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# Aspects of Tikuna grammar (San Martin de Amacayacu variety, Colombia) : phonology, nominal phrase, predicative phrase

Denis Bertet

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Denis Bertet. Aspects of Tikuna grammar (San Martin de Amacayacu variety, Colombia) : phonology, nominal phrase, predicative phrase. Linguistics. Université de Lyon, 2020. English. NNT : 2020LYSE2068 . tel-03144314

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N° d'ordre NNT : 2020LYSE2068

THESE de DOCTORAT DE L'UNIVERSITÉ DE LYON

Opérée au sein de

L'UNIVERSITÉ LUMIÈRE LYON 2

**École Doctorale : ED 484 Lettres, Langues, Linguistique et Arts**

Discipline : Sciences du langage

Soutenue publiquement le 16 décembre 2020, par :

**Denis BERTET**

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**Aspects of Tikuna grammar (San Martín de Amacayacu variety, Colombia).**

*Phonology, nominal phrase, predicative phrase.*

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Université Lumière–Lyon 2

**Aspects of Tikuna grammar  
(San Martín de Amacayacu variety, Colombia)**

Denis BERTET

2020



Université Lumière–Lyon 2

École Doctorale Lettres, Langues, Linguistique, Arts (ED 484)

Laboratoire Dynamique Du Language (UMR 5596)

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Denis BERTET

Sciences du Langage

Sous la direction d'Antoine GUILLAUME

Thèse de Doctorat présentée et soutenue le 16 décembre 2020

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À Martin

J'avais en moi une graine d'Amazonie.

Nos enthousiasmes l'ont fait germer.

Põráàkù kú'kạ chā-ǵěchà'ù, pà chòmùkũ'ùchì.

À Maurice

J'avais en moi l'instinct de curiosité.

J'ai su par ton exemple

qu'il ne tenait qu'à nous de l'assouvir.





# Acknowledgments

There's a few people I owe very, very special thanks to.

**Loida**, ¡mil gracias a usted, y a todos ustedes, Eusevio, Karen, Olmedo, Octavio, Zoelia y Tiaguito, por acogerme cada vez con tanta generosidad y por hacerlo siempre todo para que me sienta como en casa con ustedes! ¡Gracias por su comprensión y su apoyo, gracias por compartir cada día conmigo sus actividades y sus conocimientos! Se lo digo con toda sinceridad: no podía soñar con estar en mejores condiciones para trabajar en San Martín.

¡Mil gracias también a usted, **Javier** – mi compadre –, y a todos ustedes, Cecilia – mi comadre –, Juan y su esposa, Eloisa – mi ahijada –, Didier, Loren, por su apoyo incondicional! A usted también, Javier, se lo digo con toda sinceridad: no podía soñar con encontrar mejor compañero de trabajo, con más dedicación, paciencia y fuerza de voluntad que usted.

Los veo a todos ustedes como parte de mi familia, y aunque hablamos poco, siempre sigo pensando en ustedes.

¡Y mil gracias a ustedes, **James y Eulalia**, por dedicarme tantas horas para reflexionar con tanta sutileza sobre su hermosa y compleja lengua! ¡Tanto aprendí con ustedes dos!

**Jean-Pierre**, comment te remercier, toi qui en dix jours bien employés m'as économisé des semaines d'acclimatation à une région que je ne connaissais pas ? C'est parce qu'elles avaient confiance en toi que toutes ces personnes-clefs que tu m'as fait connaître ont si vite eu confiance en moi. Sans ta longue expérience, sans ta générosité surtout, aurais-je réalisé ma première séance de travail trois jours seulement après mes premières rencontres avec des locuteurs du tikuna ? Puisse ta joie de transmettre nous servir de modèle à tous, nous chercheurs de terrain.

**Antoine**, enfin, merci d'avoir cru en moi et en mon projet, merci pour ta disponibilité, ta patience et ton œil attentif, merci pour tes conseils et tes encouragements !



Although I cannot thank them all individually, there's many other people I'd like to extend my gratitude to. Each of you contributed to this work, either through academic discussions or by lending me crucial support at different stages of my research. I'm deeply grateful to each and everyone of you!

**Amigos y colaboradores en San Martín de Amacayacu:** muchas gracias a todos los moradores de San Martín, y en particular a los abuelos Geraldo, Grimanesa, Humberto, Isidora, Miguel, Mónica y Olegario, a Andrés, Augusto, Darío, Elcy, Ismael, Martín, Rocky y Teodocia, y a Gabriel y su familia, Ignacio, Inés y Jhony y su familia.

**Amigos, colaboradores y colegas en el resto de Colombia, Perú y Brasil:** muchas gracias a Doris y Lambert Anderson, Nepomuceno Castillo (ACITAM), Cristóbal, Freddy Espinoza, Rufino García, Claudia López, Dany Mahecha y su prima, María Montes, Ana María Ospina, Abel Santos, Salima Valdivieso y su familia, doña Helena, doña Francia, doña Silvia y Juan Carlos. Muito obrigado a Nilvânia Amorim, Fernando Carvalho, Sanderson Oliveira e ao professor Bernabé.

**Friends and colleagues in the United States:** many thanks to all the members of the Department of Linguistics of the University of California Berkeley, and in particular to Belén Flores, Larry Hyman, Myriam Lapierre, Lev Michael, Zachary O'Hagan, Nicholas Rolle, and Amalia Skilton. Many thanks to Matthew Stave, Logan Sutton, Farah, Lin, Patty, and Snow.

**Amis et collègues de Lyon :** merci à tous les membres du DDL, et en particulier à Linda Brendlin, Thiago Chacon, Natacha Chevrier, Denis Creissels, Minella Duze-rol, Shelece Easterday, Geny Gonzales, Dan Ke, Olga Krasnoukhova, Magdalena Lemus, Rabia Makine, Esteban Montenegro, Françoise Rose, Adam Tallman et Marine Vuillermet, ainsi qu'à tous les doctorants que je n'ai pas déjà mentionnés.

**Other colleagues in Europe:** many thanks to Gilles Authier, Birgit Hellwig, Genner Llanes-Ortiz, Enrique Palancar, Daniel Petit, and Leo Wetzels.

**Autres amis et parents :** un merci tout particulier à Martin, ainsi qu'à Adrien, Antoine, Arthur et Timothée. Merci à Rachel, Fabienne et Polo. Obrigado, Daniela, dona Clara e senhor José. Merci, enfin, à toute ma famille.

This research was supported by funding from École Normale Supérieure (Paris), Université Lumière–Lyon 2, Labex ASLAN, Dynamique Du Langage research center, and IDEXLYON–Université de Lyon.





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# Conventions

## Fully interlinearized examples

The following example serves as an illustration for the explanations below:

- ❶ (207) *Chòmà rù ērù <tǎu...> tǎ'ú'ǔ chǎná-tǎ'u ērú chā-completo ì chòmà [...].*
- ❷ *chò-mà = rù ērù <tǎu...> tǎ'ú-ǔ*  
❸ 1SG-ANAPH = TOP as.for.it NEG be.absent\SBJV-REL.NS
- chǎ = ná = tǎ'u ērú chā = completo ì = chò-mà*  
1SG.BEN = 3M/N/NS.SBJ = be.absent because 1SG.SBJ = complete LK.NS = 1SG-ANAPH
- ❹ ‘[My brother is disabled in his hands.] As for myself, I don’t... I don’t lack  
❺ anything, I’m complete [*i.e.* fully able-bodied] [...].’ [JGS 727]

### ❶ RUNNING SMAT ORTHOGRAPHIC LINE.

- apart from its regular uses defined in SECTION 2.9, signals a bound morpheme uttered after a significantly long pause or a false start (see *e.g.* -*ǎrǔ* and -*wǎ* in examples (T1) and (T2), respectively)

On the practical orthography used in this grammatical description, see SECTION 2.9.

### ❷ MORPHOSYNTACTICALLY SEGMENTED SMAT ORTHOGRAPHIC LINE.

- morpheme boundary
- = clitic boundary
- (space) phonological word boundary



- [*abc*] constituent of interest in the context of the surrounding discussion  
 . replaces the orthographic hyphen in cases where the latter stands  
 within an unanalyzable morpheme to indicate that the syllable that  
 immediately follows it is stressed (or can be stressed)<sup>1</sup>

The orthographic space and hyphen employed in line 1 are omitted from this line so as to allow for unambiguous segmentation.

Note, importantly, that this line **does not represent morphemes under their lexical form, but under the form they feature once all morphophonological processes** (and morphotonological processes, in particular) **have been applied** (on these processes, see SECTION 2.6). The presence of such morphophonological processes is left implicit when they merely result from morphological binding (thus *tǎ'ǐchì* ‘be very hard’ in line 1, composed of the lexical forms *tǎi* ‘be hard’ + /-'ǐchì/ ‘genuinely’, would be analyzed as /tǎ-'ǐchì/ in line 2). In cases where these processes are the exponent of a specific morphosyntactic feature, by contrast, this feature is indicated in the gloss (see, in line 2 of the illustration example above, /tǎ'ú-'ǐ/ , composed of the lexical forms *tǎ'u* ‘be absent’ + /-'ǐ/ ‘SUB’; the feature exposed by the morphotonological alternation deriving /tǎ'ú-/ from the lexical form *tǎ'u*, specifically the Subjunctive Inflectional Type, is indicated in the corresponding gloss ‘be.absent\SBJV-REL.NS’).

### ③ MORPHEME-BY-MORPHEME LINGUISTIC GLOSS LINE.

- A/B either feature ‘A’ or feature ‘B’  
 ? in glosses that contain an English interrogative word (‘what’, ‘where’, etc.), indicates that the corresponding SMAT form has an interrogative(-indefinite) meaning; elsewhere, indicates that the adequacy of the gloss to the corresponding SMAT form is uncertain  
 \A the phonological exponent of feature ‘A’ is of purely tonological—*i.e.* non-segmental—nature  
 a~B the phonological exponent of feature ‘B’ (in practice ‘VOC’) is the truncation of the item corresponding to gloss ‘a’ (on truncation, see SECTION 2.6.1.3)

---

<sup>1</sup>This very exceptional situation only occurs in the conjunction *nî-î* /nî.î/ (etymologically < *nî-î* /nî=î/ [3M/N/NS.SBJ.PCì = be] ‘(it) is’) and in a handful of proper nouns and independent nouns involving segmental reduplication (e.g. *pētā-pētā* /pētā.pētā/ ‘axe’).

See p.27 for a list of the glosses employed in this study.

**④ ENGLISH TRANSLATION LINE.**

[abc] contextualization, literal translation, or clarification

Contextualizations are not necessarily close translations of the immediately preceding utterance in the original recording but may consist instead in a broader summary of the preceding discourse.

