Osornio 2015: 35; Claesson 2016: 213)

### *níltsa(?)X_{1,2}, *níltsX_{1,3}a-ts ‘white-lipped peccary’ (ChW)

PCh *<?ih>nílsah, *<?ih>nílsa-s [1] > Ijw ?ihníls^je; I'w ihnílsa-tók, ihnílsa-s-tó-ji; Mj ?ihnílsa (-s ~ -Ø) (Drayson 2009: 98; Gerzenstein 1983: 132; Carol 2018) || PW *nítsaχ, *nítsha-s > LB nitsaχ; Vej nitsah; 'Wk nítsax, níts^ha-s (Braunstein 2009: 52; Viñas Urquiza 1974: 68; Gutiérrez & Osornio 2015: 21; Claesson 2016: 273)

[1] We have no explanation for the element *?ih- in Chorote.

**Rejected:** Najlis (1984) compares the reflexes of PW *nítsaχ with the Nivaclé term for ‘wild cavy’ (*tsaxani*) and the Chorote term for ‘Chacoan peccary’ or ‘collared peccary’ (Ijw *kíhn'e*, I'w *kíhnje* (-s), Mj *kíhn'e?* (-s)), which are poor matches from both the phonological and

## 10.8 ChW only

semantic points of view.

***ntå(?)k ‘two’ (ChW)**

PCh *ntåk > I'w nták; Mj inták (Gerzenstein 1983: 152; Carol 2018) || PW *nitåk^w ‘two, many’ > LB nitok^w ‘many’; Vej nitåk^w ‘many’ (> 4)’ [1]; ’Wk nitåk^w ‘two, many’ (Nercesian 2014: 356; Gutiérrez & Osornio 2015: 27; Claesson 2016: 271)

[1] Viñas Urquiza (1974: 74) documents Vej -tak^w ‘two’, which must be the same word.

Najlis 1984: 39 (*tawk)

***[t^o]nxát'itsaXan [1] ‘to sneeze’ (ChW)**

PCh *[t^o]hnát'isaan > Ijw [ti]hn^jét'is^je^on / -hnát'is^je^on; I'w [-hnátis^jen [2]; Mj [ʔi]hn^jéʔiseen / -hnáʔiseen ~ -hnáʔaseen [3] (Carol 2014b; Gerzenstein 1983; Carol 2018) || PW *[t]náʔtsan [?] ~ *[t]náʔtshan [4] > LB [ta]naʔtsan; ’Wk náʔts^haŋ (Nercesian 2014: 157; Claesson 2016: 253)

[1] The reconstruction is tentative. We assume that the element *-nxá- is identical to the PM root *-na'x ~ *-ná'x, *-nxá-ts ‘nose’. A similar root is found in Maká and Nivaclé (see *[t]aqsin ~ *[t]aq'asin in §10.7), but the correspondences are entirely irregular. We have also contemplated the possibility that the correct reconstruction is *[t^o]nxáq'isaXan, which would be more similar to the Maká and Nivaclé forms and could account for the otherwise irregular Manjui reflex, but such a decision would require to posit additional irregular developments for Iyo'jwa'aja', Iyo'awujwa', and Wichí.

[2] The plain stop *t* in Gerzenstein’s (1983) attestation of the Iyo'awujwa’ reflex, as opposed to an ejective stop *t'*, must be a mistranscription.

[3] Manjui has irregularly debuccalized the ejective stop **t'* and shows an optional translaryngeal harmony.

[4] Wichí has irregularly lost the PM guttural fricative. It also shows an irregular syncope of the vowels in the medial syllables. The Lower Bermejeño Wichí reflex points to *[t]náʔtsan, the ’Weenhayek one to *-náʔtshan. Lunt (2016: 65) attested the surprising forms -nekts^han and -nakts^han, but does not indicate their dialectal procedence.

***[j]ókφe(')(t)s ~ *[j]ókφä(')(t)s ~ *[j]ékφe(')(t)s ~ *[j]ékφä(')(t)s ‘frighten away [animals]’ (ChW)**

PCh *[j]ókwes > Ijw [j]ók^jos / -ók^jos; Mj [j]ókes / -ókes (Drayson 2009: 161;

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Carol 2018) || PW **[j]ókʷes* > 'Wk *[j]ókes* (Claesson 2016: 551)

### *-pák'o (*-l) 'heel' (ChW) [1]

PCh *-pók'o? (*-l) [2] > Ijw -pók'oj? (-l); I'w -pók'oj? (-l); Mj -pók'o? (-l) (Drayson 2009: 125; Gerzenstein 1983: 156; Carol 2018) || PW *-pák'o? (*-l^h) 'foot' > LB -patʃ'u (-l); Vej -patʃ'o (-l) [3]; 'Wk -pák'o? (-l) (Nercesian 2014: 201; Viñas Urquiza 1974: 69; Gutiérrez & Osornio 2015: 61; Claesson 2016: 79)

[1] This is obviously a fossilized compound of an unidentified root *-pa- and PM *-k'o, *-k'ó-l 'bottom'.

[2] Chorote has apparently undergone irregular vowel harmony.

[3] The glottalization of the stem-medial consonant is missing in Gutiérrez & Osornio (2015: 61).

**Rejected:** Najlis (1984: 55) lists Ni -p'ik'o 'heel' under this etymology. We regard it as a fossilized compound whose second element is also PM *-k'o, *-k'ó-l 'bottom', but whose first element is a cognate of Maká -f'i? 'foot' (thus -p'i-k'o < *-f'i-k'o).

Najlis 1984: 36, 45, 55 (*páco, 2 *a-páco, PL *pac'ol)

### *pá(?)x ~ *pá(?)χ ~ *pá(?)x ~ *pá(?)χ ~ *pá(?)χ ~ *pé(?)χ [1] 'to pass (of time), to be soon' (ChW)

PCh *páh > Ijw páh, CAUS [ʔi]páh-anit; Mj [ʔa]páhto be ancient, to spend a lot of time doing something (Drayson 2009: 109, 142; Carol 2018) || PW *páχ 'to take time', *(-)páχ(-) 'deictic root found in temporal adverbs' > LB pax 'later'; 'Wk páx 'to take time' CAUS [ʔi]pá-nit-ex, (-)pax(-) (Nercesian 2014: 342–343; Claesson 2016: 288–289)

[1] The Iyojwa'aja' causative points to PM *á, and the Wichí reflex points to *á, *á, or *é. If Mk pa?ax 'a long time ago' (Gerzenstein 1999: 294) is shown to be related, the original vowel should be reconstructed as *á, with an irregular evolution in Wichí.

### *pájih 'frog (*Leptodactylus* sp.)' (ChW)

PCh *pájih > Ijw páji (-his); I'w páji [1]; Mj pá?i ~ pá?ji (-wa ~ -Ø) (Drayson 2009: 143; Gerzenstein 1983: 154; Carol 2018) || PW *pá?jih > LB po?ji; Vej pá?ji [2]; 'Wk pá?jih (-lis ~ -tajis) (Nercesian 2014: 47; Gutiérrez & Osornio 2015: 22; Claesson 2016: 284)

[1] The plain reflex of PCh *j in Iyo'awujwa' as attested by Gerzenstein (1983) must be a

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mistranscription.

[2] Viñas Urquiza (1974: 70) mistranscribes the root as *pa'ji*.

**Rejected:** It is tempting to include Mk *paxpaje?* (-l) 'a tiny frog (*Melanophryne niscus fulvoguttatus*)' in this cognate set, but the expected reflex of PM **pá'jih* in Maká would be **pa'ji?*, making the comparison dubious.

Najlis 1984: 12, 17 (**pa(-)i*)

***på(?)q 'kind of zorzal (*Turdus sp.*)' (ChW)**

PCh **påq* > Ijw *pák-hit^jok* 'creamy-bellied thrush (*Turdus amaurochalinus*)'; MJ *pák* 'bird sp.' (Drayson 2009: 143; Hunt 1994) || PW **påq* 'creamy-bellied thrush (*Turdus amaurochalinus*)' > Vejoz or Guisnay *pák*; 'Wk *påq* (Lunt 2016: 72; Claesson 2016: 286); **påq-taχ* 'LB *poq-taχ* 'creamy-bellied thrush (*Turdus amaurochalinus*)'; Vejoz or Guisnay *pák-t'ah* 'rufous-bellied thrush (*Turdus rufiventris*)' [1] (Spagarino et al. 2013 [2011]; Lunt 2016: 72)

[1] The form *pák-t'ah*, attested in Lunt (2016), is quite unexpected. The regular reflex would be *påq-tah*. It is unknown whether this form should be attributed to the Vejoz or to the Guisnay variety.

***[ji]på(?)x ~ *[ji]på(?)χ ~ *[ji]på(?)x ~ *[ji]på(?)χ 'to hit' (ChW)**

PCh *[?i]páh > Ijw [?i]páh / -páh; MJ [?i]pé-e / -pá-a 'to slap with one's palm' (Drayson 2009: 109; Carol 2018) || PW *[?i]páχ-APPL 'to beat', *[?i]<nhå>páχ 'to punch' > LB [?i]poχ-ti 'to punch', [?i]nopoχ-ti 'to punch (iteratively)', -poχ-hek 'blow (noun)'; 'Wk [?i]páx(-APPL)-tih 'to beat (iteratively)', [?i]nápáx 'to punch' (Nercesian 2014: 161, 224, 298, 365; Claesson 2016: 285)

***[ji]pén ~ *[?i]pán 'to cook' (ChW)**

PCh *[?i]pén > Ijw [?i]pí'n / -pé'n; I'w -pén; MJ [?i]pín / -pén (Drayson 2009: 110; Gerzenstein 1983: 155; Carol 2018) || PW *[?i]pén > LB [ta]pen<ek>; Vej -pen; 'Wk [?i]pén (Braunstein 2009: 56; Viñas Urquiza 1974: 70; Claesson 2016: 292)

Najlis 1984: 9 (2 **hl-pén*)

***pex ~ *päx 'each time, every time' (ChW) [1]**

PCh **péh* > Ijw *péh* (Carol 2014b) || PW *=*peχ* > LB =*peχ*; Vej -peh; 'Wk -pex

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(Nercesian 2014: 304; Viñas Urquiza 1974: 70; Claesson 2016: 291)

[1] Even though we have not found cognates in Iyo'wujwa' or Manjui, we find the Iyojwa'aja' form unlikely to be a Wichí borrowing because it shows a greater degree of autonomy (it is always stressed and does not behave like an enclitic or suffix). The putative Guaicuruan cognates listed above yield further support to the possibility that the etymon in question is old enough.

Likely related to Proto-Guaicuruan **-pek'e* 'each (distributive)' (Viegas Barros 2013b, #721).

### ***púle(?) ( *-ts) 'sky, cloud' (ChW)**

PCh **pule?* (*-s) > Ijw *póli?* (-s) 'cloud', *póli?* (-jis) 'sky' [1]; I'w *púle?* ~ -ó- ~ -i?; Mj *póle?* (-s) (Drayson 2009: 144; Gerzenstein 1983: 156, 189, 211; Carol 2018) || PW **púle* (*-s ~ *-tajis) > LB *pele*; Vej *pule* (-tajis); 'Wk *púle?* (-s ~ -tajis) (Nercesian 2014: 161; Viñas Urquiza 1974: 70, 112; Gutiérrez & Osornio 2015: 44; Fernández Garay 2006–2007: 213; Claesson 2016: 296)

[1] The Iyojwa'aja' form is mistranscribed as *póli* in Drayson (2009).

Najlis 1984: 9, 43 (*pule)

### ***púm 'drum' (ChW)**

PCh **púm* (*-is) > Ijw *pó?om*, *póm-is*; I'w *póm-itók*, *póm-is-itó-ji*; Mj *pó'm*, *-póm-is* (Drayson 2009: 144; Gerzenstein 1983: 156; Carol 2018) || PW **púm* > LB *pem*; Vej *pum*; 'Wk *púm-tax* (Braunstein 2009: 54; Viñas Urquiza 1974: 70; Claesson 2016: 296)

### ***qaka (*-l / *-qáka (*-l)) 'medicine' (ChW)**

PCh **-qáka?* (*-l) > Ijw *-kák'e?* [1]; I'w *-kák'e?* (-l) (Drayson 2009: 120; Gerzenstein 1983: 136) || PW **qak'a*, **qak'á-l* / **-qák'a* (*-l^h) > LB *qatfa*; Vej *-katfa* (-l) [2]; 'Wk *qak'a?*, *qak'á-l* / *-qák'a?* (-l) (Nercesian 2014: 199; Viñas Urquiza 1974: 61; Gutiérrez & Osornio 2015: 47; Claesson 2016: 85, 306)

[1] The Iyojwa'aja' form is mistranscribed as *-kák'e* in Drayson (2009).

[2] The Vejoz reflex is attested with an aspirated velar in Gutiérrez & Osornio (2015: 47): *-k^hatfa* (-l).

### ***[t]qási(?)t / *-qasí(?)t 'to stand' (ChW)**

PCh **[t^o]qásit* > Ijw *[ta]káxsit*; I'w *-ká(x)sit*; Mj *[ti]káxsi* (Drayson 2009: 148; Gerzenstein 1983: 139, 213; Carol 2018) || PW **[t]qásit*, imp. **qasít* >

## 10.8 ChW only

LB [ta]qasit; Vej [ta]kasit; 'Wk [t(a)]qásit, imp. qasít (Nercesian 2014: 275; Braunstein 2009: 55; Viñas Urquiza 1974: 61; Gutiérrez & Osornio 2015: 35; Fernández Garay 2006–2007: 217; Claesson 2016: 375)

Najlis 1984: 46 (*qahsit)

***qatsíwo(?) 'limpkin' (ChW)**

PCh *qasíwo<?oh> [1] > Ijw kaséwo?o; Mj kaséiwo?o, kasíwo?o (-s) (Drayson 2009: 134; Carol 2018) || PW *qatsíwo > LB tsiwu [2]; 'Wk qatsíwo? (Spagarino et al. 2013 [2011]; Claesson 2016: 317)

[1] We have no explanation for the element *-?oh in Chorote.

[2] The root-initial syllable was irregularly lost in Lower Bermejeño Wichí.

***qawa(?)q / -qáwa(?)q 'belt, band' (ChW)**

PCh *-qáwak > Ijw -ká'wak, -ká'wak^j-awa [1]; I'w -káwak (Drayson 2009: 121; Gerzenstein 1983: 138) || PW *-qáwaq > LB -qawaq; 'Wk qawaq, qawáq-aç / -qáwaq (-aç) (Braunstein 2009: 47; Claesson 2016: 317)

[1] The glottalization in 'w in Iyojwa'aja' is unexpected.

***-qá?tu(?) 'yellow' (ChW)**

PCh *-qá?tu? > I'w ká?ts^ju< t^ju?>; Mj -ká?at^ju? (Gerzenstein 1983: 138; Carol 2018) || PW *qá?tu > LB qa?te; Vej ka?tu [1]; 'Wk <ja>qá?tu? (Braunstein 2009: 47; Gutiérrez & Osornio 2015: 42; Claesson 2016: 527)

[1] Viñas Urquiza (1974: 62) mistranscribes the root as -kátu.

Najlis 1984: 25 (*qatu)

***-qátsile(?) (*-j^h) 'guts' [1] (ChW)**

PCh *-qásile-j^h > Ijw -káxsili (-wa) 'intestine, umbilical cord'; I'w -káxsili; Mj -káxfili (Drayson 2009: 121; Gerzenstein 1983: 139; Carol 2018) || PW *-qásle (*-j^h) > LB -t(a)-qosle-j; Vej -kásle; 'Wk -qásle-j^h (Nercesian 2014: 164, 339; Viñas Urquiza 1974: 62; Claesson 2016: 83)

[1] This is likely an opaque compound of *-qá-ts 'food (pl.)' and *-éle(?) ~ *-ále(?) (*-j^h) 'inhab-

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itant, inner' (in Chorote also 'intestine').

Najlis 1984: 16 (**qatsle*); Campbell & Grondona 2007: 15

### *-qótso(?) 'node' (ChW)

PCh *-qósó-ke? > Ijw -kóxso-ki (-jis) [1]; I'w -kóxso-ki? (-wa?) (Drayson 2009: 123; Gerzenstein 1983: 144) || PW *-qótso > LB -qotsu; 'Wk -qótso? ~ [ta]qótso?(-t) (Braunstein 2009: 48; Claesson 2016: 89)

[1] The absence of a word-final glottal stop in Drayson's (2009) attestation of this noun must be a mistranscription.

Najlis 1984: 24 (**kɔtshɔq*)

### *[t]qXán 'to dig' [1] (ChW)

PCh *[t^o]q(h)án > Ijw [ta]ká'n; Mj [ti]k(x)án, [ti]k(h)án (Drayson 2009: 148; Hunt 1994; Carol 2018) || PW *[t]χhán > 'Wk [t(a)]xháñ (Claesson 2016: 352)

[1] The reconstruction *qX is highly tentative. Note that the cluster *xh* in 'Weenhayek is unique and occurs only in this root. In Manjui, the verb is attested as [ti]khán in Carol (2018) but with a plain -k- in Hunt (1994); we concede that [kh], [kx] could be simply allophones of /k/ before a low vowel in Manjui; see §8.2.2.1 *in fine*.

### *-q'á(?)X₁₂ 'tongue' (ChW)

PCh *-q'áh > I'w -káh (-es) [1]; Mj -k'áh (-as) (Gerzenstein 1983: 138; Carol 2018) || PW *-q'áχ 'mouth' > LB -q'áχ; Vej -kah [1]; 'Wk -q'áx (Nercesian 2014: 121; Gutiérrez & Osornio 2015: 60; Claesson 2016: 89)

[1] The plain reflex of the stem-initial stop in Iyo'awujwa' and Vejoz as attested in Gerzenstein (1983) and Gutiérrez & Osornio (2015: 60) must be a mistranscription.

**Rejected:** Najlis (1984: 23) compares the Wichí word with Ni -tʃ'akletʃ, -tʃ'akxe-s 'tongue' (Seelwische 2016: 109) and reconstructs *k'ahn hle. Campbell & Grondona (2007: 16) and Viegas Barros (2013a: 309), in turn, compare the Nivaclé word with the Wichí compound *-q'áχ-ł-ik'u 'tongue' (literally 'the egg of the mouth'); Viegas Barros reconstructs PM *-kahlik'u. The comparisons are untenable; the Nivaclé word must go back to *-k'álek, *-k'álhe-ts.