**⑤ SPEAKER AND UTTERANCE REFERENCES.**

[ABC speaker reference (see TABLE 1, p.42)

A recording reference in cases where the corpus contains several recordings by the same speaker (see TABLE 1, p.42)

123] segment reference in the annotated version of the corresponding recording made under the computer software ELAN

elic.] utterance stemming from elicited data

In most PDF viewers, the gender and age of speakers may be consulted at any point of this grammatical description by hovering over their reference with the mouse pointer.

**① & ②**

< abc... > false start

abc Spanish word inserted by code-mixing

{abc} segment of uncertain transcription

[abc] poorly audible segment extrapolated by transcription assistant

**① & ⑤**

[...] segment of the utterance not reported in the example

– rupture of syntactic construction or conversation turn shift

“abc”, “abc” direct speech

abc...?, abc...? rhetorical question

aaabc, aaabc strong emphasis of the speaker on the corresponding syllable

## SMAT forms in main text and tables

In the main text, SMAT forms in **italics and not enclosed between slash marks** are running orthographic forms (e.g. *nūchā-dău* ‘I see it’). They follow the same transcription conventions as in line 1 of interlinearized examples (see above).

SMAT forms in **roman type enclosed between slash marks** are segmented orthographic forms (e.g. /nū = chā = dău/ ‘I see it’). They follow the same transcription conventions as in line 2 of interlinearized examples (see above). Their subsequent glosses, whenever present, follow the same transcription conventions as in line 3 of interlinearized examples (e.g. ‘3M/N/NS.ACC = 1SG.SBJ = see’; see above).

**Within tables specifically**, SMAT forms are always in italics and never enclosed between slash marks, but always represent segmented orthographic forms (*i.e.* not running orthographic forms).

## Highlighting within SMAT forms

Whether in examples or in the main text, phonemes or morphemes to which the reader should pay particular attention within a SMAT form or sentence are regularly highlighted in boldface (e.g. /nū = chā = **dău**/ [3M/N/NS.ACC = 1SG.SBJ = **see**] ‘I see it’). Superscript graphemes, however, such as tonal or tonological numbers and the orthographic apostrophe <’> (which stands for a glottal stop), are highlighted by means of **small boxes** instead for the sake of visibility (e.g. /dau<sup>34</sup>/ ‘to see’).

## Example references

References of **examples including a capital letter T** (for “Text”, such as <(T120)>) correspond to lines of the fully-interlinearized text in APPENDIX A. References that do not include a T (such as <(388)>) correspond to examples in the body chapters.

## Transcription of tones and tonemes

In phonetic and phonological representations, tones and tonemes are transcribed by means of superscript numerals placed to the right of the syllable they belong with. These numerals range from 1 to 6 and correspond to relative levels of pitch distributed at roughly equal intervals, with **1 standing for the lowest pitch level and 6 for the highest pitch level**. Single numerals stand for a (level) tone or toneme in unstressed syllable. **Sequences of two of these numerals** stand for a level or contour tone or toneme in stressed syllable. Tones or tonemes in stressed syllables start at the pitch level represented by the first numeral of the sequence and end at the pitch level represented by the second numeral.

## Abbreviations

FGC	figure-ground configuration
IMP	Imperative Inflectional Type
IND	Indicative Inflectional Type
LGA	Língua Geral Amazônica
M. Om.	Modern Omagua
NA	not attested
n/a	not applicable
NP	nominal phrase
O. Om.	Omagua
PP	predicative phrase
Prt.	Portuguese
SBJV	Subjunctive Inflectional Type
SMA	San Martín de Amacayacu
SMAT	San Martín de Amacayacu Tikuna
Sp.	Spanish



# List of glosses

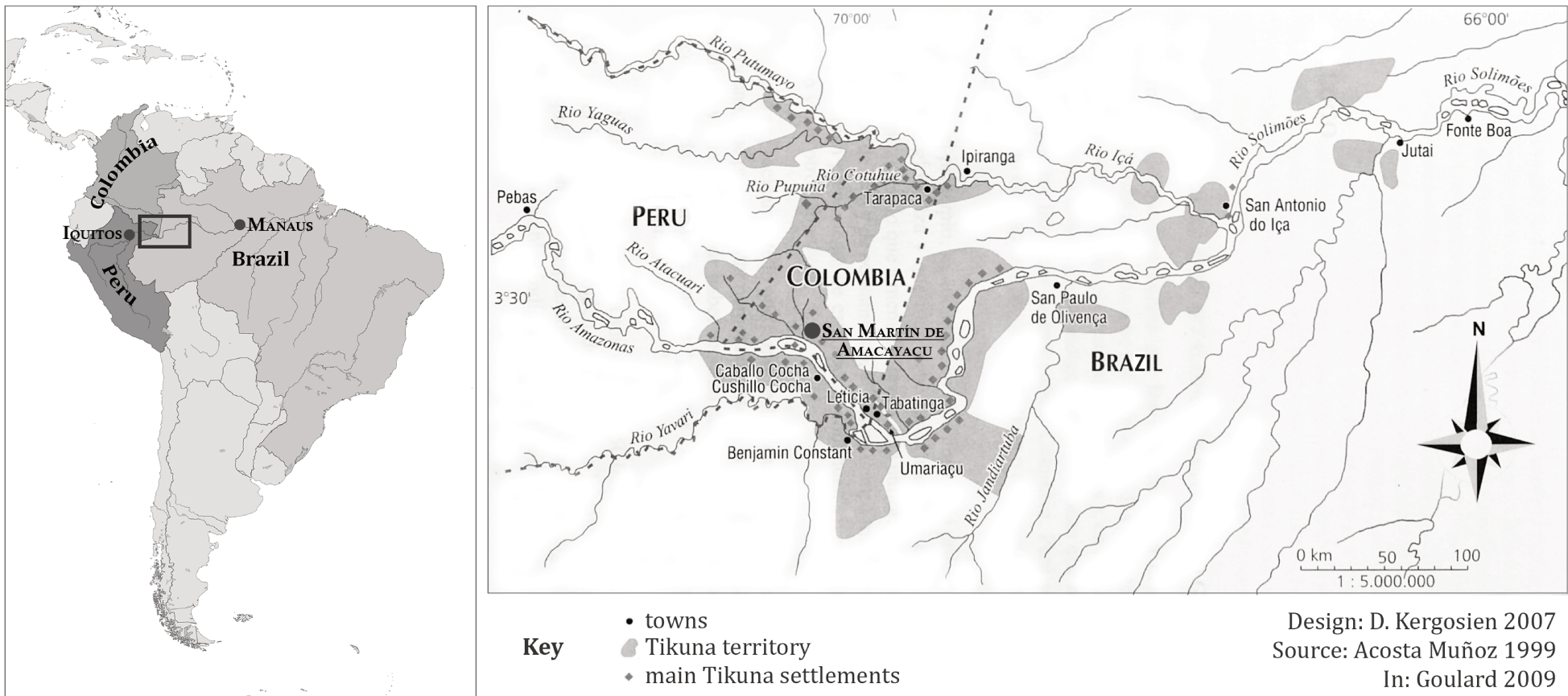
In most PDF viewers, the unabbreviated form of glosses may be consulted anywhere in this study by **hovering over them with the mouse pointer**.

1	first person	CAUS	causative
2	second person	CTRPET	centripetal
3	third person	CIRC	circumstantial
4	fourth person	COLL	collective
ACC	accusative	COM	comitative
ADD	additive	COMPAR	comparative
ALOC	areal locative	CONJ	conjunction
AM	associated motion	CONTR	contrastive
ANAPH	anaphoric	DAT	dative
ANTIP1	antipassive 1	DIR	direction
ANTIP2	antipassive 2	DIST	distal
ANTIP3	antipassive 3	DISTR	distributive
APPREC	appreciative	DUB	dubitative
APPROX	approximate	EXO	exophoric
APRF	antiperfect	EXPL	explanation
ASSERT	assertive	F	feminine
AVERS	aversive	FRUSTR	frustrative
BEN	benefactive-malefactive	FUT	future

GEN	genitive	PRF	perfect
IMP	imperative	PL	plural
INDF	indefinite	PLLOC	plurilocal
INTENS	intensive	PLOC	punctual locative
INTENT	intensive	PLURAC	pluractional
INTR	intransitive	POSS	possessive
INV	inverted	PRED	predicativizer
IRR	irrealis	PROH	prohibitive
ITER	iterative	PROX	proximal
LK	linker	PST	past
M	masculine	PURP	purposive
MAN	manner	QUOT	quotative
MED	medial	REFL	reflexive
MOT	motion	REL	relativizer
N	neuter	S	salientive
NEG	negation	SBJ	subject
NS	non-salientive	SBJV	subjunctive
OBJ	object	SG	singular
PART	partitive	SIMULT	simultaneous
PC	predicative class	SUB	subordinator
PC $\emptyset$	predicative class $\emptyset$	SUPERF	superficial
PC $\bar{i}$	predicative class $\bar{i}$	TEL	telic
PC $\grave{i}$	predicative class $\grave{i}$	TEMP	temporal
PC $n\grave{a}$	predicative class $n\grave{a}$	TOP	topicalizer
PC $r\bar{u}$	predicative class $r\bar{u}$	VOC	vocative
PERSIST	persistent	VOL	volitive







**FIGURE 1.** Location map of San Martín de Amacayacu within the main areas populated by the Tikunas  
 (right-hand map: courtesy of Jean-Pierre Goulard)

# Chapter 1

## Introduction

---

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1.2.1	San Martín de Amacayacu . . . . .	35
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1.4	Previous literature and non-linguistically-informed records on Tikuna . . . . .	45
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This study is a typologically-informed description of a few major aspects of the **grammar of a variety of Tikuna**, a language isolate spoken in western Amazonia along the banks of the Amazon river. The Tikuna variety described in this work is that of **San Martín de Amacayacu**, a community located near the southeastern tip of Colombia. Its speakers typically refer to it as *tǎgà*, lit. ‘our (incl.) language’ or ‘people’s language’, even when talking to foreigners. The grammatical topics covered primarily include the **phonological system** of the language as well as the morphosyntax and semantics of its **predicative phrase**. Additional grammatical domains treated in less detail include aspects of the **nominal phrase** and the **expression of negation**. All the analyses I put forward in this description are based on **first-hand linguistic data** that I have collected between 2015 and 2018 in San Martín de Amacayacu with the help of native speakers of the language.