Campbell & Grondona 2007: 16

### *siló?tåɸV(?) [?] ~ *siwó?tåɸe(?) [1 2] 'Caatinga puffbird' (ChW)

PCh *siló?tåhwV? [2] > Ijw siló?t'ohwa? [1]; Mj siló?tahwej (Drayson 2009:

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145; Carol 2018) || PW **siwótåxʷe* > LB *siwutofʷe*; 'Wk *siwótåxʷe?* (Spagarino et al. 2013 [2011]; Claesson 2016: 330)

[1] Chorote points to PM **l* and Wichí to PM **w*.

[2] Wichí points to PM *-*e*(?), whereas in Chorote one finds different endings in *Iyojwa'aja'* and *Manjui*, neither of which matches the evidence from Wichí.

**spú(?)p* ‘dove’ (ChW) [1]

PCh **s³púp* > Ijw *sipóp* [2] ‘Picui dove’; I'w *sipóp* (-is); Mj *sipóp* (-is) (Drayson 2009: 146; Gerzenstein 1983: 159; Carol 2018) || PW **spúp* > LB *sipep* ‘white-tipped dove’; Vej *sipup* ‘white-tipped dove’; 'Wk *supúp* [3] (Spagarino et al. 2013 [2011]; Gutiérrez & Osornio 2015: 22; Claesson 2016: 332)

[1] Maká has a similar root, *sapip* (-its) ‘white-tipped dove’ (Gerzenstein 1999: 323), but the vowels are very different from those found in Chorote and Wichí.

[2] The *Iyojwa'aja'* reflex is attested as *sipóp* in Carol (2014a: 99), which is most likely a mis-transcription.

[3] The ‘Weenhayek reflex shows an irregular sound change **i* > *u*.

**stá(?)X* (fruit); **stá-?**q* (plant) ‘*Stetsonia coryne cactus*’ (ChW)

PCh *?*stáh*; *?*stá-k* > Ijw *?istjé*; *?istjé-k*, *?istjé-k'et*; I'w *?istá-k*, *?istá-ki-?*; Mj *?istáh* ~ *?iftáh*; *?iftá-k* ~ *?iftá-k* (Drayson 2009: 112; Gerzenstein 1983: 132; Carol 2018) || PW **?istá-q* > LB *?ista-q* ‘white cactus’; Southeastern (Salta) *?ista-q*; Vej *ista-k* ‘Mataco tree’; 'Wk *?istá-k* [1] ‘*Cereus giganteus*’ (Nercesian 2014: 339; Suárez 2014: 242; Gutiérrez & Osornio 2015: 18; Claesson 2016: 37)

[1] The velar consonant *-k* in ‘Weenhayek’ is explained as an result of analogical leveling (the suffix for trees *-(u)k* ends in a velar consonant). Note that in PM **k* was banned following the vowel **a*, which is why the compound of **stáX* and **-uk* has the shape **stá-q* and not ***stá-k*.

Najlis 1984: 39 (**s-thək* (plant))

**ståφe(?)* ‘Chaco chachalaca’ (ChW)

PCh *?*stáhwe?* (*-*wa?*) > Ijw *?istjáhwe*, *?istjáhwi-wa?*; I'w *istáfʷe* (-*wa?*); Mj *?istáhwe?* ~ *?iftáhwe?* (-*l* ~ -*wa?*) (Drayson 2009: 112; Gerzenstein 1983: 132; Carol 2018) || PW **?iståxʷe* > Southeastern (Salta) *sitofʷe* ~ *?istofʷe*; Vej *iståhʷe*; 'Wk *?iståxʷe?* (Suárez 2014: 178; Gutiérrez & Osornio 2015: 20;

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Claesson 2016: 37)

[1] The Vejoz reflex is mistranscribed as *istahʷe* in Viñas Urquiza (1974: 61).

Najlis 1984: 39 (**s-thāhwε*)

### *tátsna(?)X₁₂ ~ *tátsne(?)χ ‘toad’ (ChW)

PCh *tásVnah > Ijw táxsina ‘*Rhinella arenarum*’; I’w táxsina ~ táxsena (-s); Mj táxsena (-as) ‘cururu toad’ (Carol 2014a: 99; Drayson 2009: 149; Gerzenstein 1983: 163; own field data; Carol 2018) || PW *tátanax [2] > LB totanax; Vej tātnah; ’Wk tātnax, tātna-s (Braunstein 2009: 58; Viñas Urquiza 1974: 121; Claesson 2016: 344)

[1] PCh *V can stand for any vowel that fails to cause both the first and the second palatalization in Chorote (such as *a or *ä).

[2] Lunt (2016: 84) documents the form *tātsinah* alongside *tātnah*, but does not indicate whether it is representative of Vejoz or Guisnay. If it turns out to be a Guisnay form, it could be an old Chorote borrowing.

Viegas Barros 2002: 144 (**tatsinax*)

### *-témä(?)k, *-téma-*j^h* ~ *-ä- ‘bile’ (ChW)

PCh *-témek, *-téhma-*j^h* > Ijw -témk, -téhma-*l* [1]; I’w -témak, -téma-*j* [2]; Mj -témak (Carol 2014a: 93; Drayson 2009: 126; Gerzenstein 1983: 164; Carol 2018) || PW *-témeq, *-téma-*j^h* > LB -temeq, -tema-*j* ‘an organ of a fish’; Vej -temek; ’Wk -témek (Nercesian 2014: 192; Viñas Urquiza 1974: 75; Guatiérrez & Osornio 2015: 57; Claesson 2016: 93)

[1] The plural form in Iyojwa’aja’ is non-etymological.

[2] The consonant *m* (rather than **hm*) in the plural form in Iyo’awujwa’ is unexpected and could result from mistranscription.

**Rejected:** Campbell & Grondona (2007: 15) list Ni -?aɸk’u^ht, Mk -?aɸtuk under this etymology, an obviously false comparison.

Campbell & Grondona 2007: 15

### *tkéna(?)X₁₂ ~ *tkána(?)X₁₂, *tkénX₁₃a-*ts* ~ *tkánX₁₃a-*ts* ‘precipice; hill, mountain’ (ChW)

PCh *t^hkénah, *t^hkéhna-s ‘precipice’; *t^hkéhna-*k^he?* ‘mountain’ > Ijw tikína ‘ravine’, tikíhna-*ki?* (-s) [1] ‘mountain’; I’w takíhna-*ki?* (-*ji*) ‘mountain’;

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Mj *takína*, *takíhna-s* ‘precipice’, *takíhn-e-ki?* (-j) ‘mountain’ (Drayson 2009: 151; Gerzenstein 1983: 162; Carol 2018) || PW **tk^jénaχ*, **tk^jénh-a-s* ‘mountain, hill’ > LB *tatseñax*; Vej *tseñah*, *tseña-s*; ’Wk *k^jénax*, *k^jéña-s* (Nercesian 2014: 51; Braunstein 2009: 56; Viñas Urquiza 1974: 72; Gutiérrez & Osornio 2015: 43; Claesson 2016: 187)

[1] The Iyojwa’aja’ word is mistranscribed as *tikíhna-ki* in Drayson (2009: 151).

**Rejected:** Najlis (1984: 11) lists Ni *ɸtseñax* ‘north wind’ as a member of this cognate set. We derive it from PM **ɸkénaχ* ‘north wind, north’ instead. Campbell & Grondona (2007: 15) compare the Chorote word with Ni *-tako?* ‘forehead’, *-tako-jif* ‘ravine’, an obviously spurious comparison.

Najlis 1984: 11, 41 (**cenaq* ~ **t-cenaq*)

### *-*tk’úlu?* (‘marrow’ (ChW))

PCh *-<té>*k’uhlu?* ‘brain, marrow’ > Ijw *-ték’ihli* [1] ‘brain’; I’w *-tékihlí*, *-tékihlé-j* [1] ‘marrow’; Mj *-téʔihl’u?* [2] (Drayson 2009: 126; Gerzenstein 1983: 164; Carol 2018) || PW *-*tk^j’úlu* > ’Wk *-k^júlu?* (Claesson 2016: 68)

[1] The absence of a word-final glottal stop in Drayson’s (2009) attestation of this noun must be a mistranscription.

[2] This is mistranscribed as *-téiʔihl’u?* in Carol (2018).

**Rejected:** Viegas Barros 2013a: 313 compares the Chorote term with Maká *-xkitiña* ‘brain, marrow’ and reconstructs PM **hetekilV*, an obviously false comparison. He also includes Mbáyá <-atiquelo>, <-atiquilo> ‘brain, marrow’ as possible Guaicuruan cognates.

### *(-)*tútse*(?)χ [1] ‘smoke’ (ChW)

PCh *(-)*túsah* > Ijw *tóxse* (-*hes*); I’w *tóxsa*, *tóxsi-s*; Mj (-)*tóxsa* (Drayson 2009: 153; Gerzenstein 1983: 166; Carol 2018) || PW *(-)*tútsaχ* > LB *tetsax*; Vej *tutsah*; ’Wk (-)*tútsax*, *tútse-tax* ‘mist’ (Nercesian 2014: 47; Viñas Urquiza 1974: 77; Claesson 2016: 95, 426)

[1] PM *-*eχ* (rather than *-*aχ* or *-*ax*) is reconstructed based on ’Wk *tútse-tax* ‘mist’ and I’w *tóxsi-s*, which show that the root had the allomorph **tútse-* before suffixes.

Possibly related to Proto-Guaicuruan *-á(?)*lodqa* ‘smoke’ (Viegas Barros 2013b, #35).

**Rejected:** Najlis (1984: 43) includes Nivaclé *stutax* ‘soot’ into the comparison, which is implau-

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sible for phonological reasons.

Najlis 1984: 16, 43 (**tutsha*); Viegas Barros 2002: 144 (**tutsaχ*)

### *-tXá(‘)t ‘to throw, to put’ (ChW)

PCh *[?i]tát-APPL > Ijw [?i]tⁱét-APPL / -tát-APPL; I’w -tát-e; Mj [?i]t(‘)ét-APPL / -tát-APPL (Carol 2014a: 76; Drayson 2009: 113; Gerzenstein 1983: 163; Carol 2018) || PW *[?i]thát > LB [?i]t^hat; Vej -tat [1]; ’Wk [?i]t^hát (Nercesian 2014: 255, 280; Braunstein 2009: 45; Viñas Urquiza 1974: 74; Claesson 2016: 455)

[1] The absence of aspiration in Vej -tat, as attested by Viñas Urquiza (1974: 74), could be a mistranscription.

Najlis 1984: 52 (1PL *a-tat-ehne)

### *[ji]tså(‘)j ‘to spill’ (ChW)

PCh *[?i]sáj? > Ijw [?i]s^já(j)-APPL / -sá(j)-APPL; I’w -sáj-APPL; Mj [?i]f^jéj? / -sáj? (Drayson 2009: 110; Gerzenstein 1983: 157; Carol 2018) || PW *[?i]tså > LB [?i]tsoj-ka; Vej -tsaj; ’Wk [?i]tsåj? (Braunstein 2009: 43; Viñas Urquiza 1974: 55; Claesson 2016: 462)

Najlis 1984: 11 (*tsaj)

### *-tséłå(?) ~ *-á- ‘sharp corner, tip’; *-tséłå-(-)χ ~ *-á-, *-tséłå-ts ~ *-á- ‘sharp’; *-tséłå-(-)t ~ *-á- ‘to sharpen’ (ChW)

PCh *-séhlå-h-i?; *-séhlå-s-i? ‘to be sharp’; *-séhlå-ht-i? ‘to sharpen’ > Ijw [?i]síhla-h-e, [?i]síhla-s-its’i?n [1]; [?i]síhla-t-i / -séhlå-t-i; Mj [?a]séhleh-ij?; [?i]fíhle-ht-ij? / -séhle-ht-ij? (Drayson 2009: 111; Carol 2018) || PW *-tséłå(?) ; *-tséłå(-)χ; *-tséłå(-)t > LB -tseło(?) [2]; ?i-tsełox; ’Wk -tséłå?(-s); ?i-tséłås; -?i-tséłå-s; [ni]tséłå-t (Braunstein 2009: 43, 48; Claesson 2016: 40, 110, 464)

[1] The absence of a word-final glottal stop in Drayson’s (2009) attestation of the singular form must be a mistranscription.

[2] This root is not attested in Nercesian (2014), hence the uncertainty regarding the presence of a word-final glottal stop. Braunstein (2009) documents a word-final glottal stop in this form, but since he is otherwise known to document one where Nercesian (2014) documents none, the datum is considered unreliable.

### *tsémłå(‘)k ~ *tsämlå(‘)k ‘silk floss tree’ (ChW)

PCh *sémlak > Ijw sémlak; I’w sémlak (-is) [1]; Mj sémlak (-ij) (Drayson

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2009: 145; Gerzenstein 1983: 158; Carol 2018) || PW *tsémłäk^w > LB tsemłok^w [2]; Vej tsemłäk^w, tsemłäk-uj; 'Wk tsémłäk (-uç) (Spagarino 2008: 59; Gutiérrez & Osornio 2015: 18; Claesson 2016: 464)

[1] The absence of *h* in the Iyo'awujwa' form attested in Gerzenstein (1983) must be a mistranscription.

[2] Nercesian (2014: 384) gives the form *tsemłog*, which could be a mistranscription.

**Rejected:** Najlis (1984: 37) includes Chorote *sel* 'thorn' (probably a mistranscription PCh *hl-é-l 'its thorns', since the first-person plural form *s-é-l 'our thorns' cannot seem to be pragmatically felicitous) as a possible cognate, which is absolutely impossible for phonological and semantic reasons.

Najlis 1984: 17, 37 (*semhla-uk ~ *selnauk)

### *tsóna(?) 'red brocket' (ChW)

PCh *sóna? > Ijw sóna? (-jis); I'w són-ta (-s) 'sheep'; Mj són(a)-ta (-s) 'sheep' (Drayson 2009: 147; Gerzenstein 1983: 161; Carol 2018) || PW *tsó'nah > LB tsu'na; Vej tso'na [1]; 'Wk tsó'nah, tsó'na-lis (Nercesian 2014: 197; Viñas Urquiza 1974: 55; Gutiérrez & Osornio 2015: 23; Claesson 2016: 466)

[1] Viñas Urquiza's (1974) attestation of the Vejoz reflex as *tsona* (with no glottalization) must be a mistranscription.

Najlis 1984: 28 (*sonatha 'sheep')

### *tsu(?)X $\overset{?}{\sim}$ *ts'u(?)X; *tsuX-uk $\overset{?}{\sim}$ *ts'uX-uk 'sachamembrillo (*Capparis tweediana*)' (ChW)

PCh *ts'úh; *ts'úh-uk > Ijw <mé>ts^ju; <mé>ts^ju-k ~ ts'ówk ~ ts'éwk; I'w ts'ów<k> ~ ts'éw<k> [2]; Mj s'óu<k> (Drayson 2009: 139; Gerzenstein 1983: 167; Scarpa 2010: 187; Carol 2018) || PW *tsúhuk^w [3] > LB tsehek^w; 'Wk tsúhuk (Spagarino 2008: 62; Claesson 2016: 467)

[1] Chorote points to PM *ts' (or *s'), and Wichí to *ts.

[2] The Iyo'awujwa' reflex is mistranscribed as *tsok* in Gerzenstein (1983: 167).

[3] Suárez (2014: 247) documents the reflex *tjuhuk* ~ *ʔitjuhuk* without specifying the location where this name was attested.

### *[ji](t)s'u(?) 'to suck' (ChW)

PCh *[ʔi]ts'ú-APPL > Ijw [ʔi]ts^jú-APPL / -ts'ó-APPL; I'w [i]ts^jú-f^we? / -tsó-f^we?

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~ -tsó-wej; Mj [ʔi]tʃ'ú-uj? / -ts'ó-uj? (Drayson 2009: 115; Gerzenstein 1983: 42, 167, 194; Carol 2018) || PW *[hi]ts'u(?) > Vej -ts'u 'to absorb'; 'Wk [hi]ts'u? (Viñas Urquiza 1974: 56; Claesson 2016: 470)

Najlis 1984: 11 (*ts'o)

***(-)(t)s'u-k 'añapa drink' [1] (ChW)**

PCh *ts'ú<k> > I'w tsók [2] (Gerzenstein 1983: 167) || PW *-ts'u<kʷ> > LB -ts'ekʷ 'suction'; Southeastern (Salta) -tʃ'ekʷ; 'Wk -ts'uk, -ts'úh-uç (Nercesian 2014: 268; Suárez 2014: 247; Claesson 2016: 101)

[1] This is transparently analyzable as a participle of *[ji](t)s'u(?) 'to suck'.

[2] The non-glottalized affricate in the Iyo'awujwa' reflex must be a mistranscription on Gerzenstein's (1983) part.

***wkína(?)X₁₂, *wkínX₁₃a-ts 'metal' (ChW) [1]**

PCh *w^okínah, *w^okínha-s > Ijw wíkin^je, wíkíhn^je-s (Carol 2014a: 74, fn. 1; Drayson 2009: 157) || PW *k^jínaχ, *k^jính-a-ts > LB -tʃínaχ 'knife'; tʃínaχ-t'-oχ 'money'; Vej tʃínaχ; 'Wk k^jínaχ, k^jína-s (Nercesian 2014: 326, 447; Viñas Urquiza 1974: 53; Gutiérrez & Osornio 2015: 47; Claesson 2016: 191)

[1] Despite the suspiciously narrow distribution of this etymology (only Iyojwa'aja' and Wichí), the possibility of a Wichí borrowing in Iyojwa'aja' is excluded because of the correspondence between Ijw wík and PW *k^j.

Najlis 1984: 28 (*wcihna)

***wóna(?) 'bala wasp (*Polybia ruficeps*) honey(comb); hat' (ChW)**

PCh *wóna? (*-l) 'bala wasp (*Polybia ruficeps*) honey(comb)' > Ijw wóna?; I'w/Mj wóna? (-l); *wón(a)-tah, *wón(a)-ta-s 'hat' > Ijw -ka-wóna (-s); I'w wóna (-s); Mj -ka wón(a)-ta (-s) (Drayson 2009: 157; Gerzenstein 1983: 171; Carol 2018) || PW *wó'nah > LB wu'na; Vej wona 'bee' [1]; 'Wk wó'nah (Nercesian 2014: 173; Braunstein 2009: 62; Viñas Urquiza 1974: 81; Claesson 2016: 488)

[1] The absence of glottalization in Viñas Urquiza's (1974) attestation of the Vejox reflex must be a mistranscription.

***wóp'ih ~ *wóφ'ih ~ *móp'ih ~ *móφ'ih [1] 'snowy egret, great egret' (ChW)**

PCh *wóp'ih > Ijw wóp'i 'snowy egret'; Mj wóp'i (-is) (Drayson 2009: 157;

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Carol 2018) || PW *móp'i > LB *mup'i* ‘great egret’; ’Wk *móp'i?* (-tajis) (Spagarino et al. 2013 [2011]; Claesson 2016: 250)

[1] Chorote points to *w- and Wichí to *m-.

***wósak'V(?)t [1] ‘red-crested cardinal’ (ChW)**

PCh *wósak'at (-is) > I'w *wóxsijét* (-is); Mj *wóxsie?et* (-is) (Gerzenstein 1983: 172; Carol 2018) || PW *wósak'it ~ *wósak'ut [1] > LB *wusatf'it*; Vej *wos(a)tf'ut* [1]; ’Wk *wósak'it* (Spagarino et al. 2013 [2011]; Viñas Urquiza 1974: 81; Gutiérrez & Osornio 2015: 23; Claesson 2016: 503)

[1] Regarding the vowel of the final syllable, Chorote points to PM *a, Lower Bermejeno and 'Weenhayek to PM and PW *i, whereas Vejoz *wosatf'ut* (Viñas Urquiza 1974) or *wostf'ut* (Gutiérrez & Osornio 2015, with an irregular syncope) point to PW and PM *u.

***[ji]wún ‘to burn (vt.)’ (ChW)**

PCh *[?i]wún > Ijw [?i]jú'n / -wú'n; I'w -wún; Mj [?i]jún / -wún (Drayson 2009: 117; Gerzenstein 1983: 172; Carol 2018) || PW *[?i]wún > LB [?i]wen-ex ‘to set on fire’; ’Wk [?i]wúŋ (Braunstein 2009: 46; Claesson 2016: 511)

Najlis 1984: 53 (2 *hl-wún)

***'wá(?)x, *'wáx-aj^h ‘stagnant water’ (ChW)**

PCh 3 *hl-<a>'wáh (*-aj^h) > Mj *hla'wáh, hla'wá-aj* (Carol 2018) || PW *'wáχ, *'wáh-aj^h > Vej *wah* (-aj) [1] ‘water’; ’Wk 'wáx, 'wáh-aç (Viñas Urquiza 1974: 79; Gutiérrez & Osornio 2015: 44; Claesson 2016: 105)

[1] The semantically shifted Vejoz reflex has irregularly lost the glottalization in the initial consonant.

***- 'wóle(?) (*-j^h) ‘leaf, hair, feather’ (ChW)**

PCh *- 'wóle? (*-j^h) > Ijw - 'wóle? [1]; I'w -wóle? (-j); Mj - 'wóle? (-j) (Drayson 2009: 128; Gerzenstein 1983: 171; Carol 2018) || PW *- 'wole (*-j^h) > LB - 'wule ~ -wu'le ~ -wule (-j) [2]; Vej - 'wole (-j); ’Wk - 'wóle? (-ç) (Nercesian 2014: 170, 233, 294, 321; Braunstein 2009: 61; Gutiérrez & Osornio 2015: 61; Claesson

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2016: 57)

[1] The Iyojwa’aja’ form is mistranscribed as *-’wóle* in Drayson (2009).

[2] The variants *-wu’le-j* ~ *-wule-j*, attested in Nercesian (2014), are irregular.

[3] Viñas Urquiza (1974: 81) mistranscribes the root as *-wole*.

### *-’wu(’)j ‘clothes, blanket’ (ChW)

PCh *-’wúj? > Ijw -’wúj?, -’wúj-e; I’w -wúj [1] (Drayson 2009: 128; Gerzenstein 1983: 172) || PW *-’wuj > LB (-)’wej [2]; Vej -’wuj [2]; ’Wk -’wuj? (Nercesian 2014: 132; Braunstein 2009: 61; Viñas Urquiza 1974: 82; Gutiérrez & Osornio 2015: 69; Claesson 2016: 57)

[1] The absence of glottalization in the initial consonant in Iyo’awujwa’ and Vejoz must be a mistranscription on Gerzenstein’s (1983) part.

[2] Braunstein (2009) and Viñas Urquiza (1974) fail to attest the glottalization in the initial consonant in Lower Bermejeño.

### *X₁₃ajá’wu(?) [?] ~ X₁₃ajá’wu(?) (*-l) [1] ‘shaman’ (ChW)

PCh *?ajá’wu? (*-l) > Ijw ?ajé’wu? (-l ~ -lis); I’w ajéwu? (-l) [2]; Mj ?ajé’wu? (-l) (Carol 2014b; Drayson 2009: 95; Gerzenstein 1983: 117; Carol 2018) || PW *hajáwu(?) (*-l^h) > LB hajawe(?); ’Wk hijáwu?(-l) [3] (Braunstein 2009: 41; Claesson 2016: 151)

[1] Chorote points to PM *X₁₃ajá’wu(?), whereas Wichí points to *X₁₃ajá’wu(?). Maká (Towothli) has a similar root, *ejawin* (Hunt 1915: 245–251), but it cannot correspond to the Chorote and Wichí forms.

[2] The absence of glottalization in Gerzenstein’s (1983) attestation of the Iyo’awujwa’ reflex must be a mistranscription.

[3] Weenhayek *i* is not the regular reflex of PW *a.

Hunt 1915: 240; Najlis 1984: 41, 43, 48 (*jewu); Viegas Barros 2002: 144 (*χajawu)

### *[ji]X₁₃án-ex ‘to know’ (ChW)

PCh *<[j]a>hán-eh [1] > Ijw [j]ihén-e / -?ahán-e; I’w -hán-e?; Mj [j]ehén-e / -?ahán-e (Carol 2014a: 91; Drayson 2009: 165; Gerzenstein 1983: 173; Carol 2018) || PW *[ji]hán-ex > LB [ji]han-ex; Vej -han-eh; ’Wk [ja]hán-ex (Nercesian 2014: 132)

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sian 2014: 308; Viñas Urquiza 1974: 56; Claesson 2016: 141)

[1] We have no explanation for the element **-ʔa-* in Chorote.

***Xmáwoh; *Xmáwo-taχ, *Xmáwo-ta-ts ‘fox’ (ChW)**

PCh **máwo-tah* (**-as*) > I'w *máwo-ta* (*-s*); Mj *máwo-ta* ~ *máwa-ta* (*-as*) ‘crab-eating fox’ (Gerzenstein 1983: 148; Carol 2018) || PW **x'máwoh* ‘fox’; **x'máwo-taχ*, **x'máwo-ta-s* ‘maned wolf’ > LB *mawu*; *mawu-taχ*; Vej *'mawo* (*-'lajis*); *'mawo-tah*, *'mawo-ta-s* [2]; 'Wk *?imáwoh*, *?imáwo-lis* ‘South American gray fox; culpeo’; *?imáwo-tax*, *?imáwo-ta-s* (Nercesian 2014: 197; Gutiérrez & Osornio 2015: 21; Claesson 2016: 31)

[1] This etymology is very similar to **wawo* (**-l*) ‘maned wolf’ (MN), but the root-initial consonants do not match. Najlis (1984) lumps these etymologies together.

[2] Viñas Urquiza (1974: 67) documents *ma'wo*; *mawo-tah*, which must be a mistranscription.

Najlis 1984: 13, 44 (**mawo* ~ **wawo*)

***-X₁₃úsek ~ *-X₁₃úsäk ‘temperance’ (ChW)**

PCh **-húsek* > Ijw *-hóxsik* [1]; Mj *-húxsek* (Drayson 2009: 113; Carol 2018) || PW **-húsek*, **-húse-j^h* ‘temperance, soul’ > LB *-hesek*, *-hese-j*; Vej *-husek*; 'Wk *-húsek*, *-húse-ç* (Nercesian 2014: 191; Braunstein 2009: 41; Viñas Urquiza 1974: 58; Claesson 2016: 60)

[1] The raising of PCh **e* to Ijw *i* is not known to be regular.

**Rejected:** Najlis (1984: 47) compares the Wichí reflex to those of PM **-sáq'ál* ~ **-sáq'ál* ‘soul, spirit’.

***-ʔaɬá(?) ‘fat’ (ChW)**

PCh **-ʔahlá?* > Ijw *-ʔahlá?* ‘honey, liquid, fat’; Mj *-?ihlá?* (*-s*) ‘fat (while on one’s body)’ (Drayson 2009: 154; Carol 2018) || PW **-t-'aɬá(?)* > 'Wk *-t-'aɬá?* (Claesson 2016: 96)

***-ʔa(?)q ‘rope, cord’ (ChW)**

PCh **-ʔák*, **-ʔaq-áj?* > Ijw *-ʔák*, *-ʔak-á'l* ~ *-ʔak-á?* [1]; I'w 3 *t-ák*, *t-ak-áj* [2]; Mj 3 *t-'ák*, *t-'ak-áj?* ‘rope, cable, shoe lace’ (Carol 2014a: 92; Drayson 2009: 154; Gerzenstein 1983: 162; Carol 2018) || PW **-t-'aq*, **-t-'aq-áj^h* > LB *-t-'aq*; Vej 3 *t-'ak* ‘band, rope, headband’; 'Wk *-t-'aq* (*-áç*) ‘object for tying, chain’

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(Nercesian 2014: 212; Viñas Urquiza 1974: 77; Claesson 2016: 96)

[1] The plural form *-?ak-á'l* in Iyojwa'aja' is non-etymological.

[2] The plain *t* in Gerzenstein's (1983) attestation of the Iyo'awujwa' reflex must be a mistranscription.

***?até(?)k ~ *?atá(?)k 'cebil (*Anadenanthera colubrina*) or vinal (*Prosopis ruscifolia*)' (ChW)**

PCh *?átek > Ijw/I'w ?aték (Drayson 2009: 94; Scarpa 2010: 185) || PW *?atéq > LB ?ateq; Vej atek; 'Wk tek ~ ték [1] (Spagarino 2008: 62; Nercesian 2014: 193; Viñas Urquiza 1974: 51; Claesson 2016: 391)

[1] The absence of any trace of PW *?a- in the 'Weenhayek reflex is unexpected. Claesson (2016: 391) is unsure whether the vowel e is short or long in this noun.

***?at'e(?)s ~ *?at'ä(?)s 'aloja drink' (ChW)**

PCh *?at'és > Ijw ?at'és; I'w ?atés 'drink'; Mj ?at'és, ?at'ëf-is (Carol 2014a: 77; Gerzenstein 1983: 122; Carol 2018) || PW *hat'es > LB hat'es; Vej hates [1]; 'Wk hat'es (Nercesian 2014: 230; Viñas Urquiza 1974: 57; Claesson 2016: 147)

[1] The plain *t* in Viñas Urquiza's (1974) attestation of the Vejoz reflex must be a mistranscription.

**Rejected:** Najlis (1984: 46) lists Ni -å't 'drink' under this etymology, which instead goes back to PM *-å't.

Hunt 1915: 240; Najlis 1984: 46 (*åtetsh)

***?atsXa(?)**, ***?atsXá-l 'dorado'** (ChW)

PCh *?asá?(?-l) > Ijw ?asá?(?-l); I'w asá?a (-l) (Drayson 2009: 94; Gerzenstein 1983: 122) || PW *?atsha(?), *?atshá-l^h > Vej ats^ha (-l); 'Wk ?ats^ha?, ?ats^há-l (Gutiérrez & Osornio 2015: 20; Claesson 2016: 19)

Najlis 1984: 11, 17 (*atsá ~ *atsa-a)

***[n]åphé(?)l ~ *'[n]åphá(?)l 'to be ashamed'** (ChW)

PCh *'[n]åhwéł > Ijw '[n]ahwéł / -?ahwéł; Mj '[n]ahwéł / -?ahwéł (Carol 2014a: 91; Drayson 2009: 162; Carol 2018) || PW *'[n]åxwéł ~ *'[n]åxwéł^h [1] > LB noh^we'l [2]; 'Wk 'nåxwéł / [hi]'nåxwéł- / [hi]'nåxwéł- (Braunstein 2009:

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53; Claesson 2016: 48–49)

[1] The variant  $*^>[n]>\acute{a}x^w\acute{e}l^h$ , which does not match the Chorote cognate, is reconstructed based on the 'Weenhayek allomorph with  $\eta$ , as in [hi] $^n\acute{a}x^w\acute{e}\eta\text{-}o?$  's/he feels ashamed in front of'.

[2] The Lower Bermejeño reflex is attested as *noh^we'l* in Braunstein (2009: 53), but this must be a mistranscription for *'noh^wel*.

**$*[j]o$  'ripe' (ChW)**

PCh  $*[j]\acute{o}\text{-?}e?$  > Ijw  $^*[j]\acute{o}\text{-?}we?$ ; I'w  $j\acute{o}\text{-}we?$  [1]; Mj  $^*[j]\acute{o}\text{-?}we?$  (Drayson 2009: 166; Gerzenstein 1983: 135; Carol 2018) || PW  $*[j]o$  > LB  $^*[j]u$ ; 'Wk  $^*[j]o?$  (Nercesian 2014: 349; Claesson 2016: 127)

[1] Drayson (2009: 166) mistranscribes the Iyojwa'aja' reflex as  $^*[j]\acute{o}\text{-?}we$ .

[2] The absence of glottalization in *j* and *w* in the Iyo'awujwa' reflex must be a mistranscription on Gerzenstein's (1983) part.

**Rejected:** Viegas Barros (2013a: 307) lists Nivaclé  $[j]i\acute{j}/-?i\acute{j}$  'to be vigorous, ripe' (Seelwische 2016: 139) under this etymology, an impossible comparison from a phonological point of view.

Viegas Barros (2013a: 307) compares the Mataguayan root with Proto-Guaicuruan  $*-eji$  'to become ripe, to bear fruit, to be ripe' (Viegas Barros 2013b, #199), which could be spurious.

Najlis 1984: 12 ( $*j\beta$ ); Viegas Barros 2013a: 307 ( $*-ju?$ )

**$*-?ó\text{'thale}(?) \sim *-?ó\text{'thále}(?)$  'heart' [1] (ChW)**

PCh  $*-?óhtale?$  ~  $*-?óhtále?$  > Ijw  $-?óta\acute{e}le$  [2],  $-?óta\acute{h}l-a?$ ; I'w  $-óhtele?$  ~  $-óhtale?$ ,  $-óhtale\text{-}j$ ; Mj  $-?óhtele?$  ~  $-?óhtale?(-l)$  (Drayson 2009: 156; Gerzenstein 1983: 154, 191; Carol 2018) || PW  $*-t\text{-}'otle$  > LB  $-t\text{-}'utle$ ; Vej  $-t\text{-}'otle$  [3]; 'Wk  $-t\text{-}'ótle?(-lis)$  (Nercesian 2014: 97; Viñas Urquiza 1974: 78; Claesson 2016: 99)

[1] This stem is likely derived from PM  $*-?o\text{'t} \sim *-?ó\text{'t}$  'chest'.

[2] The absence of a final glottal stop in Ijw  $-?óta\acute{e}le$  is unexpected.

[3] Gutiérrez & Osornio (2015: 61) document Vej  $-t\text{-}'otle$ , which could be a typo.

**Rejected:** Najlis (1984: 42) includes Ni  $-ti\text{'bte}$  'heart' under this etymology, but this is absolutely impossible for phonological reasons.

Najlis 1984: 42 ( $*t\text{'owtle}$ )

10 *Dictionary*10.9 **Wichí and Iyojwa’aja’**

The etymologies listed in this section have a very restricted distribution, limited to Iyojwa’aja’ Chorote and Wichí. It is highly likely that in most or all of these cases, Iyojwa’aja’ borrowed from Wichí (and in a couple of cases, it is probable that both Iyojwa’aja’ and Wichí borrowed from a common third source). In fact, it is often possible to show that such loans replaced Proto-Chorote terms with a *bona fide* Mataguayan etymology (PCh *ʔisáh or *ʔisáh ‘sand’, *kʰús-APPL ‘to be hot’, *kʰújʔ ‘cold’, *núʔuh ‘dog’, *ʔahwú ‘woman’ vs. Ijw *hólo?*, *kójo*, *tétfah-a?*, *taléna*, *paséhn̩a?*). The fact that in most cases Iyojwa’aja’ and Wichí terms display regular sound correspondences is hardly surprising given that the correspondences are largely trivial.

Ijw *[j]éhwut* /-áhwut/ ‘to fan, to blow’ (Drayson 2009: 159)

← PW **[j]áxʷut* / **[j]áxʷ(u)t-APPL* ‘to blow’ > LB *[j]afʷit* [1]; Guisnay *j-ahʷtʰ-i-tah*, *j-ahʷtʰ-i-ta-s* ‘wind’; ’Wk *[j]áxʷ(u)t-APPL*, *j-axʷtʰ-i-tax* ‘North; north wind’ (Braunstein 2009: 62; Gutiérrez & Osornio 2015: 44; Claesson 2016: 524–525)

Ijw *-éli?* /-ile/ ‘bone’ (Drayson 2009: 130)

← PW *-t-ile (*-jʰ) ‘bone, branch’ > LB *-t-ile*; Vej *-t-ile* (-j); ’Wk *-t-ile* (-q) (Nercesian 2014: 348; Viñas Urquiza 1974: 66; Claesson 2016: 75)

Najlis 1984: 36 (*ele)

Ijw *-ép* /-íp/ ‘side’ (Drayson 2009: 130)

← PW *-t-íp (*-ejʰ)side, part > LB *-t-ip* (-ej); Vej *-t-ip* ‘some, few’; ’Wk *-t-íp* (-eç) (Nercesian 2014: 213, 414; Viñas Urquiza 1974: 66; Gutiérrez & Osornio 2015: 8, 9; Claesson 2016: 75)

Najlis 1984: 17 (2 *a-ep)

Ijw *hólo?* /hólo/ ‘sand’ (Drayson 2009: 128)

← PW **hólo* > LB *hulu*; Vej *holo-tah*; ’Wk *hólo?* (-lis) (Nercesian 2014: 161; Viñas Urquiza 1974: 57; Gutiérrez & Osornio 2015: 43; Claesson 2016: 152)

Najlis 1984: 33 (*hn̩olo); Viegas Barros 2002: 144 (*χolo)

Ijw *hwaté’n* /hwatén/ ‘sachapera (*Acanthosyris falcata*)’ (Drayson 2009: 133)

← PW **xʷitén* > LB *fʷixten* ~ *fʷisten* [1]; Southeastern (Salta) *fʷiten*; ’Wk *xʷitéñ* ‘kind of wild fruit’, *xʷitéñ-tax* ‘sachapera’ (Spagarino 2008: 60;

10.9 *Wichí and Iyojwa'aja'*

Suárez 2014: 334; Claesson 2016: 171)

[1] The Lower Bermejeno reflex is irregular.