This chapter introduces the language that is the subject matter of the present

study as well as the data on which it is based. SECTION 1.1 characterizes the general geographic, sociolinguistic, genetic, and dialectal **context of the Tikuna language as a whole**. SECTION 1.2 focuses on the **specific context of the community of San Martín de Amacayacu** and explains why and how I have conducted data collection there. SECTION 1.3 identifies the 22 San Martín de Amacayacu Tikuna **speakers** who have collaborated in my research project and describes the **nature of the data** that I have been able to collect with their help. SECTION 1.4 gives an overview of the **main resources** currently available on the Tikuna language, whether relatively recent linguistically-informed studies or older non linguistically-informed records. SECTION 1.5 sketches out the **typological profile** of San Martín de Amacayacu Tikuna. SECTION 1.6 finally introduces the general **organization of the remainder of this study**.

### 1.1 Geographic, sociolinguistic, genetic, and dialectal context of the Tikuna language

At least 68,500 people identify themselves as Tikunas, or Ticunas,<sup>2</sup> across Brazil—where most of them live—Colombia, and Peru (Instituto socioambiental 2018). Most ethnic Tikunas, *i.e.* about 48,500 of them according to Ethnologue (Simons & Fennig 2018) but likely many more, speak Tikuna on a daily basis, which makes it **one of the largest indigenous languages in Amazonia by number of speakers**. The area inhabited by the Tikunas **stretches along the Amazon**

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<sup>2</sup>I use the form “Tikuna” (instead of “Ticuna”) throughout this study in accordance with Article 20 of an agreement taken by Tikuna education professionals and leaders from Brazil, Peru, and Colombia at a meeting held on December 16–17, 2010 in the Tikuna community of Macedonia (Amazonas, Colombia) (see Santos Angarita 2015):

20. *The word “tikuna” shall be written with a k, not a c; the present agreement reaffirms what was agreed upon in the “Tomeepü i nachianeka ï nguteerü tikunagü arü ngutakee – Primer encuentro trinacional de maestros tikuna[s]”. That meeting took place in the year 2004 in Leticia on the campus of the Universidad Nacional de Colombia, Sede Amazonia. The [2004] agreement states: “The Tikuna language teachers have agreed that, since the letter c does not exist in the alphabet they employ for writing [Tikuna], the letter k shall be used instead. There exists, in practice, among anthropologists a consensus on writing, for instance, “Tikuna”, with the sound /k/ being replaced by the consonant c of the Spanish alphabet, a consensus [that arose] without consulting the Tikuna teachers and communities.” (translation is mine)*

(**Amazonas-Solimões**) and **Putumayo-Içá rivers**, from the mouths of the Atacuari (Amazon) and Yaguas (Putumayo) rivers to the west, down to the mouth of the Tefé river (Solimões) to the east. Sizable groups of Tikunas are also found in the major regional cities of Iquitos and Manaus (see map in FIGURE 1 on p.30).

Due to the magnitude of the area they occupy, an exceptionally vast one for today's Amazonia, the Tikunas face a **wide array of geographic and socio-economic situations**. This in turn underlies the **diversity of sociolinguistic statuses and degrees of vitality** that their ancestral language displays across the area where it is spoken. At one end of the spectrum are the “**Malocas**” of the **Pupuña river**, five large communal dwellings that apparently continue to exist to this day in Colombia in the heart of the Amazon-Putumayo interfluvial area. In these relatively isolated, ethnically homogeneous, and culturally conservative settlements, **Tikuna is reported to be virtually the only language in use** and its transmission is apparently ensured (Santos Angarita 2005:25–27). At the other end of the Tikuna sociolinguistic spectrum is the situation of some **urban areas or urbanizing communities**. Thus, in the Colombian town of Puerto Nariño, which numbers over 2,000 inhabitants (DANE 2010), a greater ethnic diversity and a stronger integration to the regional communication networks have contributed to what has become a **near-exclusive presence of Spanish**. Initially employed as a lingua franca, Spanish, the official language of Colombia, has come to be the only language of common use in the community. On the intermediate sociolinguistic situation of the community of San Martín de Amacayacu, whose Tikuna variety is the topic of this grammatical description, see next section.

Interestingly, alongside this classic sociolinguistic spectrum, Tikuna also exhibits, in parts of its territory, atypical situations for Amazonia that could ensure a long-term future for the language as a whole, which Ethnologue characterizes as a “developing” language (Simons & Fennig 2018).<sup>3</sup> In some **communities of thousands undergoing incipient processes of urbanization**, **Tikuna has maintained a solid position** in most social contexts, for a variety of reasons that include ethnic homogeneity. Cushillococha (Peru) and Filadélfia, in the vicinity of Benjamin Constant (Brazil), are instances of such communities.

Tikuna's **genetic affiliation** is currently a **matter of debate**. Although sev-

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<sup>3</sup>According to Ethnologue's (Simons & Fennig 2018) “Intergenerational Disruption Scale”, a “developing” language is one that “is in vigorous use, with literature in a standardized form being used by some though this is not yet widespread or sustainable”.

eral hypotheses, all superficial to varying degrees, were put forward throughout the twentieth century (see Carvalho 2009 for a complete survey of these hypotheses), specialists in the language (primarily Marília Facó Soares and María Emilia Montes Rodríguez) kept considering it as an isolate well into the 2000s (Montes Rodríguez 2005b:13–14; Soares 2010:189). Articles by Carvalho (2009) and Goulard & Montes (2013) have recently provided far stronger arguments in support of a **possible genetic connection between Tikuna and Yuri**, a language believed to have become extinct at the beginning of the twentieth century (Franco 2012:65–71) and of which only three word lists are known. Almost at the same time, Franco (2012) and Seifart & Echeverri (2014) hypothesized that the **language of the so-called “Carabayos”** (or “Caraballos”)—a group in voluntary isolation between the Putumayo and Caquetá rivers—might be genetically related, directly or indirectly, to the language of the ancient Yuris, and hence to Tikuna itself. More work will be needed to confirm or disprove these promising genetic hypotheses.

Note that a **historical outline of major contacts** between Tikuna and other languages once spoken in its surroundings (Old Omagua, a variety of Língua Geral Amazônica, and a Quechuan variety) or still currently spoken in its surroundings (Spanish and Portuguese) is provided in SECTION 2.7.1 as a necessary background to the study of the phonology of contact phenomena in San Martín de Amacayacu Tikuna.

Little work has been done on the **dialectal diversity** of Tikuna specifically, apart from Santos (2005) and Montes (2005a). However, these and other documentary and descriptive works indicate a **relatively high degree of similarity and mutual intelligibility across the whole territory of the language**, which makes its treatment as a single language hardly questionable. Yet significant variation can be observed at all levels, from phonetic and morphosyntactic to lexical. Note, importantly, that a lot of that variation cannot be easily associated with geographic areas or generational divisions, as it not infrequently occurs within the same community among speakers of the same age group. This situation results to a large extent from the fact that a number of communities (such as Cushillococha, in Peru, and San Martín de Amacayacu itself, on which see next section) were historically formed by the aggregation of families originating from different areas, and that migrations between Tikuna settlements are frequent to this day. As a consequence, **identifying a variety of Tikuna with the geographic area where it is being spoken presently** as is done in this study, although useful and necessary as a first approximation, can only be, in many cases, a **rather artificial practice**.



## 1.2 Field site and fieldwork

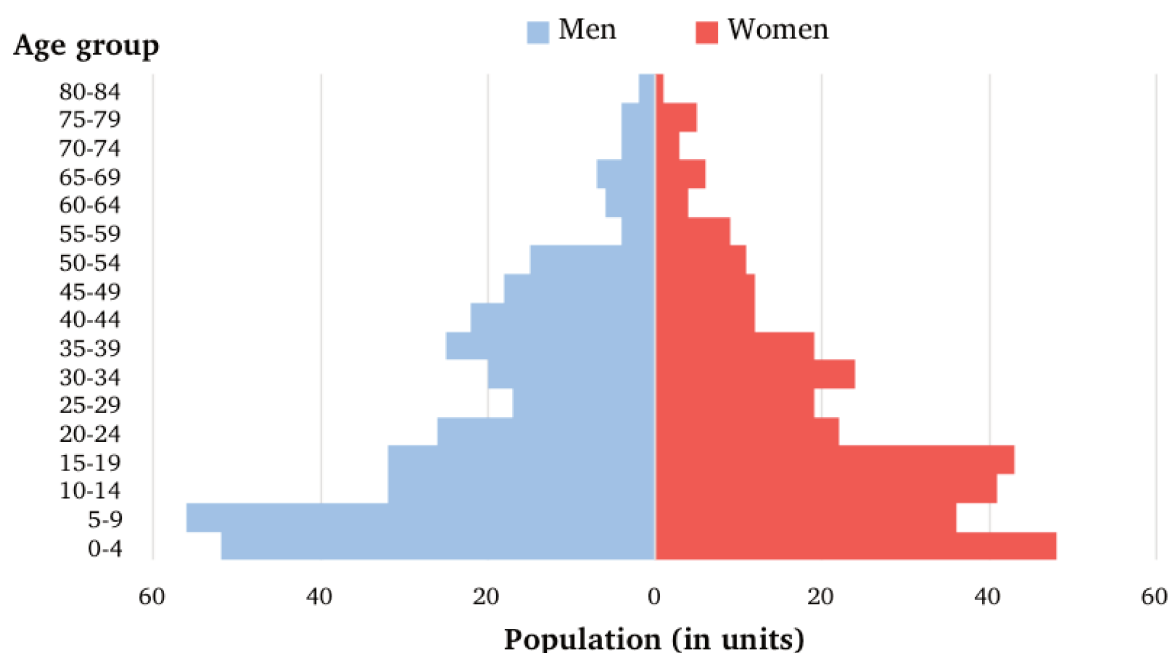
### 1.2.1 San Martín de Amacayacu

The Colombian Tikuna community known in Spanish as San Martín de Amacayacu<sup>4</sup> (henceforth abbreviated as SMA; *Nâpâtú* in SMA Tikuna) is named after the river Amacayacu, a minor tributary of the Amazon river (<Sp. *hamaca* ‘hammock’ and Quechuan /jaku/ ‘water, river’, a literal equivalent of the SMA Tikuna name of the river, /Nâ-pâ-tú/ [3N/NS-hammock-river] ‘hammock river’). SMA was **established in the mid-1960’s on the left bank of the Amacayacu** about 3.5 kilometers (20–30 minutes by river) from its mouth (see FIGURE 1, p.30). The Amacayacu is by far the primary channel of communication between SMA and its surroundings (see pictures in FIGURES 4 and 5, at the end of this chapter). The community is not connected to any road network, in particular, although a fully paved footpath that directly connects it to Puerto Nariño, the second largest human settlement in the Colombian Amazonas department (about 7 kilometers away from SMA), has been completed in 2019. Several express boats a day allow to go from the mouth of the Amacayacu to Leticia (in Colombia) in about two hours or to Caballococha (in Peru) in about one hour. While no major settlements exist upriver from SMA on the Amacayacu itself, the community is located on the **natural overland route that connects the Putumayo (to the north) and the Amazon river basins**, which is why it enjoys relatively tight social bonds with interfluvial (and comparatively more isolated) Tikuna communities settled on the Cotuhé and the Pupuña rivers, and in particular with the community of Buenos Aires.