Ijw *hwék-hwék* /hwík-hwík/ ‘red-billed scythebill’ (Drayson 2009: 133)

← PW *wíq-wíq > LB wiq-wiq; 'Wk wík-wik-tax (Spagarino et al. 2013 [2011]; Claesson 2016: 485)

Ijw *hwétina, hwétihna-s* /hwítenah/ ‘firefly’ (Drayson 2009: 133)

← PW *xʷítanax, *xʷítanh-a-s > LB fʷitonax; 'Wk xʷítanax, xʷítāna-s (Braunstein 2009: 43; Claesson 2016: 170)

Najlis 1984: 42 (*hwethna); Viegas Barros 2002: 144 (*xʷetenaχ)

Ijw [ʔi]hwí'ñ-n-i / -hwé'ñ-n-i / -hwín+?eh/ ‘to braid’ (Drayson 2009: 100)

← PW *[ʔi]xʷin > (?) LB -fʷin-aχ ‘line’; Vej -hʷin ‘to line up’; 'Wk [ʔi]xʷiñ ‘to interweave, to intertwine’ (Braunstein 2009: 43; Viñas Urquiza 1974: 59; Claesson 2016: 170)

Ijw [j]ími'ñ / -émi'ñ / -ímin/ ‘to love’ (Drayson 2009: 159)

← PW *[ji]húmin > LB [ji]hemin; Vej -humin; 'Wk [ja]húmiñ (Nercesian 2014: 308; Viñas Urquiza 1974: 58; Claesson 2016: 156)

Najlis 1984: 10, 40 (*hmi)

Ijw [j]íp'is / -ép'is / -íp'is/ ‘to be full, satisfied’ (Drayson 2009: 160)

← PW *[j]íp'is > LB [j]ip'is (Nercesian 2014: 49)

Ijw [j]íxsit / -éxsit / -ísit/ ‘to cut’ (Drayson 2009: 160)

← PW *[j]ísit ~ *[j]íset / *[j]íst- [1] > LB [j]iset / [j]ist-; Vej [j]isit; 'Wk [j]ísit / [j]íst- (Nercesian 2014: 234, 406; Viñas Urquiza 1974: 84; Claesson 2016: 548)

[1] The Lower Bermejeno form points to PW *[j]íset; Vejoz and 'Weenhayek to *[j]ísit.

Ijw *kaláp'i<te>, kaláp'i<teh>-es* /kaláp'i<tah>/ ‘plumbeous ibis’ (Drayson 2009: 134)

← PW *qalá(q)p'ih [1] > LB qalaqp'i; 'Wk qaláp'ih (Spagarino et al. 2013 [2011]; Claesson 2016: 307)

[1] The Lower Bermejeno form points to PW *-qp'- and 'Weenhayek to *-p'-.

Ijw [ʔi]sí'm / -kí'm / -kí'ím/ ‘to be thirsty’ (Drayson 2009: 112)

← PW *[ʔi]kí'ím > LB [ʔi]tʃim; 'Wk [ʔi]kí'ím (Nercesian 2014: 108; Braunstein

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2009: 86; Claesson 2016: 191)

Possibly related to Proto-Guaicuruan *-ák'ip 'thirst' (Viegas Barros 2013b, #23).

### Ijw *k'ó jo* /k'ó?joh/ 'hot' (Drayson 2009: 136)

← PW *k'ájo > LB [ni]tſaju; Vej tſajo; 'Wk k'ájo? (Nercesian 2014: 217; Viñas Urquiza 1974: 52; Claesson 2016: 185)

### Ijw *páhna?* /páhnå/ 'pepper' (Drayson 2009: 143)

← PW *páhnå > LB poñon; Vej pánán [1]; 'Wk páñán (Spagarino 2008: 60; Nercesian 2014: 197; Viñas Urquiza 1974: 70; Claesson 2016: 285)

[1] The voiced *n* in Viñas Urquiza's (1974) attestation of the Vejoz reflex must be a mistranscription.

Rejected: Najlis (1984: 17, 49) includes Ni ojintse (-j) (Seelwische 2016: 208), but there are no regular correspondences between Nivačle and the other languages.

Najlis 1984: 17, 49 (*på-ahn-åjn)

### Ijw *palak* /pálak/ 'brown cachalote (*Pseudoseisura lophotes*)' (Drayson 2009: 143)

← PW *pálaχ ~ *pálaχ ~ *páláχ > LB pulaχ [1]; Vejoz or Guisnay pálahhoopoe [2] (Spagarino 2008: 60; Nercesian 2014: 197; Viñas Urquiza 1974: 70; Claesson 2016: 285)

[1] The vowel of the first syllable is reflected irregularly in Lower Bermejeño Wichí as *u*, a development also seen in LB putsaχ 'jabiru'.

[2] The gloss 'hoopoe' (Spanish 'abubilla') in Lunt (2016) is obviously incorrect, since hoopoe is not found in South America.

### Ijw *póp* /pop/ 'eared dove' (Drayson 2009: 144)

← PW *póp > LB pup; Vej pop; 'Wk pót (Nercesian 2014: 157; Gutiérrez & Osornio 2015: 22; Claesson 2016: 295)

### Ijw *-sát (-is)* /-sat/ 'foot' (Drayson 2009: 125)

← PW *-sat 'heel' > Vej -sat 'heel'; 'Wk -såt, -såt-aç 'tendon, heel' [1] (Viñas Urquiza 1974: 72; Claesson 2016: 90)

[1] Weenhayek shows contamination of PW *-sat 'heel' and *-såt 'tendon', which has resulted

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in a polysemic noun *-sát* 'tendon, heel'.

Ijw *tétſah-a?* [1] 'cold' (Drayson 2009: 149)

← PW *ték'jåχ > LB [ni]tetſoχ(-tſe/=hi); Vej -tetſah-tſe; 'Wk ték'jåx (Nercesian 2014: 283; Viñas Urquiza 1974: 75; Claesson 2016: 392)

[1] *tſ* is not a native phoneme of Iyojwa'aja'.

Ijw *tihwána* /t'hwánah/ 'Molina's hog-nosed skunk' (Drayson 2009: 150)

← PW *túxʷanaχ > Vejoz or Guisnay tuhwanah ~ tuhwenah; 'Wk túxʷanax (citealtRL16: 90; Claesson 2016: 420)

Ijw *sihnát* /sʰhnát/ 'knife' (Carol 2014a: 99; Drayson 2009: 145)

← PW *tsonhat > Vej tsonat; 'Wk tsonat, tsonát-es (Viñas Urquiza 1974: 55; Claesson 2016: 466)

[1] The voiced *n* in Viñas Urquiza's (1974) attestation of the Vejoz reflex must be a mistranscription.

Ijw *wóna wúmki-na* /wónah wúmk̥V-nah/ 'crane hawk (*Geranospiza caerulescens*)' (Drayson 2009: 157)

← PW *wó'nah wúmeq [1] > LB wu'na wemek; Vejoz or Guisnay wo'na wumek; 'Wk wó'na-wumek (Spagarino et al. 2013 [2011]; Lunt 2016: 105; Claesson 2016: 488)

[1] In Wichí, this is a transparent compound of PW *wó'nah 'bala wasp (*Polybia ruficeps*) honey(comb); hat' and *-wúmeq, -wumh-aj^h 'old'.

Ijw -'wúk, -'wúk-i'l/-?wúk/ 'house' (Carol 2014a: 96; Drayson 2009: 128)

← PW *-wúk^w, *-wuh-uj^h 'owner' > LB -wek^w, -wehe-j; Vej -wuk, -wuh-uj; 'Wk -wuk, -wuh-uc; *-wúk^w-e (*-j^h) 'house' > LB -wek^w-e; Vej -wuk(^w)-e; 'Wk -wúk-e? (-ç) (Nercesian 2014: 192; Braunstein 2009: 61; Viñas Urquiza 1974: 82; Gutiérrez & Osornio 2015: 152; Claesson 2016: 103)

Ijw *?ahwijeta, ?ahwihjeta-* /ahwihatah/ 'mojarra fish (*Cheirodon interruptus*)' (Carol 2014a: 91; Drayson 2009: 94)

← PW *?áxʷetaχ > Vej ahwetah (Lunt 2016: 15)

Ijw *?aléna* (-s) /alínah/ [1] 'dog' (Carol 2014a: 999; Drayson 2009: 94)

Possibly borrowed from a source identical or close to that of PW *?asínåχ, *?asínhå-s > LB ?asinoχ, ?asiño-s; Vej asinåh, asiñå-s; 'Wk ?asínåx, ?asiñå-s

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(Nercesian 2014: 191; Gutiérrez & Osornio 2015: 20; Claesson 2016: 15).

[1] The absence of palatalization in Ijw *-n-* in this word is synchronically irregular.

[2] Viñas Urquiza (1974: 51) documents *asinah*, which must be a mistranscription.

### Ijw *?aséhn'a?* /asíhna/ ‘woman’ (Carol 2014a: 91; Drayson 2009: 94)

← PW **?atsínha* (*-j^h) [1] > LB *?atsiṇa* (-j); Vej *atsiṇa* [2]; 'Wk *?atsiṇa?* (-ç) (Nercesian 2014: 285, 303; Gutiérrez & Osornio 2015: 29; Claesson 2016: 18)

[1] The Wichí noun itself is likely derived from **?ásnaq* (if from **?átsinak*, vocalic stem **?átsinha-*) > LB *?asnaq* ‘male’ (Nercesian 2014: 197).

[2] Viñas Urquiza (1974: 50) documents *atsina*, which must be a mistranscription.

### Ijw *?áxse'ni* (-wa) /áse'nih/ ‘guira cuckoo’ (Drayson 2009: 94)

← PW **hátsé'nih* > LB *hotse'ni*; 'Wk *hátsa'nih* ~ *hátsé'nih* [1] (Spagarino et al. 2013 [2011]; Claesson 2016: 139)

[1] The variant *hátsa'nih* in 'Weenhayek is irregular.

**Rejected:** I'w *áxsina* (-s), Mj *?áxsena* (-s) ‘quebracho crested tinamou’ (Gerzenstein 1983: 124; Carol 2018) must be unrelated, despite apparent formal similarity. The only thing guira cuckoos and quebracho crested tinamous have in common is that both species are crested, but otherwise these birds are quite different.

### Ijw *?ip'áta* /ipátaḥ/ (Drayson 2009: 109)

← PW **?ixpát* > Vej *ihpat* (-lajis); 'Wk *?ixpát* (Viñas Urquiza 1974: 60; Gutiérrez & Osornio 2015: 18; Claesson 2016: 24)

Najlis 1984: 9, 26 (**iphátha*)

### Ijw *?is'á'ni* (-wa) /isá'niḥ/ ‘narrow-billed woodcreeper’ (Drayson 2009: 111)

← PW **xʷitsá'niḥ* > LB *fʷitso'ni*; 'Wk *xʷitsá'niḥ* (Spagarino et al. 2013 [2011]; Claesson 2016: 171)

### Ijw *?íhna?* /óhna/ ‘sachasandía (*Capparis salicifolia*) fruit’; *?íhna-k* /óhna-k/ ‘sachasandía (*Capparis salicifolia*) tree’ (Drayson 2009: 142)

← PW **?ónha?*; **?ónha-q* ~ **?ónha-k^w* [1] > LB *?una-q*; Vej *oṇa-j* ‘sachapera’, *oṇa-tile* ‘sachasandía’; 'Wk *?óna?*; *?óna-k* (Spagarino 2008: 61; Nercesian 2014: 348; Gutiérrez & Osornio 2015: 18; Claesson 2016: 46)

[1] LB *?una-q* points to PW **?ónha-q*, 'Wk *?óna-k* to **?ónha-k^w*.

**Rejected:** Maká *inhek* ‘vinal (*Prosopis ruscifolia*)’ (Gerzenstein 1983: 202) cannot be related, as

## 10.10 Possible borrowings and Wanderwörter

Mk *i* cannot correspond to PW **o*.

### 10.10 Possible borrowings and Wanderwörter

The etymologies listed in this section show too irregular correspondences to allow for a reconstruction of a Proto-Mataguayan etymon. In some cases, evidence from neighboring languages suggests that horizontal transmission, as opposed to cognation, may account for the similarity between the forms.

‘to help’:

Mk *[ji]fen* (Gerzenstein 1999: 173) || Ni *[j]eſfen* / *-eſfen* ‘(?)’[123]JS16

‘seven- or nine-banded armadillo’:

Ni *βokotsex*, *βokotse-s* ‘seven-banded armadillo’ (Seelwische 2016: 364) || PW **xʷóq(‘)atsaχ* > LB *fʷuq’atsaχ*; Vej *hʷok’åtsah* [1]; ’Wk *xʷóq(‘)atsax* ‘nine-banded armadillo’ (Nercesian 2014: 231; Viñas Urquiza 1974: 59; Claesson 2016: 174)

[1]Vej *hʷok’åtsah* (Viñas Urquiza 1974: 59) is likely a mistranscription for *hʷok’atsah*.

Nivaclé points to **wóqotseχ* and Wichí to **φóq(‘)atseχ*.

Najlis 1984: 13 (**hwɔqɔtsha* ~ **wɔqɔtsha*); Viegas Barros 2002: 144 (**xʷoqotsaχ*)

‘Azara’s capuchin (*Sapajus cay paraguayanus*)’:

Mk *k’ateni* (Gerzenstein 1999: 235) || PW **háta’nih* [?] ~ **háta’nih* [1] > LB *ho-to’ni*; Vejoz or Guisnay *háta’ni*; ’Wk *háta’nih*, *háta’ni-lis* [4] (Mendoza & Merino 2019; Lunt 2016: 36; Viñas Urquiza 1974: 59, 63; Claesson 2016: 138)

[1]Different Wichí dialects point to different root-medial vowels: ’Weenhayek suggests the reconstruction **háta’nih*, which matches the Maká form somewhat better, whereas other varieties point to **háta’nih*.

Viegas Barros 2002: 146 (**k’atani* ~ **χatani*)

‘bare-faced curassow (*Crax fasciolata*)’:

Mk *hehe* (Braunstein 1987: 58) || Ni *xexe* (-*k*) (Seelwische 2016: 148)

‘*yica bag*’:

PCh *-*hílij?* ~ *-*híluj?* (*-*is*) > Ijw <*hl>éli?* (-*jis*); I’w -*éli?* (-*jis*); Mj 3 *hl-éilij?*

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(Drayson 2009: 130; Gerzenstein 1983: 126; Hunt 1994) || PW *(-)hílu (*-lis) > LB *hele* (-lis); Vej *-hílu*; 'Wk *hílu?* (-lis) (Nercesian 2014: 191; Viñas Urquiza 1974: 57; Claesson 2016: 150)

Najlis 1984: 33 (**hnelu*)

### ‘tapir’:

Ni *ji'jekle* (-k) || PW *x^jé'lah > LB *je'la* (-lis); 'Wk *?ijé'lah* (Nercesian 2014: 191; Claesson 2016: 43)

### ‘fly’ / ‘mosquito’:

Ni *taφ-katax*, *taφ-kata-s* ‘fly’, *φisin-katax*, *φisin-kata-s* ‘gnat’ (Seelwische 2016: 134, 162) || PCh *qatá-ke? ~ *qáta-ke? (*-j^h) [1] > Ijw káta-ki? [2]; I'w *katáki?* (-ji); Mj *katáki?* (-j); cf. also Ijw *hatak'i* [3] ‘mosquito’ (Carol 2014a: 91, fn. 22; Drayson 2009: 118, 134; Gerzenstein 1983: 137; Carol 2018) || PW *q'átaq ~ *?átaq [4] ‘fly’ > LB *?ataq*; Vej *k'atak*; 'Wk *q'átaq*; *x^winátaq ‘gnat, mosquito’ > LB *f^winataq*; Vej *h^winatak*; 'Wk *x^wunátaq* [4] (Braunstein 2009: 38, 43; Nercesian 2014: 47; Viñas Urquiza 1974: 59, 63; Claesson 2016: 322)

[1] Iyojwa'aja' points to PCh *qatá-ke?, and the other varieties to *qáta-ke?, suggesting that these terms are not necessarily inherited from Proto-Chorote.

[2] This is mistranscribed as *káta-ki* (-?) in Drayson (2009: 134).

[3] Ijw *hatak'i* is attested only in Drayson (2009) but is absent from our corpus, making it impossible for us to decide which syllable is stressed in this noun.

[4] Lower Bermejeño points to PW *?átaq, and the other varieties to *q'átaq, suggesting that these terms are not necessarily inherited from Proto-Wichí.

[5] ‘Weenhayek *u* is not the regular reflex of PW *i.

**Rejected:** Campbell & Grondona (2007: 15) also include Maká *qaχtets* (-its) ‘horse fly’ (Gerzenstein 1999: 305), which is hardly related.

Najlis 1984: 23,34 (**qataq* ‘fly’, **hwinhnatha* ‘mosquito’); Campbell & Grondona 2007: 15

### ‘ray (fish):

Mk *k'ejejki?* (-l) (Gerzenstein 1999: 236) || Ni *k'ijejke* (-k) (Seelwische 2016:

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‘smooth-billed ani (*Crotophaga ani*)’:

Ni *k’onxa?* (Campbell et al. 2020: 118) || PW **k^jinhå* ~ **k^jinhå* ~ **k^jinhå* > LB *tf’iŋo* (Spagarino et al. 2013 [2011])

‘black-legged seriema (*Chunga burmeisteri*)’:

Ijw *nók^ju* (-s) [1]; I’w *ohón^juk^ju?* ~ *ohón^juk^juh* (-us) ‘red-legged seriema’ [1]; Mj *hón(i)?i* ~ *hóni?u*, *hón?i-is* [1] (Drayson 2009: 141; Gerzenstein 1983: 153, 194; Carol 2018) || PW **xník^ju* > LB *netʃe*; ’Wk *?inik^ju?* (Nercesian 2014: 170; Claesson 2016: 32)

[1] Iyojwa’aja’ points to PCh **núk’uh*, Iyo’awujwa’ to **uhújnukuh* ~ **uhújnuku?*, and Manjui to **húnk’uh*, suggesting that these terms are not necessarily inherited from Proto-Chorote. It is admittedly possible to reconstruct a PChW form similar to **Xúnjuk’uh* or maybe **Xun-júk’uh*, but in this case it is not clear how to reconstruct the hypothetical PCh form.

## ‘sweet potato’ (MN) / ‘manioc’ (W):

Mk *peχeje?*; *peχeje-k*, *peχeje-ket* (Gerzenstein 1999: 295) || Ni *pexaja* (-*k*); *pexaja-juk*, *pexaja-ku-j* (Seelwische 2016: 218) || PW **pi^jók^w* > ’Wk *pi^jók* (Claesson 2016: 292)

The Maká and Nivácle forms cannot be cognate because the expected reflex of PM **e* before a uvular is Maká *a*, not *e*. Viegas Barros (2013a: 300) and Fabre (2014: 307) note the similarity with Proto-Guaicuruan **pijóko* ‘manioc’ (Viegas Barros 2013b, #487), Ayoreo *peheeí* ‘manioc’, and the Enlhet-Enenlhet term for ‘sweet potato’ – Enlhet/Angaité *peheja?*, Enxet *peheje* ~ *peheje?* ~ *pehe?*, Enenlhet-Toba, Sanapaná, Guaná *peja?* ‘sweet potato’ (Unruh & Kalisch 1997: 549; Unruh et al. 2003: 334; Wheeler 2020: 48; Elliott 2021: 33, 97, 730; Kalisch 2023: 180) – which is attributed to language contact. Of these, the Weenhayek word is most similar to the Guaicuruan forms, whereas Maká and Nivácle display more similarity with the data of Ayoreo and Enlhet-Enenlhet languages.

**Rejected:** Najlis (1984: 38) derives Ni *pexaja* from PM **pewhla*, which is claimed to be the etymon of Chorote *hwél^üe-t’o* ‘potato’ (a reflex of PM **ɸilâ(?)X₁₂* in our account), Ni *seklâx* ‘*sutia* fruit (*Solanaceae*)’ (a reflex of PM **xélâX₁₂* in our account), and Wichí *weltsitax* ‘tobacco’

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(in old times)', a term we were unable to locate in other published sources on Wichí.

Viegas Barros 2002: 145; Viegas Barros 2013a: 300

### 'kind of jay (*Cyanocorax* sp.):'

Mk *qolom-qolom* (-*its*) 'a kind of jay larger than the plush-crested jay (*Cyanocorax chrysops*); makes elongated hanging nests' (Braunstein 1987: 64; Gerzenstein 1999: 233) || Ni *koklop* (-*is*) 'kind of a black weaving bird'; *koklop-itax* (-*koklop-ita-s*) 'purplish jay (*Cyanocorax cyanomelas*)' (Seelwische 2016: 70; Campbell et al. 2020: 506)

### 'cane (*Arundo donax*):'

Ni *sise* (-*k*) (Seelwische 2016: 233) || Ijw *siséh* (-*l*); I'w *sisé* (-*jis* ~ -*hes*) [1]; Mj *siséh* (-*k*) [1] (Drayson 2009: 146; Gerzenstein 1983: 159; Carol 2018)

[1] The plural forms attested in Iyo'awujwa' and Manjui does not match the Iyojwa'aja' and Nivaclé data (nor do they match each other).

The Chorote form is likely a recent Nivaclé loan, as suggested by the fact that the vowel *i* in the first syllable fails to trigger the first and the second palatalizations, as well as by the Manjui plural form.

Najlis 1984: 41 (**s*-*se*)

### 'spider':

Mk *si'walaχ* (-*its*) (Gerzenstein 1999: 327; Paraguay 2022: 15) || Ni *siβåklåk*, *siβåklåk-is* (Seelwische 2016: 233–234) || PCh **s²wålåk*, **s²wålåq-is* > Ijw *siwålak*; I'w *siwålak* ~ *siwålak* (-*es*); Mj *siwålak* (-*is*) (Drayson 2009: 146; Gerzenstein 1983: 21, 159; Carol 2018)

Based on the Nivaclé and Chorote forms, it could be possible to reconstruct PM **siwålåq*, but the Maká form cannot be derived from this reconstruction. The discrepancy in the final consonant suggests independent borrowings from a source close to Enlhet *sawa:lak*, Enxet *sawa:laq*, Sanapaná *sewa:lak* 'spider', Guaná *sewalaq* (Unruh & Kalisch 1997: 595; Wheeler 2020: 92; Elliott 2021: 33; Kalisch 2023: 184), as suggested by Fabre (2014: 307) for Enlhet.

Najlis 1984: 41 (**s*-*wålåk*); Viegas Barros 2002: 146; Campbell & Grondona 2007: 21; Gutiérrez 2015b: 253

### 'fish, *sábalo* fish':

Mk *sehets* (Gerzenstein 1999: 323; Paraguay 2022: 5) || Ni *saxetf* (Seelwische

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2016: 229) || PCh *sik'ús > Ijw siʔjús; I'w sijús [1] 'fish'; Mj siʔjús ~ fiʔjús (Carol 2014a: 90; Drayson 2009: 147; Gerzenstein 1983: 158; Carol 2018) || PW *sik'ús 'sábalo fish' > Guisnay sitʃ'us; 'Wk sik'ús (-tajis) (Lunt 2016: 78; Gutiérrez & Osornio 2015: 22; Claesson 2016: 329)

[1] The seemingly plain *j* in Iyo'awujwa' could be a mistranscription on Gerzenstein's (1983) part.

Based on the Chorote and Wichí forms, it could be possible to reconstruct PM *sik'ú(t)s, but the Maká and Nivaclé forms cannot be derived from this reconstruction.

Najlis 1984: 43 (*scutsh); Viegas Barros 2002: 144 (*saxets)

### 'anco squash':

Mk ko:sinhe?(-j) (Gerzenstein 1999: 232) || Ni sinxeja-tax, sinxeja-ta-s (Seelwische 2016: 232) || Ijw ɿosin'e, ɿosini-s; I'w sihnáje?; Mj sihnáje? 'andai squash' (Drayson 2009: 142; Gerzenstein 1983: 159; Carol 2018) || PW *ɿúsenha (*-j^h) > 'Wk ɿúseña?(-ç) (Gutiérrez & Osornio 2015: 19; Claesson 2016: 46)

Maká points to PM *koosenha? or *koosinha?; Nivaclé to *sinheja(?); Iyojwa'aja' to *ɿúsenah or *ɿúsinah; Iyo'awujwa' and Manjui to *senhája(?) or *senhája(?) (though the failure of *n to palatalize would remain unexplained); Wichí to *ɿúsenha(?). Fabre (2014) suggests that these are independent borrowings from a source close to Enlhet semhe:ja?, Enenlhet-Toba/Angaité/Guaná semheja? (Unruh & Kalisch 1997: 604; Unruh et al. 2003: 336; Wheeler 2020: 38; Kalisch 2023: 184).

**Rejected:** Najlis (1984: 26, 31) includes Vejoz amjo-tah 'anco squash' (Viñas Urquiza 1974: 50; Gutiérrez & Osornio 2015: 17) into the comparison, but this is impossible for phonological reasons.

Najlis 1984: 26, 31 (*ɔtsh)ajhmetha)

### 'wax' [1]:

Ni -sup'ax (-is) (Seelwische 2016: 237) || PW *sóp'a > Vej sop'a; 'Wk sóp'a?; sóp'l-is; *[ɿi]sóp'a-n 'to stick' > LB sup'an-i 'stew'; Vej sop'an-i 'paste'; 'Wk [ɿi]sóp'an (Nercesian 2014: 310; Viñas Urquiza 1974: 73; Claesson 2016: 330)

[1] Najlis (1984: 18) adds Chorote só?pa 'wax' to the comparison. We have been unable to iden-

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tify any similar word either in our corpus or in published works.

Najlis 1984: 18 (**sɔwp'a*)

### ‘*moro* bee honey(comb)’:

Ni (-)/*nakubax* (-is) (Seelwische 2016: 243) || PCh **nákowo?* ~ **nákuwo?* > Ijw *nákiwo?* [1]; I’w *nákiwo?(-l)* (Carol 2014a: 79; Drayson 2009: 140; Gerzenstein 1983: 149) || LB *naquwu-taχ* (Braunstein 2009: 52)

[1]This is mistranscribed as *nákiwo* in Drayson (2009: 40).

Najlis 1984: 34, 42 (**hnawko(tha)*); Campbell & Grondona 2007: 15

### ‘*pacu* fish’:

PCh **taqám* > Ijw *taká'm* (-is); I’w *takám* (-is) (Drayson 2009: 148; Gerzenstein 1983: 162) || PW **ták'ám* > Guisnay *tatfam*; 'Wk *ták'ám* [1] (Lunt 2016: 80; Claesson 2016: 363)

[1]The glottalization of the root-medial consonant in the 'Weenhayek reflex is unexpected.

The Chorote form can only go back to **taqam* or **taqám*, the Wichí one to **tákam*.

Campbell & Grondona 2007: 17

### ‘*garabato* (*Acacia praecox*)’:

Mk *t'okonok* (Gerzenstein 1999: 346) || PCh **kútunuk* > Ijw *kjút(j)unjuk* ~ *kjútinik* ~ *kjútunuk*; I’w *kjútunuk* ~ *kjútanuk*; Mj *kjútenek* ~ *kjútunuk* ~ *kjútanuk* ~ *kjútanek*, *kjútenki-j* (Drayson 2009: 137; Carol 2018) || PW **hútunuk^w* [1] > LB *hetenek^w* (Spagarino 2008: 63; Suárez 2014: 269)

[1]Suárez (2014: 269) documents the forms *hutunuk*, *hutunek^w*, and *hetenek^w* in Wichí, without specifying the respective dialects.

### ‘*salt*’:

Ni ChL *tsifoni* (-k) (Seelwische 2016: 295) || Ijw *sihwón-e?*; I’w *sifwóni?* (-l); Mj *sihwóni?* ~ *sihwóne?* (Carol 2014a: 100; Drayson 2009: 145; Gerzenstein 1983: 158; Carol 2018)

Seelwische (2016: 295) states that the Nivaclé word is a Chorote loan. However, the Chorote word itself does not look native, as in *Iyojwa'aja'* [n^l] does not normally occur following a non-high vowel /o/ (unless the underlying representation is /s^ohwójna/). The term in question

## 10.10 Possible borrowings and Wanderwörter

could be related to PM **tsóqa* ‘*Maytenus vitis-idaea*’ (whose ashes are used for making salt) via indirect borrowing by means of unidentified languages.

### ‘roseate spoonbill’:

Mk *tsinletsex*, *tsinletse-s* (Seelwische 2016: 295) || PCh **kin(al)Vsah* > Ijw *kinjélica*; Mj *kínise* (Gerzenstein 1979: 38; Drayson 2009: 136; Carol 2018) || PW **níletsaq* > LB *niletsaq*; ’Wk *niletsax*, *niletsa-s* (Nercesian 2014: 170; Claesson 2016: 269)

The correspondences are too irregular to consider the aforementioned terms cognate. Nivaâle points to **tsinletseχ*, Chorote to **kin(a)lVtseχ*, and Wichí to **níletseχ*.

Najlis 1984: 46 (**cihnilitsha*); Viegas Barros 2002: 144 (**kineletsay*)

### ‘dorado fish’:

Mk *tsiwanaq (-its)* (Gerzenstein 1999: 349; Paraguay 2022: 5; Braunstein 1987: 68) || Ni *siβânâk*, *siβânâkl-is* (Seelwische 2016: 234)

Obviously related to Proto-Guaicuruan **ats'iwanaga* ‘dorado fish’ (Viegas Barros 2013b, #143).

Note that Maká *ts* cannot regularly correspond to Nivaâle *s*.

Campbell & Grondona 2007: 22

### ‘tinamou’:

Mk *wextsoxoxo (-l)* ‘solitary tinamou (*Tinamus solitarius*); red-winged tinamou (*Rhynchotus rufescens*); elegant crested tinamou (*Eudromia elegans*)’ (Gerzenstein 1999: 371; Braunstein 1987: 54) || Ni *tsoxoxo (-xis)red-winged tinamou* (*Rhynchotus rufescens*) (Seelwische 2016: 108)

### ‘a Chacoan game; stick used in that game’:

Mk *-tsuka? (-l)* (Gerzenstein 1999: 350) || Ni *tsukoc* (Nordenskiöld 1919: 157) || Mj *súk'e?* ‘the stick’, *súk'e-l* ‘the game’ (Carol 2018) || ’Wk *soka? ~ suka?*, *soká-lis ~ suká-lis* (Claesson 2016: 330)

A similar game is played by many other peoples of the Chaco (cf. Tapiete *fsuka*, González 2005: 359), and is ultimately of Andean origin. Nordenskiöld (1919: 157) suggests that its name derives from Quechua *tsunka* ‘ten; a game of chance’.

### ‘white-barred piculet (*Picumnus cirratus*)’:

Mk *tsxini('n)*, *tsxinin-its* (Gerzenstein 1999: 350) || Ni *tsini'ni (-k)* [1] (Seel-

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wische 2016: 295; Campbell et al. 2020: 502) || Ijw *ʔéskini’ni* ~ *ʔéskini’ni* [1] (Drayson 2009: 96)

[1] The Iyojwa’aja’ term is not documented in our data, and Drayson (2009) does not distinguish between /i/ [e] and /e/ [ɛ], hence the uncertainty.

### ‘great antshrike (*Taraba major*)’:

Ni *ts’i’joklöklo* (Campbell et al. 2020: 506) ~ *ts’ijoxoklå* ~ *ts’ijokåklå* ~ *ts’ijokåklo* (Seelwische 2016: 303) || PW **ts’ólo-taχ* > LB *ts’ulu-taχ*; ‘Wk *ts’ólo-tax* (Spagarino et al. 2013 [2011]; Claesson 2016: 470)

### ‘wood rail (*Aramides sp.*)’:

Mk *wuqaʔa?* (-l) ‘giant wood rail (*Aramides ypecaha*)’ [1] (Gerzenstein 1999: 350) || Ni *βotåxåx(-is)* ‘chicken’; *βotåxåx-itax* ‘giant wood rail (*Aramides ypecaha*)’ (Campbell et al. 2020: 95) || I’w *wótaha* ‘chicken’; Mj *’wótaa* ‘chicken’ (Campbell & Grondona 2012: 345; Carol 2018) || LB *wutqaq* ‘grey-necked wood rail (*Aramides cajanea*)’; Vejoz or Guisnay *wotaqa* ‘giant wood rail (*Aramides ypecaha*)’ (Spagarino et al. 2013 [2011]; Lunt 2016: 105)

[1] The Maká form is documented as *wuq’āʔa*, with an ejective stop, in Braunstein (1987: 58).

The Iyo’awujwa’ and Manjui forms are likely borrowed from Nivaclé, but before word-initial glottalized sonorants were deglottalized. The relation between other forms is unclear. Compare also the Guachí term *vwokaaké* ‘chicken’ (de Castelnau 1851: 280).

### ‘ibis sp.’:

Ni *βakåk* (-is) ‘plumbeous ibis (*Harpiprion caerulescens*)’ (Campbell et al. 2020: 504) || PW **woqáq* > LB *wuqaq* ‘black-faced ibis (*Theristicus melanopis*)’; ‘Wk *woqák* [1] (Spagarino et al. 2013 [2011]; Claesson 2016: 500)

[1] The stem-final velar stop (rather than uvular) in the ‘Weenhayek reflex is unexpected.

### ‘catfish sp.’:

Ijw *ʔawánhle?* ‘*Pimelodus clarias*’; I’w *wánhle* (-jis) (Carol 2014a: 76; Drayson 2009: 95; Gerzenstein 1983: 168) || Vej *wahnoči* [1] (Viñas Urquiza 1974: 79)

[1] Lunt (2016) gives the form *wahnoča* for Wichí, but does not indicate whether it is representative of Vejoz or Guisnay. In (Nercesian 2021), the form is given as *vwajnulha* without any dialectal attribution; judging by the root-medial vowel, it could be representative of the

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Southeastern dialect, in which case it should be phonologized as *waxnuña*.

Najlis 1984: 42 (**wahnhle*)

### ‘hail’:

Ni *xaklātu* (Campbell et al. 2020: 100) || PCh **?alátu?* > Ijw *?alát'u?*; I'w *alát'u?*; Mj *?alátu?* (Drayson 2009: 94; Gerzenstein 1983: 119; Carol 2018) || PW **qalátu?* (Claesson 2016: 307)

Based on the Nivaclé and Chorote forms, it could be possible to reconstruct PM **halátu?*, but the ‘Weenhayek’ form cannot be derived from this reconstruction. Obviously related to Proto-Guaicuruan **qa(?)lat'i* ‘hail’ (Viegas Barros 2013b, #513). The Lower Bermejeno form *qalati* (Nercesian 2021), in turn, is perhaps a late borrowing from the Qom languages.

Najlis 1984: 16 (**(q)alathu*); Viegas Barros 2002: 146; Viegas Barros 2013a: 312

### ‘spotted sorubim’:

Ijw *?askjún'e?*; I'w *askjúna?*(-l); Mj *?alkjúna?* (Drayson 2009: 94; Gerzenstein 1983: 122, 221) || 'Wk *?axwúkña?*(-lis) (Claesson 2016: 10)

Campbell & Grondona 2007: 16 (‘*suruví* (fish)’)

### ‘marbled swamp eel’:

Ijw *?ahje?* [1]; Mj *?ihn(j)ée?*(-l) (Drayson 2009: 93; Carol 2018) || PW **?ijhá?*(?) > LB *?içá?*(?); 'Wk *?içá?* (Braunstein 2009: 44; Claesson 2016: 45)

[1] The position of the stress in Ijw *?ahje?* is unknown to us.

The Iyojwa’aja’ and Manjui forms cannot be cognate with each other, and neither of them corresponds to Wichí. The expected cognate of Wichí **?ijhá?*(?) in Chorote would be PCh ***?ihjá?* > Ijw/I'w/Mj **?ihjé?*.

### ‘clay’

Ijw *?isát*; I'w *isát*; Mj *?isát* (Drayson 2009: 110; Gerzenstein 1983: 131; Carol 2018) || PW **?ijhát* > LB *?içát*; Vej *inját* [1]; 'Wk *?içát*, *?içát-es* (Braunstein 2009: 44; Viñas Urquiza 1974: 60; Claesson 2016: 45)

[1] The sequence *nj* in the Vejoz form, as given by Viñas Urquiza (1974), must represent [n], the realization of the underlying sequence /jh/ (where /j/ undergoes devoicing and nasalization).

It is unclear whether the Chorote forms are even reconstructible to Proto-Chorote. Note that *i* of whichever origin is expected to induce progressive palatalization in coronals, unless it

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goes back to a Proto-Chorote low vowel, but PCh low vowels do not yield *i* in the word-initial position. That way, the Chorote form is best viewed as a Wichí borrowing.