In 2018, SMA had a **population of 657**, of which 342 men and 315 women (DANE 2018). As shown in FIGURE 2, the community is characterized by a markedly expansive population pyramid. It has a very broad base of children and youth relative to its number of elders (with 265 residents below age 15, 350 between ages 15 and 60, and 42 above age 60 in the year 2018 according to DANE 2018; see Pinilla Herrera 2004:148 for comparable data for the year 2004). Comparatively few inhabitants are tempted by permanent emigration from the community. As a consequence, SMA’s population is **growing at a rapid pace**, which is unfortunately likely to soon lead the community into land access issues as gradually less lots

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<sup>4</sup>Coordinates: 3°46’33S, 70°18’07W. San Martín de Amacayacu is located in the administrative *municipio* of Leticia, department of Amazonas, Colombia.



**FIGURE 2.** *Population pyramid of the community (Sp. centro poblado) of San Martín de Amacayacu in 2018 (DANE 2018)*

remain available for building within the village and for cultivating in the village's surroundings.

The village itself is roughly organized in a star network of footpaths bordered with houses, with at its heart the **communal maloca** (a public equipment used mostly for meetings of the community and, occasionally, for holding rituals; see picture in FIGURE 6 at the end of this chapter), the Catholic **church**, **two school buildings**, and one of the community's sports fields. Most housing follows a widespread construction plan in the region, with a wooden structure and a zinc roof (see picture in FIGURE 7 at the end of this chapter). Surrounding the village is a large belt of secondary jungle scattered with **cultivated or temporarily abandoned slash-and-burn swidden fields**, followed, further away, by the primary jungle.

Nearly all adults dedicate a **major part of their time to cultivating these swiddens for their families' subsistence**, with manioc and plantains arguably constituting the major locally-cultivated staple foods (see picture in FIGURE 8 at the end of this chapter). Men and, to a certain extent, children additionally **fish on a very regular basis**. Hunting, by contrast, is no longer as regularly practiced by most men, game having become relatively rare as a result of overexploitation. Another non-monetary activity in which most adults are regularly involved are the **commu-**

**nal labor parties** which any household can organize to ask for the help of other inhabitants in exchange for food and drink (manioc beer<sup>5</sup> in particular; see picture in FIGURE 9 at the end of this chapter) and future favors. Civil service (education, health services, national park within which SMA is located, etc.) and **tourism, a rapidly growing activity**,<sup>6</sup> provide a crucial monetary income for a number of households. A few families additionally hold small convenience food stores.

Most people in SMA identify themselves as **Roman Catholics**, and a few as Evangelical Protestants. All, as far as I can tell, practice one or the other religion in **strong syncretism with traditional native beliefs**. The native notion that every individual belongs, like their father, to one or the other of the two Tikuna clanic moieties (moiety of the winged clans vs moiety of the non-winged clans), in particular, and that marrying within one's own clanic moiety amounts to committing an incest, remain predominant.

As of 2018, most households possessed at least one boat and one gas boat engine. A communal power station provided **electricity to the whole village about 8 hours a day**. A number of households possessed one or several electric appliances, mostly freezers, fridges, or televisions. Most adults and youths, to the exception of the elders, had a personal or shared cell phone, although the cellular and Internet network coverage in the village was generally very poor. A state-run local digital technology center<sup>7</sup> offered Internet access on most weekday evenings for a very affordable price, a service that was mostly made use of by the youths. The village had **no water distribution system**. The Amacayacu river and its minor tributaries, as well as collected rainwater, were the main water supplies available.

SMA is an **ethnically very homogeneous community**, with a vast majority of its residents being ethnic Tikunas, and only a few being non-Tikuna indigenous people or people who do not identify themselves as indigenous. Most adults, to the exception of the non-Tikuna residents essentially, are fully proficient in SMA Tikuna, which they have as their mother tongue. Most of these SMA-Tikuna-speaking adults, to the exception of those above age 60, are simultaneously proficient—to varying degrees—in Spanish, their second language. **SMA Tikuna and Spanish stand in a diglossic relationship** in the community, with SMA Tikuna being used, in a major-

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<sup>5</sup>Sp. *masato*.

<sup>6</sup>At least until the beginning of 2020. This year's COVID-19 pandemic is likely to have drastically reduced tourism activity in SMA, at least temporarily.

<sup>7</sup>Sp. *kiosco digital*.



ity of households, in most contexts of daily life, and Spanish being resorted to part of the time at school, for communication with non-Tikuna speakers (whether from the community or from the outside), as well as in discussions on administrative and political matters among SMA Tikuna speakers themselves. Note, additionally, that SMA Tikuna speakers—especially younger speakers, including fully-proficient ones—**frequently practice code-mixing with Spanish** while speaking SMA Tikuna (the converse—code-mixing with SMA Tikuna within Spanish discourse—rarely occurs, by contrast). SMA Tikuna is thus in intense contact with Spanish within the community itself. Despite this intense contact with Colombia’s national language, **SMA Tikuna remains, for the time being, relatively vital**. A majority of children in the community can be considered to have SMA Tikuna as their mother tongue as they only really acquire Spanish as a second language once they start to attend primary school. However, a significant number of children, often—but not always—because one or both of their parents are non-Tikunas, acquire Spanish, not SMA Tikuna, as their mother tongue, although they usually have some passive knowledge of SMA Tikuna. On the long run, this situation, combined with rapidly increasing direct contacts with non-Tikunas as a consequence of tourism, among other factors, is in fact **likely to bring about a replacement of SMA Tikuna by Spanish** in more and more contexts of daily life in the community.

SMA probably represents, among the Tikuna communities, an extreme case of internal dialectal diversity. Founded half a century ago only, it is populated by families originating, for the most part, from three different areas, specifically the valleys of the Amacayacu, Loretoyacu, and Cotuhé rivers. Due to the geographic location of SMA, the speeches of its residents additionally stand in regular contact with the speeches of the neighboring Tikuna communities established on the banks of the Amazon river (such as Mocagua, Palmeras, and Puerto Nariño), as well as with the speeches of Tikuna communities of the interfluvial area (Buenos Aires, in particular). The **concept of San Martín de Amacayacu Tikuna (henceforth abbreviated as SMAT)**, *i.e.* the variety of Tikuna described in the present work, therefore has to be understood, somewhat artificially, as the **heterogeneous set of Tikuna speeches used by long-term permanent residents of the community of SMA**. In the remainder of this study, I call “subdialectal” the variation that occurs *within* the set of speeches that compose SMAT whenever that variation is shared in a consistent fashion by several SMAT speakers (*i.e.* whenever that variation is not idiosyncratic but shared by a subgroup of SMAT speakers). From a dialectological perspective, the tentative identification of a SMA Tikuna variety that underlies this grammatical description might prove ineffective once we attain a better understanding of Tikuna dialectology as a whole and can show, perhaps, that the

set of Tikuna speeches spoken in SMA in fact correspond to several geographically well-identifiable Tikuna dialects.

## 1.2.2 Data collection

To collect the first-hand data that are analyzed in this grammatical description, I took 4 field trips to the Colombian Amazon **between October 2015 and July 2018**, for a total of 9 months and a half spent in the area, of which **6 months in SMA itself** (divided in stays of 1 to 8 weeks) and 3 months and a half in the regional capital city of Leticia, where I stayed between two periods spent in SMA.

At the beginning of my first stay, I was extremely lucky to benefit from the **crucial practical help of Jean-Pierre Goulard**, an anthropologist with three decades of research experience with Tikuna people, who happened to be doing fieldwork in the region at the same time. Although I initially had no precise destination, it quickly became clear to me, when Jean-Pierre generously introduced me in SMA, that it was an excellent working site for my purposes. The main factors that made me opt for conducting most of my data collection in SMA after my first visit there were the **vitality of Tikuna** in the community, the **ease of access** to the village, the **openness of its residents**, their **comparatively conservative way of life**,<sup>8</sup> and the **potential access that the community offers to virtually undocumented interfluvial dialects** when speakers of these dialects come and stay over for a few days in SMA, usually on their way to Leticia or to other settlements in the valley of the Amazon. Another important factor was the kindness with which LAR and her family welcomed me in their house, where I lived during all of the 6 months that I spent in SMA itself. By living with them, I had the invaluable opportunity to **share the daily life of a Tikuna family** for extended periods of time. Note, incidentally, that SMA is also **one of the sites where María Montes, one of the few specialists**

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<sup>8</sup>This aspect was important to me inasmuch as I was interested, on the long term, in working on the dialectology and diachrony of Tikuna. It seemed reasonable to tentatively hypothesize, given the comparatively conservative way of life in SMA, that SMAT might be a comparatively conservative Tikuna variety, which would allow for a more accurate look into the past of Tikuna as a whole. Indeed, the relatively conservative character of SMAT is noted by Montes (2005a). First-hand data I have collected on the Tikuna varieties of the Colombian communities of Nazareth (with an anonymous speaker) and Arara (with Abel Santos), as well as conversations with anonymous speakers from the Colombian town of Puerto Nariño, likewise confirm that SMAT is much more conservative than, minimally, these three varieties.

of Tikuna, has conducted most of her linguistic research starting in the mid-1980's, which meant that working myself in SMA could provide data that would be directly comparable with older data collected in the same community.

In the initial stages of my research, the language I used in interactions with SMAT speakers was exclusively Spanish. Although I later started to use more and more SMAT with them, especially while recording texts and with older speakers not proficient in Spanish, it proved culturally and politically delicate to switch entirely to SMAT for all daily interactions. A few residents of SMA, as well as certain members of other Tikuna communities who happened to come to SMA on occasions, thought of foreigners learning their language as a serious instance of cultural appropriation and suspected my intentions, and those of researchers working in the area more generally, were to “steal their culture or their language” to make money out of it back where I was from. Their fears were made all the more acute if they ever heard me speaking the language, or heard that I spoke it with other people. This generally discouraged me from speaking SMAT, especially with people who were not close collaborators in my project and might not be fully convinced of its essentially harmless nature. My hope is that the concerns of certain Tikunas regarding the purposes of my project will ease once I can go back to SMA to deliver its final products to the community.