**Rejected:** Najlis (1984: 11) includes Ni *?ajisxan* ‘clay’ into the comparison, which is hardly related.

Najlis 1984: 11 (**ihsá*)

### ‘stone’:

Mk *ute* (-*l*) (Gerzenstein 1999: 356) || Ni *?utex*, *?ute-s* (Seelwische 2016: 307)

Note that Maká *e* cannot regularly correspond to Nivaçle *e*, and Maká zero cannot match Nivaçle *x*.

## 11 Conclusion

In this book, we put forward a phonological reconstruction of Proto-Mataguayan, and show the main developments from the protolanguage to the daughter languages, including the intermediate protolanguages such as Proto-Wichí and Proto-Chorote. In addition, we compiled a short etymological dictionary, which contains several hundred lexical and morphological entries with Proto-Mataguayan reconstructed etyma and their reflexes in the daughter languages and dialects.

Regarding the consonantal system of Proto-Mataguayan, our study by and large supports Viegas Barros's (2002) findings, including the reconstruction of three "dorsal" fricatives ( $*x$ ,  $*χ$ ,  $*h$ ). We depart from previous reconstructions in positioning  $*ɸ$  instead of  $*xʷ$ , thus rendering the reconstructed inventory more symmetrical and accounting in an elegant way for the correspondence between Mk  $f$  and Ni/PCh/PW  $(*)p$ . We also find solid evidence for  $*?$  as a Proto-Mataguayan phoneme, supporting Gutiérrez & Nercesian's (2021) hypothesis. We reconstruct a glottalized counterpart for every plain supraglottal consonant except the dorsal fricatives. Although in many cases it is possible to derive them from underlying clusters of the shape  $*/C?/$ , there is evidence that  $*'l$  and  $*'m$  are phonologically different from  $*l?$  and  $*m?$  in Proto-Mataguayan as well as in the modern languages. Contrastive (pre)glottalization may also be reconstructed in the coda position, though in this case, too, it is possible to represent the preglottalized codas as sequences of the type  $*/?C/$ , as proposed by Gutiérrez (2016c) for Nivaclé. There is evidence for tautosyllabic consonant clusters of the structure  $*/CX/$  (where X stands for a velar, uvular, or glottal fricative), which have given rise to aspirated consonants in Wichí. Other types of tautosyllabic consonant clusters are reconstructed primarily based on evidence from Maká and Nivaclé. In general, our proposal differs from the extant reconstructions of Proto-Mataguayan consonants in that our reconstructed inventory is quite symmetrical, and in that the development of each phoneme in the daughter languages can now be accounted for without major exceptions or irregularities.

As for the vowels, alongside the six ones of previous reconstructions ( $*i$ ,  $*e$ ,  $*a$ ,  $*å$ ,  $*o$ ,  $*u$ ) we posit a seventh vowel,  $*ä$ . This putative vowel accounts for the correspondence between Ni  $a$  and Mk/PCh/PW  $*e$ . We leave open the question whether it was a truly distinct phoneme in the protolanguage. At present, we

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cannot discard the possibility that the instances of  $^*\ddot{a}$  in our proposal should be reconstructed with  *a  instead, though we are currently unable to formulate the environment where  *a  would have yielded  *e  in Proto-Chorote and Proto-Wichí. Another novelty of our proposal is the reconstruction of the prosodic system of Proto-Mataguayan (Chapter 4), which has not been previously attempted. Our proposal is mainly based on evidence from Chorote, the 'Weenhayek dialect of Wichí, and Nivaclé (the evidence from the latter language is rather limited, however). There is also limited evidence from the Lower Bermejeño variety of Wichí and Nivaclé, which consists of a partial correlation between the position of the accent and deglottalization (loss of  $^*?$  or preglottalization in codas). The precise nature of the Proto-Mataguayan accent is still far from clear. Phonetically, its reflexes include stress (in Chorote and Nivaclé) and vowel length ('Weenhayek). We also describe the phonological innovations that characterize each Mataguayan language. Some of them are shared between two or three languages, providing grounds for establishing clades within Mataguayan, as detailed below.

There are multiple innovations shared by Wichí and Chorote, supporting the existence of a Chorote–Wichí clade within Mataguayan, as identified in our lexicostatistic survey (§1.1.5) and suggested in previous research (Fabre 2005, Campbell & Grondona 2007, Viegas Barros 2013a: 296). Among the processes exclusively shared by Chorote and Wichí are sound changes such as the merger of the three dorsal fricatives as  *h  in simplex onsets and, with some provisos, in complex onsets (§8.1.1.4, §9.1.1.3); the glottal dissimilation (§8.1.1.8, §9.1.1.9); the merger of PM  $^*\ddot{a}$  and  *e  as  *e  (§8.1.2.1, §9.1.2.1); the lowering of  *i  to  *e  in the environment  $^*At/x...ts$  (§8.1.2.3, §9.1.2.3), the lowering of  *i  to  *a  in the environment  $^*j...C\acute{A}$  (§8.1.2.4, §9.1.2.4), and the rounding of  *e  before clusters with a labial (§8.1.2.5, §9.1.2.5).¹ In previous studies, the similarities between Wichí and Chorote might have been somewhat exaggerated because Chorote was mostly represented by the better-known Iyojwa'aja' variety, known to have been in close contact with

¹The sound change PM  $^*k(')$  > PW  $^*k^l(')$  in onsets (§9.1.1.2) is also closely paralleled by an analogous sound change in the Chorote varieties (§8.2.2.2, §8.2.2.5), but in Chorote this sound change must have taken place quite late, after the disintegration of the Chorote varieties and the so-called first palatalization (§8.2.1.1). Since Proto-Wichí split into dialects at a much later date than Proto-Chorote (§1.1.5), it is likely that the sound change  $^*k(')$  >  $^*k^l(')$  in onsets was an areal one, and affected Proto-Wichí, pre-Iyojwa'aja' and Proto-Manjui–Iyo'awujwa' at some point between the 7th and 13th centuries. It is further conceivable that Enxet Sur (a language belonging to the geographically adjacent Enlhet–Enenlhet family), where one finds [c], [c^l], or [k^l] corresponding to [k] in the sister languages (Elliott 2021: 70–73), was also affected by the putative areal sound change. It is, however, also possible that  $^*k(')$  in onsets was simply articulated as a prevelar stop [k^l] in the hypothetical Proto-Chorote–Wichi language, thus facilitating the independent development to  $^*k^l(')$ .

Wichí since at least 1900 (see Chapter 10 for a list of possible borrowings from Wichí into Iyojwa’aja’). However, the number of cognates shared by Wichí and Chorote only, including the Manjui and Iyo’awujwa’ variations, is still considerable, and the percentage of matches on the 110-item Swadesh list between Chorote (excluding Iyojwa’aja’) and Wichí ranges between 50.50% and 55.77% (§1.1.5).

The position of Nivaclé is somewhat ambiguous. On the one hand, it shares some innovations with Maká but not with other languages, such as the merger of PM  $^*\ddot{a}$  and  *a  as Mk *e*, Ni *a* (§3.3, §6.2.1.2) and the glottal insertion in monosyllables (§6.1.7, §7.1.1.9). On the other hand, it shares some innovations with Chorote and Wichí but not with Maká, such as the fortition of the Proto-Mataguayan glottalized fricatives (phonologically possibly analyzable as tautosyllabic sequences of a fricative and a glottal stop) to glottalized stops, whereby PM  $^*\phi$ ,  $^*\ell$  changed to  $(^*)p$ ,  $(^*)t$  (§7.1.1.6, §8.1.1.10, §9.1.1.6), as well as the deaffrication of PM  *ts  to  $(^*)s$  in the coda position (§7.1.1.5, §8.1.1.1, §9.1.1.4). As of now, it appears impossible to decide whether Nivaclé is genetically closer to Maká, to Chorote–Wichí, or forms a clade on its own. Our lexicostatistic survey (§1.1.5) likewise allows for all three possibilities. Given the wide popularity of the hypothesis that Nivaclé is most closely related to Maká (Fabre 2005, Campbell & Grondona 2007, Viegas Barros 2013a: 296), we list Maká–Nivaclé cognates in a separate section in our etymological dictionary (Chapter 10), but it should be kept in mind that this clade is less well-supported than Chorote–Wichí.

At least two processes – the lowering of  *e  to  $(^*)a$  before the coda  $^*\chi$  (§6.2.1.4, §8.1.2.2, §9.1.2.2) and the loss of  $^*\chi$  after fricatives (§6.1.8, §8.1.1.12, §9.1.1.16) are shared by Maká, Chorote, and Wichí to the exclusion of Nivaclé. These sound change must have occurred independently in Maká and Chorote–Wichí, since Maká is lexically distant from Chorote and especially Wichí.

As for the temporal depth of the family, a glottochronological assessment in §1.1.5 suggests that Proto-Mataguayan was likely spoken some 4,630–5,060 years before present, or 3,785–3,945 years before present if one considers that the low share of cognates between Maká and Wichí results from contact-induced vocabulary loss in one of these languages (or maybe in both) due to lexical borrowing from unknown sources. This temporal depth is comparable to that of protolanguages such as Proto-Jê.

Future studies will need to consider evidence from other domains, such as morphology and syntax, in order to arrive at a reliable subgrouping of the Mataguayan family, in particular with regard to the status of Nivaclé.

Finally, we hope that our reconstruction will prove helpful in establishing possible genetic links with other language families of South America through a com-

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parison of reconstructed protolanguages between themselves. In particular, we consider that the possibility of a genetic relationship with Guaicuruan is very promising, in accordance with [Viegas Barros \(1993, 2013a\)](#). Other candidates for sister language families, even if very distantly related, include Zamucoan, Tupian, Macro-Jê, Bororoan, Cariban, Karirian, Yaathê, and Harakmbut–Katuksina.

## References

- Adelaar, Willem F. H. 2000. Propuesta de un nuevo vínculo genético entre dos grupos lingüísticos indígenas de la Amazonía occidental: harakmbut y katukina. In Luis Miranda Esquerre (ed.), *Actas del I Congreso de Lenguas Indígenas de Sudamérica*, 219–236. Lima: Universidad Ricardo Palma, Facultad de Lenguas Modernas, Departamento Académico de Humanidades.
- Adelaar, Willem F. H. 2008. Relações externas do Macro-Jê. O caso do Chiquitano. In Stella V. T. de A. P. L. Telles & Aldir Santos de Paula (eds.), *Topicalizando Macro-Jê*, 9–28. Recife: Nectar.
- Aguirre, Juan Francisco. 1793. *Diario del Capitán de Fragata de la Real Armada don Juan Francisco Aguirre en la demarcación de límites de España y Portugal en la América Meridional*. Asunción.
- Alderete, John D. 1999. *Morphologically governed accent in optimality theory*. Amherst: University of Massachusetts Amherst. (Doctoral dissertation).
- Alvarsson, Jan-Åke. 2012a. *Etnografía 'weenhayek, volumen 3. Belleza y utilidad – la cultura material*, vol. 13 (Dissertations and Documents in Cultural Anthropology (DiCA)). Uppsala: Universidad de Uppsala.
- Alvarsson, Jan-Åke. 2012b. *Etnografía 'weenhayek, volumen 5. Ver y aprender – efectos socioculturales de la educación tradicional y bilingüe*, vol. 15 (Dissertations and Documents in Cultural Anthropology (DiCA)). Uppsala: Universidad de Uppsala.
- Alvarsson, Jan-Åke & Kenneth Claesson. 2014. 'Weenayek (mataco). In Mily Crevels & Pieter Muysken (eds.), *Lenguas de Bolivia. Tomo III: Oriente*, 415–465. La Paz: Plural.
- Anjos, Zoraide dos. 2011. *Fonología e gramática Katukina-Kanamari*. Utrecht: LOT.
- Arenas, Pastor & Gustavo F. Scarpa. 2007. Edible wild plants of the Chorote Indians, Gran Chaco, Argentina. *Botanical Journal of the Linnean Society* 153(1). 73–85. DOI: [10.1111/j.1095-8339.2007.00576.x](https://doi.org/10.1111/j.1095-8339.2007.00576.x).
- Avram, Megan Leigh Zdrojkowski. 2008. *A phonological description of Wichí: The dialect of Misión La Paz, Salta, Argentina*. Ypsilanti: Eastern Michigan University. (MA thesis).

## References

- Bateman, Nicoleta. 2007. *A crosslinguistic investigation of palatalization*. San Diego: University of California, San Diego. (Doctoral dissertation).
- Beliaeff, Juan. 1931. Vocabulário maccá. *Revista de la Sociedad Científica del Paraguay* 3(2). 53–67.
- Beliaeff, Juan. 1934. El vocabulário maccá. Clave y apuntes gramaticales. *Revista de la Sociedad Científica del Paraguay* 3(4). 124–130.
- Bell, Alan. 1978. Syllabic consonants. In Joseph H. Greenberg, Charles A. Ferguson & Edith A. Moravcsik (eds.), *Universals of human language. Volume 2: Phonology*, 153–201. Stanford: Stanford University Press.
- Borise, Lena. 2021. Word stress in the languages of the Caucasus. In Maria Polinsky (ed.), *The Oxford handbook of the languages of the Caucasus*, 729–755. Oxford: Oxford University Press. DOI: [10.1093/oxfordhb/9780190690694.013.19](https://doi.org/10.1093/oxfordhb/9780190690694.013.19).
- Braunstein, José. 2009. Matako-dialecto bazarero (1989). Contribución para el Intercontinental Dictionary Series Worldlist [sic] editado por Mary Ritchie Key (Universidad de California en Irvine). In José Braunstein & Cristina Messineo (eds.), *Hacia una nueva carta étnica del Gran Chaco VIII*, 3–90. Las Lomitas: Centro del Hombre Antiguo Chaqueño (Chaco).
- Braunstein, José Alberto. 1987. *El problema de la significación de la cultura material de los indios Maka*. Buenos Aires: Universidad Nacional de Buenos Aires. (Doctoral dissertation).
- Buckwalter, Alberto S. & Lois Litwiller de Buckwalter. 2013. Vocabulario toba. <https://chacoindigena.net/wp-content/uploads/2020/07/Vocabulario-Toba.pdf>.
- Buckwalter, Lois Litwiller de, Alberto S. Buckwalter & Roberto Ruiz. 2014. Vocabulario mocoví: recopilación en soporte digital. Villa Ángela. [https://pueblosoriginarios.com/lenguas/mocovi/archivo/dicci_mocovi.pdf](https://pueblosoriginarios.com/lenguas/mocovi/archivo/dicci_mocovi.pdf).
- Caballero, Gabriela. 2011. Morphologically conditioned stress assignment in Choguita Rarámuri. *Linguistics* 49(4). 749–790. DOI: [10.1515/ling.2011.023](https://doi.org/10.1515/ling.2011.023).
- Caballero, Gabriela & Lucien Carroll. 2015. Tone and stress in Choguita Rarámuri (Tarahumara) word prosody. *International Journal of American Linguistics* 81(4). 457–493. DOI: [10.1086/683157](https://doi.org/10.1086/683157).
- Camargos, Lidiane Szerwinski. 2013. *Consolidando uma proposta de família linguística Boróro: contribuição aos estudos histórico-comparativos do tronco Macro-Jê*. Brasília: Universidade de Brasília. (Doctoral dissertation).
- Campbell, Lyle. Submitted. Proto-Matacoan reconstruction. *International Journal of American Linguistics*.
- Campbell, Lyle, Luis Díaz & Fernando Ángel. 2020. *Nivaclé grammar*. Salt Lake City: The University of Utah Press.

- Campbell, Lyle & Verónica Grondona. 2007. Internal reconstruction in Chulupí (Nivaclé). *Diachronica* 24(1). 1–29. DOI: [10.1075/dia.24.1.02cam](https://doi.org/10.1075/dia.24.1.02cam).
- Campbell, Lyle & Verónica Grondona. 2010. Who speaks what to whom? Multilingualism and language choice in Misión La Paz. *Language in Society* 39. 617–646. DOI: [10.1017/S0047404510000631](https://doi.org/10.1017/S0047404510000631).
- Campbell, Lyle & Verónica Grondona. 2012. Linguistic acculturation in Nivaclé and Chorote. *International Journal of American Linguistics* 78(3). 335–367. DOI: [10.1086/665672](https://doi.org/10.1086/665672).
- Carol, Javier. 2009–2010. Causación en chorote (mataguayo). *Amerindia – Revue d'ethnolinguistique amérindienne* 33/34. 73–108.
- Carol, Javier. 2011. Aplicativos/adposiciones en chorote (mataguayo): algunos aspectos formales. *LIAMES: Línguas Indígenas Americanas* 11(1). 51–74. DOI: [10.20396/liames.v0i11.1496](https://doi.org/10.20396/liames.v0i11.1496).
- Carol, Javier. 2014a. Esbozo fonológico del chorote (mataguayo). *LIAMES: Línguas Indígenas Americanas* 14(1). 73–103. DOI: [10.20396/liames.v0i14.1521](https://doi.org/10.20396/liames.v0i14.1521).
- Carol, Javier. 2014b. *Lengua chorote (mataguayo): estudio fonológico y morfosintáctico*, vol. 72 (LINCOM Studies in Native American Linguistics). München: LINCOM Europa.
- Carol, Javier. 2018. *Inamites jleeizi' inkijwas ji'ljij–kiláyi ji'ljij. Diccionario bilingüe manjui–castellano*. Asunción: Paraguái Ñe'ënguéra Sämbyhyha–Secretaría de Políticas Lingüísticas.
- Carol, Javier. Forthcoming. Palatalización y cambio de altura vocálica/-grado de abertura en manjúi/chorote (mataguayo). *Amerindia – Revue d'ethnolinguistique amérindienne*.
- Carvalho, Fernando O. de. 2022. A new sound change for Guarani(an): Glottal prothesis, internal classification and the explanation of synchronic irregularities. *Folia Linguistica Historica* 56(s43-s1). 263–288. DOI: [10.1515/flin-2022-2026](https://doi.org/10.1515/flin-2022-2026).
- Cayré Baito, Lorena. 2015. Una primera aproximación a la variación vocálica inter-dialectal en wichí. *LIAMES: Línguas Indígenas Americanas* 15(2). 355–374. DOI: [10.20396/liames.v15i2.8642306](https://doi.org/10.20396/liames.v15i2.8642306).
- Cayré Baito, Lorena & María Belén Carpio. 2009. Aproximación a los tipos de asimilación más frecuentes en wichí. In Ana Fernández Garay & Marisa Censabella (eds.), *Estudios fonológicos de continua dialectales: mapuche y wichí*, 83–109. Santa Rosa: Editorial de la Universidad Nacional de La Pampa.
- Censabella, Marisa. 2009. Sistema fonológico y sincronía dinámica de seis variedades orientales del continuum wichí. In Ana Fernández Garay & Marisa Censabella (eds.), *Estudios fonológicos de continua dialectales: mapuche y wichí*, 111–144. Santa Rosa: Editorial de la Universidad Nacional de La Pampa.