During part of my stays in SMA, I taught free English classes twice a week to anyone interested. A basic knowledge of spoken English is currently becoming a very valuable skill in SMA for working in the tourism sector. Although the results of these classes were as a whole limited, one participant in particular, JGS, made quick progresses which he could directly apply in his professional activity as a tourist guide.

### 1.3 Speakers and data

A total of 22 SMAT speakers have collaborated in the research whose results are presented in this grammatical description. Eight of them are women, the other 14 are men. The ages of these speakers ranged from 18 to 76 years old in 2017 (see FIGURES 10 and 11 at the end of this chapter for pictures of three of them). TABLE 1 lists the names of all those who are directly mentioned in this work with their corresponding gender and age. Each of them is attributed a three-letter reference used in the remainder of this work whenever they are mentioned. Note that in most PDF viewers, the gender and age of any of these speakers may be

consulted anywhere in this document by hovering over their name.

Speakers not directly mentioned in this work but whose valuable contributions I would like to acknowledge here are Eusevio Curico Cayetano, Juan Andrés Morán Cayetano, Elcy Micaela Reina Gregorio, Rodrigo Sánchez Gregorio, Olegario Sánchez Pinto, and one anonymous speaker.

The data on which this description is based (to which I refer collectively as “my data”) are of two major types: **elicited data and textual data**.

My **elicited data** are mostly handwritten notes collected during dozens of hours of elicitation on topics ranging from **phonetics and phonology to morphosyntax and lexicography**.

My **textual data** (to which I refer as “my corpus”) consist in the practical orthographical transcription of about **10 hours of recordings of half-staged<sup>9</sup> and staged speech performances** collated under the computer software FieldWorks Language Explorer (FLEX).<sup>10</sup> These recordings, which are listed in TABLE 1, represent a **varied array of discourse genres**, including, in particular, the following:

- **interview-format conversations** with me (generic or specific aspects of the speaker’s daily life, speaker’s life story, personal anecdotes, plans for the future, etc.);
- **procedural discourse** (cooking recipes, how to make a canoe, how to cultivate a swidden, etc.);
- **historical accounts** (origins of the Tikunas, life during the Rubber Boom, foundation of SMA, etc.);
- **staged storytelling** (text C in TABLE 1, based on a visual stimulus by Vuillermet & Desnoyers (2013));
- storytelling from **traditional repertoire** (tales, legends, myths);
- **songs** (lullabies, ritual songs, entertainment songs, etc.);

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<sup>9</sup>By half-staged speech performances, I refer to ones that are not directed (e.g. a story) or only marginally directed (e.g. an interview-format conversation), but that are not entirely spontaneous either insofar as they result from a planned meeting between the linguist and the speaker(s) participating in the recording session.

<sup>10</sup>Out of a total of about 15 hours of recordings of such speech performances that I collected in SMA and Leticia with SMAT speakers over the course of my doctoral research.

## 1. INTRODUCTION

Consultant			Recording		
ref.	name	gender, age	ref.	title	dur.
AMB	Augusto Morán Betancurt	♂, 52 y.o.		Interview	39:52
ANO1	<i>(anonymous)</i>			Interview	13:00
ANO2	<i>(anonymous)</i>			Interview	35:26
DSG	Elisbán Darío Sánchez Gregorio	♂, 30 y.o.		<i>(elicitation only)</i>	
EAR	Eulalia Ángel Ruiz	♀, 44 y.o.		<i>(elicitation only)</i>	
GRA	Grimanesa Ruiz del Águila	♀, 70 y.o.		Interview	17:22
GSG	Geraldo Sánchez de Gregorio	♂, 60 y.o.		Story of Würi	5:12
HGA	Humberto Gregorio Amaru	♂, 76 y.o.		Interview	38:32
IGS	Isidora Gregorio de Sánchez	♀, 64 y.o.		Interview	39:54
IGV	Ismael Gregorio Vásquez	♂, 31 y.o.		Interview	48:54
JGS	James Gregorio Sánchez	♂, 26 y.o.		Interview	41:55
JSG	Wilfredo Javier Sánchez Gregorio	♂, 33 y.o.	A	Interview 1	23:49
			B	Interview 2	44:59
			C	Hunting story	8:22
LAR	Loida Ángel Ruiz	♀, 49 y.o.	A	Legend of Metare	28:27
			B	An ordinary day	26:59
			C	Myth of Ngutapa (see APPENDIX A)	35:17
			D	Interview	23:55
			E	Myths of Peta-Peta and Iya-Iya	26:20
MVG	Mónica Vásquez de Gregorio	♀, 70 y.o.	A	Story of Batüüe	8:40
			B	Song 1	5:54
			C	Song 2	5:46
			D	Song 3	6:54
RCA	Robert Octavio Curico Ángel	♂, 18 y.o.	A	Activity 1	5:40
& JCA	& Jarvey Olmedo Curico Ángel	& ♂, 24 y.o.	B	Activity 2	3:44
			C	Activity 3	3:01
			D	Activity 4	4:22
			E	Activity 5	3:47
			F	Activity 6	2:09
TVJ	Teodocia Vásquez Joaquín	♀, 51 y.o.	A	Interview (part 1)	11:56
			B	Interview (part 2)	30:56
<b>TOTAL</b>					<b>9:51:04</b>

**TABLE 1.** *List of consultants and overview of the corpus analyzed in this work*

- and dialog in interactive **staged activities**.

Note that any recording that contains *at least some* moments of interview-format conversation is entitled “Interview” in TABLE 1. This does not imply that these recordings *only* contain interview-format conversation. Most of them, in fact, contain moments that qualify as several of the categories of speech performances just listed. The capital letters <A, B, C...> in the fourth column of TABLE 1 identify specific recordings in cases where my corpus contains several recordings by the same speaker (see conventions for “Speaker and utterance references” on p.23). A **sample of excerpts** from the recordings in TABLE 1 are available online at the following address: <<https://www.youtube.com/channel/UCafhTQ1bTrPt6vohQgjEcAw>>. An extensive, **fully-interlinearized transcription of the recording C by LAR** (“Myth of Ngutapa”) is additionally provided in APPENDIX A of the present work.

The main shortcoming of my corpus in terms of variety of included discourse genres is its **lack of texts representing non-staged conversation**. Despite considerable and repeated efforts, I was not able to record non-staged conversations with a sufficient level of audio quality as to allow for their posterior transcription. The steady ground noise in the environment, especially after dawn (insects, in particular) when speakers sit and relax after their day of work, is high in SMA. Because I only had a single head worn microphone at my disposal, at least one speaker in a conversational setting had to be recorded with another type of microphone, but it turned out that even recordings of conversations between no more than two speakers with one of them being recorded with a shotgun (*i.e.* a highly directional) microphone proved insufficiently audible to allow for an accurate and extensive transcription of at least some parts of it. A cultural circumstance that further complicates the recording of conversations in SMAT is the fact that speakers engaged in relaxed conversations with few participants have a strong tendency to talk in a significantly lower voice than in *e.g.* Western European cultures. Exploitable recordings of spontaneous or half-staged conversations in SMAT will require the use of as many head worn microphones as conversation participants.

Of the 10 hours that make my corpus, note that only **about 5 have been entirely transcribed and freely translated into Spanish with the systematic help of one or several speakers**. The transcription and translation of these 5 hours can therefore be considered as highly reliable. The remaining 5 hours have not benefited from such a systematic process of interpretation. For part of them, I only have a systematically verified transcription, but no systematically verified translation, or the other way around. I have been able to verify neither the transcription nor the translation of another part of these remaining 5 hours, which I pre-transcribed by

myself over the course of the research project waiting for an opportunity to verify them. A vast majority of the examples presented in this grammatical description **stem from the part of my corpus that I have been able to fully verify with SMAT speakers**. I only resorted to non-fully verified examples, or exceptionally to unverified examples, in cases where a non-fully verified or unverified example provided a clear and uncontroversial instance of a phenomenon widely attested in the verified part of the corpus. The main two reasons why I was not able to complete the systematic verification of the whole corpus were 1) the irregular availability of speakers, which did not allow me to work as much as I would have liked, and 2) the complexity of the language's tonological system, which for months could make the correct transcription of a single syllable into a long and painful process.

Elicitation and systematic transcription and translation have been mostly conducted with DSG, EAR, JGS, JSG, and LAR, which undoubtedly entails **unintentional biases in this grammatical description towards the subdialectal variants employed by these speakers**.<sup>11</sup>

The recordings that constitute my corpus were made for the most part using a **Zoom Q8 audio-video recorder and a Shure BETA 53 head worn microphone**, which proved an optimum combination of recording quality, ease of use, volume, and weight. Using a head worn microphone, *i.e.* an admittedly relatively invasive device, considerably improved the recording quality (by contrast with any device—including highly directional microphones—placed at a greater distance from the speaker's mouth) without posing cultural issues at any point in the context of SMA. The recordings **included a video whenever possible**, which significantly enriched their posterior analysis. Note that given the tonological complexity of the language,

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<sup>11</sup>The mother of DSG and JSG, two brothers who grew up in SMA, was from the area of the Agua Blanca river, a tributary of the upper Amacayacu river; their father was from the area of the Cotuhé river, a minor tributary of the Putumayo river. EAR and LAR, two sisters, have lived most of their lives in SMA; their mother, GRA, grew up mostly in Caballococha and the upper Loretoyacu river, a minor tributary of the Amazon upriver from the mouth of the Amacayacu; I do not know the geographic origins of their late father, Marcelino Ángel. JGS, finally, grew up mostly in Buenos Aires and Caña Brava, two communities settled on the Cotuhé river, and definitively settled in SMA at the age of 16; I do not have clear data regarding the geographic origins of either of his parents. Note, in any case, that the geographic origins of these speakers and their parents, although they certainly account for most of the linguistic variation that occurs among them, obviously do not account for all the characteristics of their idiolects. EAR and LAR, for instance, two sisters who have lived most of their lives in the same area, diverge on the subdialectal variant of the conjunction *ná'a* ~ *nî-i* 'CONJ' they use, with EAR using the former variant and LAR the latter variant.

among other factors, I opted from the beginning for systematically recording the audio of all elicitation sessions and transcription and translation sessions (see the picture of a typical recording setting of a transcription session in FIGURE 11 at the end of this chapter), which indeed proved extremely useful at later stages of the project by allowing me to verify my own transcriptions once my understanding of the language's phonology had reached sufficient maturity.

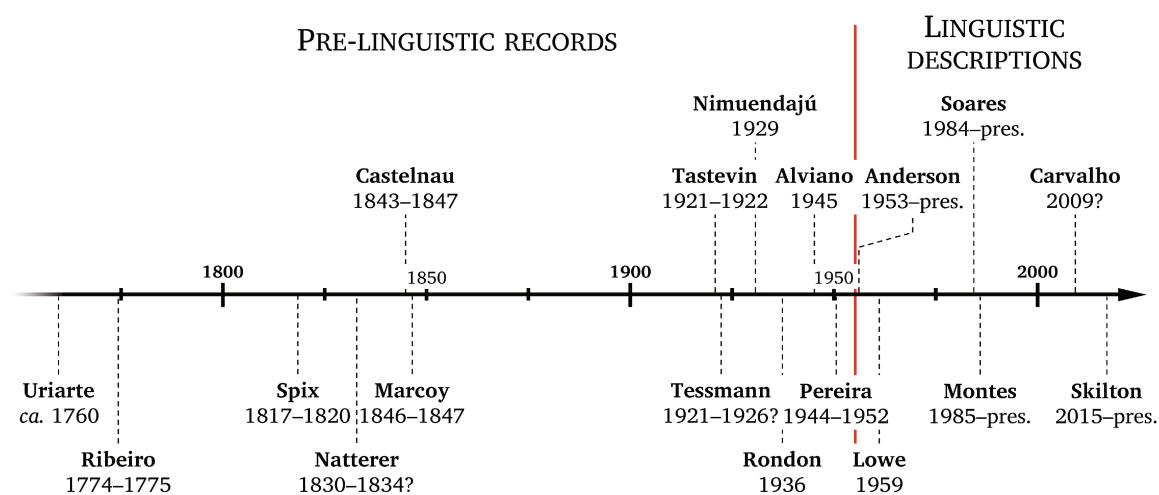
## 1.4 Previous literature and non-linguistically-informed records on Tikuna

In this section, I provide a brief overview of most of the **linguistic literature currently available on the Tikuna language in general**. Linguistically-informed research on the language can be considered to have started in 1953 with SIL linguists D. and L. Anderson's pioneering work on the Cushillococha Tikuna variety. At the end of this section, I additionally give a list of possibly all the **non-linguistically-informed records of the language that pre-date 1953**, most of which are wordlists. Although uneasy to use and of varying length and quality, these pre-linguistic records are of crucial importance as they allow us to directly look into the last two centuries and a half of the language's history, minimally from a lexical perspective, and more hypothetically from a phonological and a morphological perspectives. FIGURE 3 gives a general **chronological overview of these linguistically-informed and non-linguistically-informed works** by plotting on a timeline the names of their authors at the point in time where they collected their data (or started collected them, in cases where the author continues collecting first-hand data on the language to this day).

Skilton (2019:8–9) provides an excellent overview of the major linguistically-informed descriptive works on Tikuna arranged by author. The most complete, and **those I have made most use of in my research**, are the following:

- L. Anderson (1959), a pioneering **research paper on the phonology of Cushillococha Tikuna**, written in English and Portuguese;
- D. Anderson (1962), an extensive **Cushillococha Tikuna self-study course** for English speakers (also available in Spanish as Anderson 2008);
- Anderson & Anderson (2016), an extensive **Cushillococha Tikuna–Spanish dictionary**;





N.B.: dates correspond to time of data collection (*i.e.* not dates of publications).

**FIGURE 3.** *Chronology of non-linguistic records (possibly exhaustive) and linguistic works (major references only) on Tikuna by author name*

- Montes (1995), an extensive **description of the phonology of SMAT**;
- and Montes (2005b), an overall **phonological and morphosyntactic description of SMAT**.

I also greatly benefitted from **personal exchanges on descriptive issues with Amalia H. Skilton**, who has been conducting extensive fieldwork on Cushillococha Tikuna from 2015 onwards. Although I only explicitly refer to these sources when discussing specific aspects of them, I cannot but acknowledge their **fundamental importance for my research**, which they have influenced—directly or indirectly—in many aspects.

I shall limit myself to listing for reference the **remaining most noticeable linguistic works** available on Tikuna by specific field of study:

- **phonetics**: Soares (1984), Carvalho (2010, 2011, 2012);
- **phonology**: Lowe (1960b), Soares (1986), Montes (2000);
- **morphosyntax**: Lowe (1960a), L. Anderson (1966), Soares (1990, 1992b, 2010), Sullón (2009), Silveira (2010), Montes (2019, to appear), Skilton (2017, 2018);
- **semantics and pragmatics**: Skilton (2019);

- **lexicography:** L. Anderson (1958), D. & L. Anderson (1962:373–398);<sup>12</sup>
- **discourse studies:** Gómez-Pulgarín (2012), Cogua (2015);
- **dialectology:** Santos (2005), Montes (2005a);
- **sociolinguistics:** Fagua (2000, 2004).

Although I have made use of a great majority of these studies for the present research, I have done so in a more occasional way.

A number of Tikuna-Spanish/Portuguese bilingual written texts have been published. Although none of them provides complete and fully-consistent phonological information, they may still prove useful to the descriptive linguist for a number of purposes. Note, in particular, the extensive texts in Pinheiro et al. (2014), the transcription of a **first-person life story of a Brazilian Tikuna leader**, and Goulard & Montes (2016), the transcription of most episodes of the **mythological cycle of Ngutapa and his children as told by a traditional storyteller**. D. Anderson (1962:282–353) contains virtually the only **extensive written texts in any Tikuna variety to feature a complete and consistent phonological transcription** (as well as a close translation into English). Finally, a complete **translation of the New Testament** in Cushillococha Tikuna coordinated by D. and L. Anderson (2008), complemented with a **comprehensive and good-quality audio recording** by native speakers,<sup>13</sup> provides a valuable source for the descriptive linguist interested in formal aspects of the language.

Also useful to the descriptive linguist is a **large amount of anthropological, ethnozoological, and ethnobotanical literature** on all aspects of the life of the Tikunas. The most comprehensive works among them are Nimuendajú (1948, 1952), which remain excellent sources three quarters of a century after they were written, and Goulard (1994, 2009).

For additional lists of references on the Tikuna language and culture, see Goulard

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<sup>12</sup>Nimuendajú (1932:573–580), although the phonological forms it provides are devoid of any tonological information, can still prove useful to this day for lexicographic purposes. I am additionally aware of the existence of an unpublished dictionary of a Brazilian Tikuna variety (or varieties) whose compilation was coordinated by Marília Facó Soares (on the project from which this manuscript presumably resulted, see Soares 1996).

<sup>13</sup>This audio recording is available online at the following address: <<https://live.bible.is/bible/TCATBL/MAT>>.

(1989)<sup>14</sup> and Fabre (2019).

Before proceeding to the next section, here is a possibly exhaustive list of the **pre-1953 non-linguistically-informed records of Tikuna** arranged by time of collection (see FIGURE 3 for a representation of this list in chronological form):

- three mostly monolingual **jesuitic missionary texts** in Tikuna (“Act of Contrition”, “Method for baptizing Tikunas”, and “Method for confessing Tikuna neophytes”) produced at an unknown date between 1750 and 1768 by an anonymous collector (perhaps Manuel J. Uriarte) (in Uriarte 1729–1790, folios 20 (?) and 250–253; published as Uriarte 1952);
- in-text mention of two lexical items collected in 1774 or 1775 by Francisco Xavier Ribeiro de Sampaio (in Ribeiro de Sampaio 1825:68);
- a **Latin-Tikuna wordlist** (plus scattered lexical items) collected between 1817 and 1820 by Johann Baptist von Spix (in Martius 1867:159–161, 413–486);
- a **German-Tikuna wordlist** collected at an unknown date between 1830 and 1834 by Johann Natterer (in Natterer 1833);
- a **French-Tikuna wordlist** collected between 1843 and 1847 by Francis de Castelnau (1851:298–299);
- a **French-Tikuna wordlist** (plus the in-text mention of one lexical item) collected in 1846 or 1847 by Paul Marcoy (in Marcoy 1869:321–322);
- a **French-Tikuna wordlist** collected in 1921 or 1922 by Constant Tastevin (published with the French entries translated into Spanish in Tastevin 1996);
- a **German-Tikuna wordlist** (plus scattered lexical items) collected at an unknown date between 1921 and 1926 by Günter Tessmann (in Tessmann 1930: 559–565);
- a **Portuguese-Tikuna wordlist**, a **German-Tikuna wordlist**, and scattered lexical items collected between 1929 and 1945 by Curt Nimuendajú (in Nimuendajú 1977[1929], 1930, 1932, 1948, and 1952);
- a **Portuguese-Tikuna wordlist** collected in 1936 by Cândido M. S. Rondon (1948:249–255);

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<sup>14</sup>I have not had access to this reference.

- a non-linguistically informed **grammar**, a **Tikuna-Portuguese dictionary**, a thematic **Portuguese-Tikuna dictionary**, and a **Portuguese-Tikuna phrase-book** based on data collected between 1926 (?) and 1945 by Fidelis de Alviano (in Alviano 1945);
- a **Portuguese-Tikuna wordlist** collected between 1944 and 1952 by Nunes Pereira (in Pereira 1966).

Note that except in SECTION 2.8, I do not make an extensive use of these sources in the present primarily synchronic grammatical description. However, as noted above, these sources are of major importance to whoever is interested in the diachrony of Tikuna.

## 1.5 Typological profile of San Martín de Amacayacu Tikuna

SMAT **phonetics and phonology** display **little complexity at the segmental level**. The language features a small inventory of segmental phonemes (11 consonants, 6 vowels) with relatively straightforward realization rules. The segmental syllable-complexity is rather low (with a segmental syllabic structure that can be summarized as  $/(C)V(V)(?)/$ ). Segments are only marginally concerned by morphophonological processes. By contrast, SMAT exhibits a **high complexity at the suprasegmental level**. The position of stress, which systematically falls on the first syllable of certain classes of (mostly) free morphemes and is absolutely fixed, poses no particular difficulty, nor does the syllabic feature of nasality, whose occurrence in certain syllables is entirely determined by the lexicon and does not give rise to phonological spreading. However, the language displays a large inventory of tonemes (10 according to my analysis) whose phonetic realizations involve both pitch and phonation features. Every single underlying syllable possesses its own lexically-assigned toneme, which in specific morphosyntactic contexts of high frequency in discourse may be affected by complex morphotonological processes.