## References

- Chase-Sardi, Miguel. 1972. *La situación actual de los indígenas del Paraguay*. Asunción: CEADUC–Centro de Estudios Antropológicos de la Universidad Católica “Nuestra Señora de la Asunción”.
- Ciucci, Luca. 2014. Tracce di contatto tra la famiglia zamuco (ayoreo, chamacoco) e altre lingue del Chaco: prime prospezioni. *Quaderni del Laboratorio di Linguistica della Scuola Normale Superiore* 13. 1–52.
- Ciucci, Luca. 2016. *Inflectional morphology in the Zamucoan languages*, vol. 103 (Biblioteca Paraguaya de Antropología). Asunción: Centro de Estudios Antropológicos de la Universidad Católica (CEADUC).
- Ciucci, Luca. 2022. ‘Eye’ in the Zamucoan languages. In Melike Baş & Iwona Kraska-Szlenk (eds.), *Embodiment in Cross-Linguistic Studies: The ‘Eye’*, vol. 31 (Brill’s Studies in Language, Cognition and Culture), 259–284. Leiden: Koninklijke Brill. DOI: [10.1163/9789004498594_014](https://doi.org/10.1163/9789004498594_014).
- Claesson, Kenneth. 1994. A phonological outline of Mataco-Noctenes. *International Journal of American Linguistics* 60(1). 1–38. DOI: [10.1086/466216](https://doi.org/10.1086/466216).
- Claesson, Kenneth. 2016. *Notas sobre el vocabulario 'weenhayek'*. <http://noctenes.org/onewebmedia/Vocabulario%5C%20'weenhayek,%5C%20publ.pdf>.
- Claesson, Kenneth. no date. Estructura silábica, acentuación y cantidad vocalica en 'weenhayek'. <http://noctenes.org/onewebmedia/Rasgos%5C%20pros%5C%5C3%5C%5C3dicos%5C%20en%5C%20'weenhayek.pdf>.
- Clements, G. N. 1999. Affricates as noncontoured stops. In Osamu Fujimura, Brian D. Joseph & Bohumil Palek (eds.), *Proceedings of LP’98: Item order in language and speech*, 271–299. Prague: Karolinum Press.
- Coelho, Gail. 2002. Conflicting directionality in thompson river salis. In Augustine Agwuele & Hansang Park (eds.), *Proceedings of the Texas Linguistics Society VII*, 271–299. [https://tls.ling.utexas.edu/2002/TLS_2002_Proceedings.html](https://tls.ling.utexas.edu/2002/TLS_2002_Proceedings.html).
- Combès, Isabelle & Rodrigo Montani. 2020. Los diccionarios matacos de Fr. Esteban Primo de Ayala: primer registro histórico de la lengua wichí. *Revista del Museo de Antropología* 13(3). 495–546. DOI: [10.31048/1852.4826.v13.n3.31065](https://doi.org/10.31048/1852.4826.v13.n3.31065).
- Cúneo, Paola & Andrés Porta. 2009. Vocabulario toba sobre peces y aves. In José Braunstein & Cristina Messineo (eds.), *Hacia una nueva carta étnica del Gran Chaco VIII*, 237–252. Las Lomitas: Centro del Hombre Antiguo Chaqueño (Chaco).
- Daviet, Windy. 2016. *Observations sociolinguistiques et analyse de la phonologie du dialecte ava du guaraní bolivien, langue tupi-guaraní de Bolivie*. Lyon: Université Lumière Lyon 2. (MA thesis).
- de Castelnau, Francis. 1851. *Expedition dans les parties centrales de l’amerique du sud: de rio de janeiro à lima, et de lima au para ; exécutée par ordre du gou-*

- vernement français pendant les années 1843 à 1847, sous la direction de francis de castelnau. Histoire du voyage*, vol. 5. Paris: chez P. Bertrand.
- Demersay, L. Alfred. 1860. *Histoire physique, économique et politique du Paraguay et des établissements des jésuites*, vol. 1. Paris: Librairie de L. Hachette et C^{ie}.
- Dirección General de Estadística, Encuestas y Censos. 2014. *Pueblos indígenas en el Paraguay. Resultados finales de población y viviendas 2012*. Fernando de la Mora.
- Drayson, Nicholas, Sebastián Frías & Julián Gómez. 2000. *Sake' iyo ti iyo-jwa'jats'e'm. Somos chorotes – nuestras costumbres*. Tartagal: ASOCIANA.
- Drayson, Nicolás. 2009. 'Niwak samtis. Diccionario iyojwa'ja 'lij-kilay 'lij (chorote–castellano). In José Braunstein & Cristina Messineo (eds.), *Hacia una nueva carta étnica del Gran Chaco VIII*, 91–174. Las Lomitas: Centro del Hombre Antiguo Chaqueño (Chaco).
- Dybo, Vladimir Antonovič. 1995. Akcentuacionnye processy v jazykax gruppy teda–kanuri i problema proisxoždenija paradigmatičeskix akcentnyx sistem. *Moscow Linguistic Journal* 1. 236–279.
- Dybo, Vladimir Antonovič. 2000. *Morfologizovannye paradigmatičeskie akcentnye sistemy: tipologija i genezis*, vol. 1. Moscow: Jazyki slavjanskoj kul'tury.
- Elliott, John A. 2021. *A grammar of Enxet Sur*. Honolulu: University of Hawai'i at Mānoa. (Doctoral dissertation).
- Fabre, Alain. 2005. Diccionario etnolingüístico y guía bibliográfica de los pueblos indígenas sudamericanos. <http://www.ling.fi/Diccionario%5C%20etnoling.htm>.
- Fabre, Alain. 2014. Estudio gramatical de la lengua nivacle. Kangasala. [http://etnolinguistica.wdfiles.com/local%E2%80%93files/biblio%5C%3Afabre-2014-estudio/fabre_2014_estudio_updated_nov.pdf](http://etnolinguistica.wdfiles.com/local%E2%80%93files/biblio%5C%3Afabre-2014-estudio/fabre_2014_estudio_updated_nov.pdf).
- Fabre, Alain. 2016. *Gramática de la lengua nivaclé (familia mataguayo, Chaco paraguayo)*, vol. 78 (LINCOM Studies in Native American Linguistics). München: LINCOM Europa.
- Fabre, Alan. 2018. Multifunctionality of the verbal suffix *-tf'e* ~ *-k'e* and analepsis in Nivaclé (Mataguayo family, Gran Chaco region). *LIAMES: Línguas Indígenas Americanas* 2(18). 338–366. DOI: [10.20396/liames.v18n2.8653164](https://doi.org/10.20396/liames.v18n2.8653164).
- Fernández Garay, Ana. 2006–2007. El sistema fonológico del wichí del Paraje La Paz (Salta). *Anuario de la Facultad de Ciencias Humanas de la Universidad Nacional de La Pampa* 8. 209–222.
- Fernández Garay, Ana & Marisa Censabella. 2009. *Estudios fonológicos de continua dialectales: mapuche y wichí*. Santa Rosa: Editorial de la Universidad Nacional de La Pampa.

## References

- Fernández Garay, Ana & Silvia Spinelli. 2009. Sincronía dinámica del sistema fonológico del wichí hablado en la Banda Norte del departamento Rivadavia, Salta. In Ana Fernández Garay & Marisa Censabella (eds.), *Estudios fonológicos de continua dialectales: mapuche y wichí*, 145–173. Santa Rosa: Editorial de la Universidad Nacional de La Pampa.
- Fritz, Miguel. 1997. “*Nos han salvado*”. *Misión: ¿destrucción o salvación? Comienzo de una misión entre etnocentrismo e in culturación*. Quito: Ediciones Abya Yala.
- Gerzenstein, Ana. 1978. *Lengua chorote. Tomo I*, vol. 3 (Archivo de lenguas pre-colombinas). Buenos Aires: Universidad de Buenos Aires, Facultad de Filosofía y Letras, Instituto de Lingüística.
- Gerzenstein, Ana. 1979. *Lengua chorote. Tomo II*, vol. 3 (Archivo de lenguas pre-colombinas). Buenos Aires: Universidad de Buenos Aires, Facultad de Filosofía y Letras, Instituto de Lingüística.
- Gerzenstein, Ana. 1983. *Lengua chorote. Variedad 2*, vol. 4 (Archivo de lenguas pre-colombinas). Buenos Aires: Universidad de Buenos Aires, Facultad de Filosofía y Letras, Instituto de Lingüística.
- Gerzenstein, Ana. 1989. *Lengua maká: aspectos de la fonología*. Buenos Aires: Universidad de Buenos Aires, Facultad de Filosofía y Letras, Instituto de Lingüística.
- Gerzenstein, Ana. 1994. *Lengua maká. Estudio descriptivo* (Archivo de lenguas indoamericanas). Buenos Aires: Universidad de Buenos Aires, Facultad de Filosofía y Letras, Instituto de Lingüística.
- Gerzenstein, Ana. 1999. *Diccionario etnolingüístico maká–español. Índice español–maká* (Archivo de lenguas indoamericanas). Buenos Aires: Universidad de Buenos Aires, Facultad de Filosofía y Letras, Instituto de Lingüística.
- Gerzenstein, Ana & Beatriz Gualtieri. 2003. La armonía vocálica en lenguas chaqueñas de las familias guaycurú y mataguaya. *LIAMES: Línguas Indígenas Americanas* 3(1). 97–110. DOI: [10.20396/liames.v3i1.1415](https://doi.org/10.20396/liames.v3i1.1415).
- Gildea, Spike & Doris Payne. 2007. Is Greenberg’s “Macro-Carib” viable? *Boletim do Museu Paraense Emílio Goeldi. Ciências Humanas* 2(2). 19–72. DOI: [10.1590/S1981-81222007000200003](https://doi.org/10.1590/S1981-81222007000200003).
- Golston, Chris & Wolfgang Kehrein. 2013. A prosodic theory of laryngeal timing. In Jean Léon Léonard & Samia Naïm (eds.), *Base articulatoire arrière: Backing and backness*, vol. 1 (LINCOM Studies in Phonology), 11–44. München: LINCOM Europa.
- Gomes, Antonio Almir Silva. 2012. *Sanapaná, uma língua Maskoy: aspectos gramaticais*. Campinas: Universidade Estadual de Campinas. (Doctoral dissertation).

- González, Hebe Alicia. 2005. *A grammar of Tapiete (Tupi-Guarani)*. Pittsburgh: University of Pittsburgh. (Doctoral dissertation).
- Gordon, Matthew & Peter Ladefoged. 2001. Phonation types: A cross-linguistic overview. *Journal of Phonetics* 29. 383–406. DOI: [10.006/jpho.2001.0147](https://doi.org/10.006/jpho.2001.0147).
- Gutiérrez, Analía. 2015a. Evidential determiners in Nivaclé. *Anthropological Linguistics* 57(4). 412–443. DOI: [10.1353/anl.2016.0011](https://doi.org/10.1353/anl.2016.0011).
- Gutiérrez, Analía. 2015b. *Segmental and prosodic complexity in Nivaclé: Laryngeals, laterals, and metathesis*. Vancouver: University of British Columbia. (Doctoral dissertation). DOI: [10.14288/1.0166445](https://doi.org/10.14288/1.0166445).
- Gutiérrez, Analía. 2016a. Nivaclé (*shichaam lhavos* variety). *Journal of the International Phonetic Association: Illustrations of the IPA*. DOI: [10.1017/S0025100316000335](https://doi.org/10.1017/S0025100316000335).
- Gutiérrez, Analía. 2016b. Patterns of (de)glottalization in Nivaclé. In Kyeong-min Kim, Pocholo Umbal, Trevor Block, Queenie Chan, Tanie Cheng, Kelli Finney, Mara Katz, Sophie Nickel-Thompson & Lisa Shorten (eds.), *Proceedings of the 33rd West Coast Conference on Formal Linguistics*, 176–185. Somerville: Cascadilla Proceedings Project.
- Gutiérrez, Analía. 2016c. The variable prosodic parsings of Nivaclé glottal stop. *LIAMES: Línguas Indígenas Americanas* 16(2). 323–347. DOI: [10.20396/liames.v16i2.8646180](https://doi.org/10.20396/liames.v16i2.8646180).
- Gutiérrez, Analía. 2019a. A reanalysis of Nivaclé *kł* and *tł*: Phonetic, phonological, and typological evidence. *International Journal of American Linguistics* 85(1). 45–74. DOI: [10.1086/700318](https://doi.org/10.1086/700318).
- Gutiérrez, Analía. 2019b. La palabra prosódica mínima en nivaclé. *Cuadernos de Lingüística de El Colegio de México* 6(1). e126. DOI: [10.24201/clecm.v6i1.126](https://doi.org/10.24201/clecm.v6i1.126).
- Gutiérrez, Analía. 2020. Vowel–consonant metathesis in Nivaclé. *Canadian Journal of Linguistics/Revue canadienne de linguistique* 65(2). 276–307. DOI: [10.1017/cnj.2020.4](https://doi.org/10.1017/cnj.2020.4).
- Gutiérrez, Analía. Forthcoming. *Desarrollo de interacciones entre glotal y sonorantes en lenguas mataguayas: el caso nivaclé*.
- Gutiérrez, Analía & Verónica Nercesian. 2021. La glotal y la glotalización en las lenguas mataguayas. *Forma y Función* 34(1). DOI: [10.15446/fyf.v34n1.79328](https://doi.org/10.15446/fyf.v34n1.79328).
- Gutiérrez, Marcos & María Elina López Osornio. 2015. *Diccionario wichi: òlhämtes ta yameje m'ak elh (significado de las palabras)*. Buenos Aires: Dunken.
- Hall, Nancy. 2006. Cross-linguistic patterns of vowel intrusion. *Phonology* 23(3). 387–429. DOI: [10.1017/S0952675706000996](https://doi.org/10.1017/S0952675706000996).
- Hill, Jane H. & Kenneth C. Hill. 2006. Stress in the Cupan (Uto-Aztecán) languages. *International Journal of American Linguistics* 34(4). 233–241. DOI: [10.1086/465023](https://doi.org/10.1086/465023).

## References

- Hunt, Gordon. 1994. *Manjui dictionary*. Santa Rosa.
- Hunt, Richard J. 1913a. *El vejoz*. Buenos Aires: Universidad Nacional de La Plata, Coni Hnos.
- Hunt, Richard J. 1913b. *Vocabularios español–inglés–vejoz*. *Revista del Museo de La Plata* 23. 93–214.
- Hunt, Richard J. 1915. *El choroti o yófuaha: con vocabularios lengua-enimaga o towothli y chunupi o suhin, y un mapa por el Reverendo H. T. M. Jones, M. A. (Oxon.)* Liverpool: Henry Young & Sons, Limited.
- Hunt, Richard J. 1937. *Mataco–English and English–Mataco dictionary (with grammatical notes)*, vol. 5 (Ethnological Studies). Göteborg: Elanders Boktryckeri Aktiebolag.
- Hunt, Richard J. 1940. *Mataco grammar*. Tucumán: Instituto de Antropología.
- Instituto Nacional de Estadística. 2015. *Censo de población y vivienda 2012. Bolivia. Características de la población*. La Paz.
- Instituto Nacional de Estadística y Censos. 2024. *Censo nacional de población, hogares y viviendas 2022. Resultados definitivos. Población indígena o descendiente de pueblos indígenas u originarios*. Buenos Aires.
- Jakobson, Roman. 1963. Opyt fonologičeskogo podxoda k istoričeskim voprosam slavjanskoy akcentologii. In *American Contributions to the Fifth International Congress of Slavists, Sofia*, 1–26. The Hague: Mouton.
- Kalisch, Hannes. 2023. *Alhpeema vana. Las palabras de los guaná: diccionario básico de la lengua guaná con traducciones al guaraní y al castellano*. Ya’alve-Saanga/Asunción: Paraguái Ñe’enguéra Sāmbhyhyha–Secretaría de Políticas Lingüísticas/Nengvaanemquescama Nempayvaam Enlhet.
- Kehrein, Wolfgang & Chris Golston. 2004. A prosodic theory of laryngeal contrasts. *Phonology* 21(3). 325–357. DOI: [10.1017/S0952675704000302](https://doi.org/10.1017/S0952675704000302).
- Kiparsky, Paul & Morris Halle. 1977. Towards a reconstruction of the Indo-European accent. In Larry M. Hyman (ed.), *Studies in stress and accent*, vol. 4 (Southern California Occasional Papers in Linguistics), 209–238. Los Angeles: University of Southern California.
- Kodzasov, Sandro V. 1999. Fonetika. In Aleksandr E. Kibrik & Jakov G. Testelec (eds.), *Èlementy caxurskogo jazyka v tipologičeskom osveščenii*, 14–47. Moscow: Nasledie.
- Kushnir, Yuriy. 2019. *Prosodic patterns in Lithuanian morphology*. Leipzig: Universität Leipzig. (Doctoral dissertation).
- Kysela, Vladimiro. 1931. Tribu indígena maccá. *Revista de la Sociedad Científica del Paraguay* 3(1). 43–49.
- Ladefoged, Peter & Iam Maddieson. 1996. *The sounds of the world’s languages*. Oxford/Cambridge: Blackwell.