SMAT **morphology** can probably be characterized as being **predominantly agglutinative**, although it is also, **to a large extent, fusional** (with one-to-one correspondence between forms and grammatical features being overall more common, but one-to-many correspondence being much more than marginal). Morphemes are **prototypically syllabic**, *i.e.* consist of one or several complete syllables and cannot comprise segments that would have to be syllabified together with neigh-

boring morphemes in order to be realized (excepting cases involving the consonant /ʔ/). The correspondence between the shape of morphemes and their function (*i.e.*, from the practical perspective of the analyst, the identification of morphemes) is relatively straightforward in most domains of the morphological system of the language, except in the **complex inflectional morphology of the finite predicative phrase**, due to extensive fusion, syncretism, and homophony between unrelated morphemes in this domain.

SMAT **nouns** are morphologically distributed in **independent nouns** (stressed free forms) and **bound nouns** (unstressed bound forms). The language features **five nominal classes**. Agreement for nominal class, which manifests itself throughout the nominal phrase and in the indexation of participants within the predicative phrase, is obligatory. The assignment of participants to a given nominal class in discourse, however, is flexible even within a single speech event and depends in complex ways on lexical, semantic, and pragmatic criteria. Nominal phrases in subject and object syntactic function are left unmarked (*i.e.* occur in the zero-case). By contrast, non-core syntactic functions are encoded, in most cases, by means of a **rich system of case-marking suffixes and relational nouns** that are attached to the nominal phrase. This tendency to dependent-marking coexists with an opposite tendency to head-marking in cases where a nominal phrase comes after (instead of before) the predicative phrase, in which case its syntactic function is preferably marked through indexation within the predicative phrase (in cases where indexes are available for participants in the corresponding syntactic function) and the nominal phrase itself is left unmarked for syntactic function.

SMAT completely **lacks a class of adjectives**. Modification of nominal phrases typically realized by means of adjectives in other languages is regularly realized in SMAT by the subject relativization of stative predicative phrases. The language does possess, by contrast, a **reduced class of adverbs**, whose single function is to directly modify the predicative phrase.

**Predicative phrases** in SMAT can be **verbal** (*i.e.* based on a typically monosyllabic verb root) or **non-verbal**. Verb roots, which may receive inflectional morphology of the finite predicative phrase as they stand, have access to a rich paradigm of derivational suffixes most of which encode the nature of the spatial relation that holds between a figure (the subject or object participant) and a ground at the culminating phase of the process. They also frequently incorporate nominal constituents. Both verbal and non-verbal predicative phrases may additionally receive one or several of a number of derivational suffixes encoding categories such as *Aktionsart*, aspect, mood, intensity, or number, among others. The **intricate**

**inflectional morphology of the finite predicative phrase** provides slots for the indexation of subject and object arguments, as well as that of participants in the accusative (a syntactic function distinct from that of (core) object), benefactive, locative, and partitive object syntactic functions. The inflection of the predicative phrase additionally encodes predicative class (an ultimately lexical feature of predicative phrases, which are distributed in five predicative classes) and, optionally, associated motion (*i.e.* the occurrence of a backgrounded motion event prior to the main process). The encoding of **tense is completely absent from the domain of the predicative phrase**. Tense is encoded instead within the nominal phrase (“nominal tense”) or by means of clause-level enclitics.

SMAT can be broadly characterized as a **nominative-accusative language**. The unique argument of intransitive predicative phrases (U) can indeed be said to align with the agent argument of transitive predicative phrases (A, as opposed to its patient argument P) as far as the encoding of their syntactic function is concerned (although this alignment can really only be observed in the indexation of these arguments within the predicative phrase, but not if these arguments are expressed as syntactically free nominal phrases, in which case nothing allows to tell how U, A, and P—which are all left unmarked—align). Note, however, that the effect of certain derivational suffixes of the verb root or the predicative phrase follows an **ergative-absolutive alignment** (*e.g.* the plural allomorph of some of these suffixes encodes the plurality of U or P, but never A).

It is unclear whether an **unmarked order of main constituents** (or Basic Word Order) can be detected in SMAT from a pragmatic perspective. Only the relative ordering of the subject (S) and the object (O) is constrained in (rare) cases where both of them are expressed as nominal phrases and occur before the predicative phrase (V) (✓SOV, not \*OSV). Apart from \*OSV, however, all possible orders occur in apparently any type of clause (in slightly varying morphosyntactic structures) without, in most cases, one of them being clearly identifiable as less marked than the others pragmatically. From a strictly morphosyntactic perspective, however, the order S(O)V can be considered as the least marked insofar as it is the one that requires the least morphosyntactic material.

A **rich system of particles and clause-level enclitics** encode notions of tense, aspect, mood, evidentiality, and polarity, among others.

Aspects of SMAT grammar that might currently be of **particular interest to typologists** are the language’s rich tonological system (see SECTIONS 2.4, 2.6.2, and 2.7.3), its system of nominal classes characterized by obligatory agreement but

flexible assignment (see Bertet to appear), its system of derivational suffixes of the verb root encoding figure-ground configurations (see SECTION 4.2.3), its unmarked passive construction (see SECTION 4.5.3.1), its simplex, binary feature of associated motion (see SECTION 5.8), the variety of strategies it uses to encode within the predicative phrase the number feature of third person participants (see SECTION 5.10), and its deictic verb (see SECTION 6).

### 1.6 Organization of this grammatical description

The remainder of this grammatical description is organized as follows. CHAPTER 2 describes **SMAT phonetics and phonology** at depth, starting from the inventory of segmental phonemes of the language, and going on to describe its rich suprasegmental inventory, its phonotactics (*i.e.* how phonemes are combined into syllables and morphemes), and its morphophonology (*i.e.* how morphemes are combined into words). The chapter further explores aspects of SMAT phonology related to contact with other languages (phonology of loanwords and code-mixing) and aspects of its diachrony. It closes with a presentation of the practical orthography employed in all the other divisions of this study for transcribing SMAT.

CHAPTERS 3 to 7 deal with **SMAT morphosyntax**. CHAPTER 3 gives an introduction to the general structure of the **nominal phrase** and proceeds to provide detailed accounts of the morphology and the syntactic distribution of some of its constituting elements (independent nouns and bound nouns, pronouns, non-locative demonstratives, and linker). It closes with a brief introduction to the encoding of the syntactic functions of nominal phrases in the language.

CHAPTERS 4 to 6 explore in detail the **morphosyntax of the predicative phrase (PP)**. CHAPTER 4 first introduces the **general structure of the PP**. It goes on to describe in detail the rich non-inflectional morphology to which only verbal PPs have access (derivational suffixes of the verb root and incorporation of nominal constituents), as well as the morphology that gives rise to the formation of various types of non-verbal PPs. The chapter closes with a description of the derivational suffixes to which both verbal and non-verbal PPs have access.

CHAPTER 5 proceeds to present the relatively intricate **inflectional morphology of the finite PP** in SMAT. It first provides a general introduction to the eight-slot inflectional template of the PP and to the grammatical functions fulfilled by the morphemes (proclitics for the most part) that compose this template (indexation of participants with various syntactic functions, encoding of associated motion, en-

coding of predicative—or “conjugation”—class; note that none of these functions relates to tense, aspect, or mood). The functional distribution of the three Inflectional Types (Indicative, Imperative, and Subjunctive Inflectional Types), which constitute the three values of the last inflectional category of the SMAT PP, is described next. The encoding of Inflectional Type does not possess a specific locus within the inflectional template of the PP, but is expressed instead through the use of one or the other of the three slightly different paradigms of morphemes that are available in certain slots of the template. The chapter proceeds to give a detailed formal account of the inflectional morphology of the slots of the template whose paradigms vary as a function of Inflectional Type, followed by an account of the morphology of the slots whose paradigms remain identical across the three Inflectional Types. It closes with functional discussions of two of the grammatical categories encoded in the inflection of the PP in SMAT (associated motion and predicative class), and a discussion of the various strategies—inflectional or not—by which the language may encode the number feature of participants from within the PP.

CHAPTER 6 deals with the morphology and the functional distribution of the **SMAT deictic verb**, whose meaning can be roughly glossed as ‘to do thus’. The deictic verb, although it inflects for the exact same categories as regular PPs, features a unique, completely irregular inflectional paradigm, which is the main reason why it is treated in a separate chapter.

Finally, CHAPTER 7 explores at length one aspect of the **morphosyntax of the clause in SMAT**, specifically the expression of **negative polarity**.

This grammatical description additionally features **three appendices**. APPENDIX A contains the contextualized and **fully-interlinearized transcription of a 22-minute long recording** of episodes of the mythological cycle of Ngutapa and his children as told in SMAT by Loida Ángel Ruiz. The main chapters of this work regularly refer to segments of this text, where grammatical phenomena under discussion can be observed in a fully explicit discursive context.

APPENDIX B provides for reference an exhaustive **glossary of the lexical morphemes** mentioned anywhere in this grammatical description.

Finally, APPENDIX C **summarizes in French** the main findings of this study.

Note that an exhaustive **index of the grammatical morphemes** mentioned anywhere in this work is featured at the end of the volume.





**FIGURE 4.** *On the Amacayacu river heading to San Martín de Amacayacu*





**FIGURE 5.** *One of the docks of San Martín de Amacayacu on the Amacayacu river*





**FIGURE 6.** *View from the lower school building on the communal maloca at the heart of San Martín de Amacayacu*



**FIGURE 7.** *View from San Martín de Amacayacu's communal maloca on typical modern Tikuna housing*





**FIGURE 8.** *Eusevio Curico Cayetano in a newly-cleared swidden*





**FIGURE 9.** *LAR and Eusevio Curico Cayetano mashing cooked manioc and sweet potatoes to prepare manioc beer for a communal labor party*





**FIGURE 10.** *HGA and MVG in their house*



**FIGURE 11.** *JSG and Denis Bertet working on the transcription of a recording*





# Chapter 2

## Phonetics and phonology

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This chapter deals with SMAT phonetics and phonology. The language's **segmental underlying units** and their realizations are described in SECTION 2.1. They compose a relatively small inventory of 11 consonant phonemes (among which no nasal nor liquid consonants) and 6 vowel phonemes. Only one consonant, the glottal stop, may occur in coda position, in which case moderately complex rules determine its surface realization.

SMAT's suprasegmental underlying units are discussed next. **Stress**, whose occurrence and position are fixed on the first syllable of certain types of morphemes (verb roots and independent nouns in particular), and whose function can consequently be said not to be contrastive but demarcative, is the topic of SECTION 2.2. **Nasality**, a feature anchored at the level of the syllable, is the topic of SECTION 2.3. SMAT's **unusually rich toneme inventory**, one of the language's most intriguing aspects, is dealt with at some length in SECTION 2.4, from a descriptive perspective as well as from a cross-linguistic and an areal perspective.