- Lafone Quevedo, Samuel A. 1910–1911. Las lenguas de tipo guaycurú y chiquito comparadas. *Revista del Museo de La Plata* 17. 7–68.
- Lehmann-Nitsche, Roberto. 1910–1911. Vocabulario chorote ó solote (Chaco occidental). *Revista del Museo de La Plata* 17. 111–130.
- Lunt, Roberto. 2016. *Diccionario de la lengua wichi: wichi–español*. Buenos Aires: Sociedad Bíblica Argentina.
- Mason, John A. 1950. The languages of South American Indians. In Julian H. Steward (ed.), *Handbook of South American Indians. Vol. 6: Physical anthropology, linguistics, and cultural geography of South American Indians*, vol. 143 (Smithsonian Institution Bureau of American Ethnology's Bulletin), 157–317. Washington: Government Printing Office.
- Massei, Inocencio. 1895. ‘Pater noster’ y vocabulario. Dialecto Noctén. Con introducción y notas de Lafone Quevedo. *Boletín del Instituto Geográfico Argentino* 16(9–12). 343–390.
- Melvold, Janis Leanne. 1989. *Structure and stress in the phonology of Russian*. Cambridge: Massachusetts Institute of Technology. (Doctoral dissertation).
- Mendoza, Evelina & Marcelo Merino. 2019. *Nanufweshu. Nalhchefwen*. El Sauzalito–Sip’ohi.
- Messineo, Cristina. 2009. Vocabulario toba de Cerrito (Paraguay). In José Braunstein & Cristina Messineo (eds.), *Hacia una nueva carta étnica del Gran Chaco VIII*, 253–269. Las Lomitas: Centro del Hombre Antiguo Chaqueño (Chaco).
- Messineo, Cristina. 2015. Indexación y sistemas de alineamiento en maká (mataco-mataguayo). *UniverSOS: revista de lenguas indígenas y universos culturales* 12. 125–146.
- Messineo, Cristina & José Braunstein. 1990. Variantes lingüísticas del mataco. In José Braunstein (ed.), *Hacia una nueva carta étnica del Gran Chaco I*, 1–13. Las Lomitas: Centro del Hombre Antiguo Chaqueño (Chaco).
- Métraux, Alfred. 1942. Linguistic affinities of the Enimaga (Cochaboth) group. *American Anthropologist* 44. 720–721.
- Murray, Robert W. & Theo Vennemann. 1983. Sound change and syllable structure in Germanic phonology. *Language* 59(3). 514–528. DOI: [10.2307/413901](https://doi.org/10.2307/413901).
- Najlis, Elena L. 1966. *Lengua abipona. Tomo II*, vol. 1 (Archivo de lenguas pre-colombinas). Buenos Aires: Universidad de Buenos Aires, Facultad de Filosofía y Letras, Centro de Estudios Lingüísticos.
- Najlis, Elena L. 1968. Dialectos del mataco. *Anales de la Universidad del Salvador* 4. 232–241.
- Najlis, Elena L. 1971. Premataco phonology. *International Journal of American Linguistics* 37(2). 128–130. DOI: [10.1086/465148](https://doi.org/10.1086/465148).

## References

- Najlis, Elena L. 1984. *Fonología de la protolengua mataguaya*, vol. 9 (Cuadernos de Lingüística Indígena). Buenos Aires: Universidad de Buenos Aires, Facultad de Filosofía y Letras, Instituto de Lingüística.
- Nercesian, Verónica. 2014. *Wichi lhomtes: estudio de la gramática y la interacción fonología–morfología–sintaxis–semántica*, vol. 74 (LINCOM Studies in Native American Linguistics). München: LINCOM Europa.
- Nercesian, Verónica. 2019. Variación dialectal y diacrónica del objeto pronominal en wichí/weenhayek (mataguaya): paradigmas prefijante y sufijante. *Cuadernos de Lingüística de El Colegio de México* 6(1). e127. DOI: [10.24201/clecm.v6i1.127](https://doi.org/10.24201/clecm.v6i1.127).
- Nercesian, Verónica. 2020. Lengua y territorio: variación histórica y dialectal del wichí/weenhayek (familia mataguaya). *Revista Del Museo De Antropología* 13(3). 477–494. DOI: [10.31048/1852.4826.v13.n3.28281](https://doi.org/10.31048/1852.4826.v13.n3.28281).
- Nercesian, Verónica. 2021. *Wichi-siwele lhayhilh. Diccionario wichí–castellano*. [www.diccionariowichi.com.ar](http://www.diccionariowichi.com.ar). Accessed on 2024-01-13. Buenos Aires.
- Nercesian, Verónica & Mónica Amarilla. 2021. Aportes al estudio de la variación en wichi/weenhayek (mataguaya). Diferencias dialectales en el léxico. *Revista de Estudos da Linguagem* 29(1). 259–288. DOI: [10.17851/2237-2083.29.1.259-288](https://doi.org/10.17851/2237-2083.29.1.259-288).
- Nercesian, Verónica & Nicolás Arellano. 2023. Vowel shifts in Middle Wichi (Mataguayan family, South America). *Journal of Historical Linguistics*. DOI: [10.1075/jhl.22030.ner](https://doi.org/10.1075/jhl.22030.ner).
- Nikulin, Andrey. 2020. *Proto-Macro-Jê: um estudo reconstrutivo*. Brasília: Universidade de Brasília. (Doctoral dissertation).
- Nikulin, Andrey. 2022. La fonología del acento en el chiquitano miguelero. *Cadernos de Etnolinguística* 10(1). e100110.
- Nikulin, Andrey & Fernando O. de Carvalho. 2018. Prehistoria de las lenguas y familias lingüísticas del Gran Chaco, de la meseta brasileña y cercanías: propuesta de base de datos léxicos y resultados preliminares. In María Alejandra Regúnada, Silvia Andrea Spinelli & María Emilia Orden (eds.), *IV Encuentro de Lenguas Indígenas Americanas–ELIA: libro de actas*, 545–560. Santa Rosa: Editorial de la Universidad Nacional de La Pampa.
- Nikulin, Andrey & Fernando O. de Carvalho. 2022. A revised reconstruction of the Proto-Tupian vowel system. *Boletim do Museu Paraense Emílio Goeldi. Ciências Humanas* 17(2). e20210035. DOI: [10.1590/2178-2547-BGOELDI-2021-0035](https://doi.org/10.1590/2178-2547-BGOELDI-2021-0035).
- Nordenskiöld, Erland. 1919. *An ethno-geographical analysis of the material culture of two Indian tribes in the Gran Chaco*, vol. 1 (Comparative Ethnographic Studies). Göteborg: Elanders Boktryckeri Aktiebolag.
- Paraguay. 2020. *Vocabulario de etnomatemática Maká*.

- Paraguay. 2022. *Pueblo Maká: Afiche. Ficha de alfabetos. Ficha de letras móviles. Ficha de sílabas móviles*. <https://www.unicef.org/paraguay/media/8481/file/Pueblo%7B%5C%7D20Maka.pdf>.
- Parker, Gary J. 2013. *Trabajos de lingüística histórica quechua*. Lima: Fondo Editorial de la Pontificia Universidad Católica del Perú.
- Pelleschi, Giovanni. 1886. *Eight months on the Gran Chaco of the Argentine Republic*. London: Gilbert & Rivington.
- Pelleschi, Giovanni. 1897. Los indios mataguayos y su lengua (con nota de Lafone Quevedo). *Boletín del Instituto Geográfico Argentino* 18(4–6). 173–350.
- Peña, Enrique. 1898. Etnografía del Chaco: manuscrito del capitán de fragata D. Juan Francisco Aguirre (1793). *Boletín del Instituto Geográfico Argentino* 19. 464–510.
- Remedi, Joaquín. 1896. Los indios matacos y su lengua. Con vocabulario ordenado por Lafone Quevedo. *Boletín del Instituto Geográfico Argentino* 17.
- Rodrigues, Aryon Dall'Igna. 2013. A case of affinity among Tupí, Karib, and Macro-Jê. *Revista Brasileira de Linguística Antropológica* 1(1). 139–167. DOI: [10.26512/rbla.v1i1.12289](https://doi.org/10.26512/rbla.v1i1.12289).
- Rubach, Jerzy. 1994. Affricates as strident stops in Polish. *Linguistic Inquiry* 25(1). 119–143.
- Rzymski, Christoph & Tiago Tresoldi et al. 2019. *The Database of Cross-Linguistic Colexifications, reproducible analysis of cross-linguistic polysemies: ‘ear’ and ‘shoulder’*. <https://clics.clld.org/edges/1247-1482>. Accessed on 2020-10-20. DOI: [10.1038/s41597-019-0341-x](https://doi.org/10.1038/s41597-019-0341-x).
- Salanova, Andrés Pablo & Andrey Nikulin. Forthcoming. A typology of relation-alizing and absolutizing morphology in lowland South American languages. *International Journal of American Linguistics*.
- Scarpa, Gustavo F. 2010. Hacia una etnotaxonomía vegetal chorote II: clasificación de las plantas entre las parcialidades iyojwá'ja e iyowújwa del Chaco argentino. In Cristina Messineo, Gustavo F. Scarpa & Florencia C. Tola (eds.), *Léxico y categorización etnobiológica en grupos indígenas del Gran Chaco*, 157–198. Santa Rosa: Editorial de la Universidad Nacional de La Pampa.
- Schmidt, Max. 1936. Los Makká en comparación con los Enimágá antiguos. *Revista de la Sociedad Científica del Paraguay* 3(6). 152–157.
- Schmidt, Max. 1937. Vocabulario de la lengua maká. *Revista de la Sociedad Científica del Paraguay* 4(2). 68–85.
- Seelwische, José. 2016. *Nuevo diccionario nivácle–castellano. Tercera edición mejorada*, vol. 94 (Biblioteca Paraguaya de Antropología). Asunción: CEADUC–Centro de Estudios Antropológicos de la Universidad Católica "Nuestra Señora de la Asunción".

## References

- Siffredi, Alejandra. 1982. *Temporalidad y espacio en la cosmovisión chorote-montaraz*. Buenos Aires: Universidad de Buenos Aires. (Doctoral dissertation).
- Silva, Mário André Coelho da. Forthcoming. As vogais do Yaathê e consequências para sua classificação genética.
- Spagarino, Carlos. 2008. Ampliación de tierras de la comunidad wichí Lote 27. Relevamiento de recursos naturales y propuesta de manejo. <https://redaf.org.ar/wp-content/uploads/2008/10/ampliacion-de-tierras-de-la-comunidad-wichi-lote-27.pdf>.
- Spagarino, Carlos, Francisco López, Paulino Ruíz & Verónica Nercesian. 2013 [2011]. Nomenclatura wichí de aves. In Verónica Nercesian (ed.), *Lengua wichí*. <https://lenguawichi.com.ar/cultura/nomenclatura-wichi-de-aves/>.
- Spinelli, Silvia A. 2007. El sistema fonológico de la lengua wichí: Misión Santa María. In Ana Valentina Fernández Garay & Marisa Malvestitti (eds.), *Estudios lingüísticos y sociolingüísticos de lenguas indígenas sudamericanas*, 159–173. Santa Rosa: Editorial de la Universidad Nacional de La Pampa.
- Spinelli, Silvia A. 2015. Aumento de la valencia verbal en wichí: causativos y aplicativos. In Ana Valentina Fernández Garay & María Alejandra Regúnaga (eds.), *Lingüística indígena sudamericana*, 159–178. Buenos Aires: Editorial de la Facultad de Filosofía y Letras, Universidad de Buenos Aires.
- Sposato, Adam. 2021. *A grammar of Xong*. Berlin/Boston. (Doctoral dissertation). DOI: [10.1515/9783110764932](https://doi.org/10.1515/9783110764932).
- Spruit, Arie. 1985. Stress in Abkhaz. *Studia Caucásica* 6. 31–81.
- Starostin, George. 2011–2019. *The Global Lexicostatistical Database*. <https://starlingdb.org/new100/>. Accessed on 2022-04-08. Moscow/Santa Fe.
- Stell, Nélida Noemí. 1987. *Gramática descriptiva de la lengua niwakle (chulupi)*. Buenos Aires: Universidad Nacional de Buenos Aires. (Doctoral dissertation).
- Suárez, María Eugenia. 2014. *Etnobotánica wichí del bosque xerófito en el Chaco semiárido salteño*. Don Torcuato: Autores de Argentina.
- Tacconi, Temis Lucía. 2015. *Formación de palabras en maká (mataguayo)*. Buenos Aires: Universidad de Buenos Aires. (Doctoral dissertation).
- Terraza, Jimena. 2009a. El repertorio fonológico del wichí de Rivadavia. In Ana Fernández Garay & Marisa Censabella (eds.), *Estudios fonológicos de continua dialectales: mapuche y wichí*, 41–82. Santa Rosa: Editorial de la Universidad Nacional de La Pampa.
- Terraza, Jimena. 2009b. *Grammaire du wichi : phonologie et morphosyntaxe*. Montréal: Université du Québec à Montréal. (Doctoral dissertation).
- Thompson, Laurence C. & M. Terry Thompson. 1992. *The Thompson language*, vol. 8 (University of Montana Occasional Papers in Linguistics). Missoula: University of Montana.

- Tovar, Antonio. 1961. *Catálogo de lenguas de América del Sur: enumeración, con indicaciones tipológicas, bibliografía y mapas*. Buenos Aires: Sudamericana.
- Tovar, Antonio. 1964. Relación entre las lenguas del grupo mataco. In *Homenaje a Fernando Márquez Miranda, arqueólogo e historiador de América. Ofrenda de sus amigos y admiradores*, 370–377. Madrid: Universidades de Madrid y Sevilla.
- Tripp, Robert. 1995. *Diccionario amarakaeri–castellano*, vol. 34 (Serie Lingüística Peruana). Lima: Ministerio de Educación/Instituto Lingüístico de Verano.
- Unruh, Ernesto & Hannes Kalisch. 1997. *Moya’ansaelha’ nengelpayvaam nengel-tomha enlhet*, vol. 27 (Biblioteca Paraguaya de Antropología). Ya’alve-Saanga: Nengvaanemquescama Nempayvaam Enlhet.
- Unruh, Ernesto, Hannes Kalisch & Manolo Romero. 2003. *Enenlhet apaivoma: nentengiai’ a nengiangveiakmoho neliatekamaha enenlhet apaivoma. Guía para el aprendizaje del idioma materno toba*, vol. 43 (Biblioteca Paraguaya de Antropología). Ya’alve-Saanga: Nengvaanemquescama Nempayvaam Enlhet.
- Unu’uneiki Patricia. 2011. *£etsetitits nama’lajinvawetji*. In Guillermo Sequera (ed.), *Historias de vida*, 12–21. Fernando de la Mora: Tetã Viru Mohendapy Motenondeha/Fundación Roa Bastos.
- Vasilyev, Mikhail & Mikhail Saenko. 2017. K voprosu o točnosti glottochronologii: datirovaniye jazykovoj divergencii po dannym romanskix jazykov. *Journal of Language Relationship* 15(2). 114–135. DOI: [10.31826/jlr-2017-151-213](https://doi.org/10.31826/jlr-2017-151-213).
- Vidal, Alejandra. 2001. *Pilagá grammar (Guaycuruan family, Argentina)*. Eugene: University of Oregon. (Doctoral dissertation).
- Viegas Barros, J. Pedro. 1993. ¿Existe una relación genética entre las lenguas mataguayas y guaycurúes? In José Braunstein (ed.), *Hacia una nueva carta étnica del Gran Chaco V*, 193–213. Las Lomitas: Centro del Hombre Antiguo Chaqueño.
- Viegas Barros, J. Pedro. 2002. Fonología del proto-mataguayo: las fricativas dorsales. In Mily Crevels, Simon van de Kerke, Sérgio Meira & Hein van der Voort (eds.), *Current studies on South American languages*, vol. 3 (Indigenous Languages of Latin America), 137–148. Leiden: Research School of Asian, African, & Amerindian Studies (CNWS).
- Viegas Barros, J. Pedro. 2004. Guaicurú no, Macro-Guaicurú sí: una hipótesis sobre la clasificación de la lengua Guachí (Mato Grosso do Sul, Brasil). [https://www.academia.edu/26789499/GUAICUR%5C%C3%5C%9A_NO_MACRO_GUAICUR%5C%C3%5C%9A_S%5C%C3%5C%8D_UNA_HIP%5C%C3%5C%93TESIS_SOBRE_LA_CLASIFICACI%5C%C3%5C%93N_DE_LA LENGUA_GUACH%5C%C3%5C%8D_MATO_GROSSO_DO_SUL_BRASIL_](https://www.academia.edu/26789499/GUAICUR%5C%C3%5C%9A_NO_MACRO_GUAICUR%5C%C3%5C%9A_S%5C%C3%5C%8D_UNA_HIP%5C%C3%5C%93TESIS_SOBRE_LA_CLASIFICACI%5C%C3%5C%93N_DE_LA LENGUA_GUACH%5C%C3%5C%8D_MATO_GROSSO_DO_SUL_BRASIL_).
- Viegas Barros, J. Pedro. 2005. Algunas semejanzas gramaticales macro-guaicurú-macro-jê. <https://www.adilq.com.ar/MACRO-GUAICURU-MACRO-JE.pdf>.

## References

- Viegas Barros, J. Pedro. 2013a. La hipótesis de parentesco guaicurú–mataguayo: estado actual de la cuestión. *Revista Brasileira de Linguística Antropológica* 5(2). 293–333. DOI: [10.26512/rbla.v5i2.16269](https://doi.org/10.26512/rbla.v5i2.16269).
- Viegas Barros, J. Pedro. 2013b. *Proto-guaicurú: una reconstrucción fonológica, léxica y morfológica*, vol. 69 (LINCOM Studies in Native American Linguistics). München: LINCOM Europa.
- Viñas Urquiza, María Teresa. 1974. *Lengua mataca. Tomo 2*, vol. 2 (Archivo de lenguas precolombinas). Buenos Aires: Universidad de Buenos Aires, Facultad de Filosofía y Letras, Centro de Estudios Lingüísticos.
- Watkins, Calvert. 1962. *Indo-European origins of the Celtic verb: sigmatic aorist*. Dublin: Dublin Institute for Advanced Studies.
- Wheeler, Paige Erin. 2020. *Consonants and syllable structure in Angaité (Enlhet–Enenlhet)*. Austin: University of Texas at Austin. (MA thesis). DOI: [10.26153/tsw/11805](https://doi.org/10.26153/tsw/11805).
- Zaliznjak, Andrej Anatol'jevič. 1985. *Ot praslavjanskoj akcentuacii k russkoj*. Moscow: Nauka.



# Historical phonology of Mataguayan

This book discusses the phonological history of Mataguayan, a language family that includes no less than four distinct languages – Maká, Nivaclé, Chorote, and Wichí – spoken by ca. 65.000 individuals in the Southern Chaco region in Argentina, Paraguay, and Bolivia. The book starts by offering a phonological reconstruction of Proto-Mataguayan, with separate chapters dedicated to its consonants, vowels, word-level prosody, and morphophonological alternations. This is followed by an outline of the phonological evolution of each Mataguayan language all the way from Proto-Mataguayan to contemporary lects, with a special attention to the dialectal diversity of Nivaclé, Chorote, and Wichí. The study concludes with an etymological dictionary of Mataguayan, where known cognate sets are accompanied by comments on phonetic irregularities, semantic shifts, possible cognates in the neighbouring Guaicuruan family, and references to earlier studies.