SECTION 2.5 is dedicated to SMAT **phonotactics**, *i.e.* to the way the underlying units presented in SECTIONS 2.1–2.4 may—or may not—be **combined into syllables**.

SECTION 2.6 describes the major **morphophonological phenomena** that occur in the language. Such phenomena obtain both at the segmental and tonological levels in SMAT. The language’s complex patterns of morphosyntactically-conditioned tonological alternations, in particular, are covered in detail in this section.

SECTION 2.7 discusses aspects of SMAT segmental and suprasegmental phonology that relate to **contact situations** the language has experienced or is still experiencing with other languages spoken in the Western Amazonian region. This section explains in particular how tonemes are attributed to borrowed words, and even to words inserted in a SMAT context by code-mixing with Spanish, so that such words, like native SMAT words, should feature one toneme per underlying syllable.

SECTION 2.8 briefly explores a few topics in the **diachrony** of SMAT’s phonological system.

Finally, SECTION 2.9 introduces the **practical orthography** that I employ in the following chapters of this study for transcribing SMAT.

## 2.1 Segmental inventory

This section on SMAT’s inventory of segmental phonemes and on their phonetic realization is divided in three subsections. The 11 **consonant phonemes** that occur in onset syllabic position are introduced first, in SECTION 2.1.1. The 6 **vowel phonemes**—and the 2 combinations of these—that occur in nucleus syllabic position are discussed next, in SECTION 2.1.2. Finally, the **only phoneme to occur in coda syllabic position underlyingly, specifically the glottal stop /ʔ/**, and the relatively complex rules that determine its realization, are the topic of SECTION 2.1.3.

### 2.1.1 Onset consonant phonemes

The main consonantal phones attested on the surface in onset syllabic position are listed in TABLE 2. TABLE 3 provides a phonological analysis of these phones.

As shown in TABLE 3, the 19 consonantal phones in TABLE 2 can be analyzed as

Manner of articulation	Place of articulation						
	<i>bilabial</i>	<i>lab. bilabial</i>	<i>alveolar</i>	<i>palatal</i>	<i>velar</i>	<i>lab. velar</i>	<i>glottal</i>
voiceless stop	[p]		[t̥]		[k]	[kʷ]	[ʔ]
voiceless affricate				[t͡ʃ]			
voiceless fricative		[ɸʷ]					
voiced stop	[b]		[d]		[g]		
voiced affricate				[d͡ʒ]			
tap			[ɾ]				
non-nasal approximant				[j]		[w]	
nasal stop	[m]		[n]	[ɲ]	[ŋ]		
nasal approximant						[w̃]	

TABLE 2. *Inventory of native SMAT consonantal phones*

Manner of articulation	Place of articulation					
	<i>bilabial</i>	<i>alveolar</i>	<i>palatal</i>	<i>velar</i>	<i>lab. velar</i>	<i>glottal</i>
[-voice]	/p/	/t/	/t͡ʃ/	/k/	/kʷ/	/ʔ/
	[p, m]	[t, n]	[t͡ʃ, ɲ]	[k]	[kʷ ~ ɸʷ, w̃]	[ʔ]
[+voice]	/b/	/d/	/d͡ʒ/	/g/	/w/	
	[b, m]	[d, ɾ, n]	[d͡ʒ ~ j, ɲ]	[g]	[w, w̃]	
			/∅/ <sup>a</sup>			
			[ɲ, ŋ]			

<sup>a</sup> This symbol stands for an empty consonantal onset in stressed syllable.TABLE 3. *Inventory of native SMAT consonant phonemes with their corresponding allophones*

Manner of articulation	Place of articulation (of consonant phoneme)					
	<i>bilabial</i>	<i>alveolar</i>	<i>palatal</i>	<i>velar</i>	<i>lab. velar</i>	<i>glottal</i>
[–voice]	/pa <sup>34</sup> / [ <sup>1</sup> pa <sup>34</sup> ] ‘be full’	/ta <sup>43</sup> / [ <sup>1</sup> ta <sup>43</sup> ] ‘be big’	/tɕa <sup>22</sup> / [ <sup>1</sup> tɕa <sup>22</sup> ] ‘anoint’	/ka <sup>22</sup> / [ <sup>1</sup> ka <sup>22</sup> ] ‘stab’	/k <sup>w</sup> a <sup>MC</sup> / [ <sup>1</sup> k <sup>w</sup> aa~ <sup>1</sup> ɸ <sup>w</sup> aa] ‘know’	/ʔa <sup>22</sup> / [ <sup>1</sup> ʔa <sup>22</sup> ] ‘sing’
[+ voice]	/ba <sup>33</sup> / [ <sup>1</sup> ba <sup>33</sup> ] ‘pour’	/da <sup>34</sup> / [ <sup>1</sup> da <sup>34</sup> ] ‘chop’	/ɖa <sup>22</sup> / [ <sup>1</sup> ɖa <sup>22</sup> ] ‘grow’	/ga <sup>34</sup> / [ <sup>1</sup> ga <sup>34</sup> ] ‘lead’	/wa <sup>MC</sup> / [ <sup>1</sup> wa <sup>MC</sup> ] ‘tip over’	
				/( $\emptyset$ )a <sup>MC</sup> / [ <sup>1</sup> ŋaa] ‘be raw’		

TABLE 4. Set of (near-)minimal pairs exemplifying contrasts between consonant phonemes in native SMAT stressed morphemes

being the realizations of **11 consonant phonemes** or underlying units. Contrasts between these 11 phonemes are exemplified by the set of (near-)minimal pairs displayed in TABLE 4. An additional hapax phoneme /fi/, not featured in TABLE 3, has to be posited to account for a phone [fi] occurring in only one morpheme in the language, /o<sup>31</sup>fi<sup>1</sup>fi<sup>3</sup>/ [ŋɔ:<sup>31</sup>fi<sup>1</sup>fi<sup>3</sup>] ‘nocturnal rat sp.’.<sup>15</sup> Note that a symbol for empty consonantal onsets in stressed syllables (/Ø/) is included in TABLE 3. This inclusion is not meant to imply that such empty onsets are positive phonemes, but simply allows all consonantal phones from TABLE 2—including [ŋ]—to be featured in TABLE 3 along with their phonological analysis. For more details on the realization of empty consonantal onsets in stressed syllables, see end of this section.

The realizations of the phonemes in TABLE 3 are discussed in the following paragraphs.

The **phoneme /d/** has two major realizations in non-nasal syllables. These stand

<sup>15</sup>Species unidentified. This independent noun is also phonologically exceptional for displaying the phoneme /o/ in unstressed syllables (see SECTION 2.5). A consultant (JSG) told me that this word is onomatopoeic in nature and mimics the [fiɔfiɔfiɔ] sound that the animal makes.

in strict complementary distribution: the phoneme is typically realized as the denti-alveolar [ɖ] in stressed syllables and as the alveolar tap [ɾ] in unstressed syllables. Contrast for instance its realization in stressed syllable in examples (1a) and (2a) with its realization in unstressed syllables in examples (1b) and (2b):

- |     |    |  |   |             |
|-----|----|--|---|-------------|
| (1) | a. | /de <sup>31</sup> /                                    | [ <sup>ɖ</sup> de <sup>31</sup> ]                   | ‘liquor’    |
|     | b. | /tu <sup>33</sup> de <sup>1</sup> /                    | [ <sup>ɖ</sup> tu <sup>33</sup> ɾe <sup>1</sup> ]   | ‘dock’      |
| (2) | a. | /du <sup>21</sup> /                                    | [ <sup>ɖ</sup> du <sup>21</sup> ]                   | ‘like this’ |
|     | b. | /i <sup>5</sup> = du <sup>3</sup> = to <sup>22</sup> / | [i <sup>5</sup> ru <sup>31</sup> tɔ <sup>22</sup> ] | ‘sit down!’ |

I have occasionally observed [ɖ] (*i.e.* the usual allophone of /d/ in non-nasal stressed syllables) to be pre-nasalized as [<sup>n</sup>ɖ] in older speakers (*e.g.* HGA). I have also observed [ɾ] (*i.e.* the usual allophone of /d/ in non-nasal unstressed syllables) to freely vary with realizations such as the retroflex stop [ɖ], the retroflex tap [ɾ], or the alveolar trill [r] in older speakers (the former two in *e.g.* GSG’s speech, the latter in *e.g.* TVJ’s).

In most speakers, the **phoneme** /ɖ/ is realized [ɖ] in both stressed and unstressed non-nasal syllables. In some older speakers, however (*e.g.* LAR, GSG), /ɖ/ may be freely realized as [ɖ] or [j] mostly in pre-tonic syllables (but also occasionally in post-tonic or even in stressed syllables). A realization of /ɖ/ as [j] in a pre-tonic non-nasal syllable is shown in the following example:

- |     |   |   |
|-----|---|---|
| (3) | /pe <sup>3</sup> = ɖa <sup>3</sup> = ~bu <sup>34</sup> -~?e?-~?u/ | [pe <sup>3</sup> ja <sup>31</sup> mũ: <sup>34</sup> ?ẽ <sup>4</sup> ?ũ <sup>4</sup> ] |
|     | (more common realization:   | [pe <sup>3</sup> ɖa <sup>3</sup> ...])  |
|     | ‘you shall multiply them’ <sup>16</sup> [LAR E204]                |   |

The free variant [j] for /ɖ/ might be a conservative realization that reflects that phoneme’s former regular realization (see SECTION 2.8.1).

The **phoneme** /k<sup>w</sup>/ has two major realizations in free variation in non-nasal syllables. It may be heard either as the labialized velar stop [k<sup>w</sup>] or—more frequently—as the labialized bilabial fricative [ɸ<sup>w</sup>], as shown in the following example:

<sup>16</sup>In the phonological representations, a tilde symbol placed in front of the segmental components of a given syllable (/~.../) indicates that this syllable is phonologically nasal (see SECTION 2.3 below).

- (4) /k<sup>w</sup>e<sup>21</sup>/                      [k<sup>w</sup>ɛ<sup>21</sup>]~[ϕ<sup>w</sup>ɛ<sup>21</sup>]                      ‘to shoot’

The former variant is in all likelihood the more conservative realization and is mostly found in older speakers or in careful speech. The latter is frequent in speakers of all ages, although less so in older speakers. The fricative variant [ϕ<sup>w</sup>] may occasionally be delabialized to [ϕ]. The phoneme /k<sup>w</sup>/ **only occurs in a dozen of morphemes**. Note that it is relatively frequent in discourse, however, given that some of these morphemes are of very common use (e.g. /k<sup>w</sup>a<sup>MC</sup>/ [k<sup>w</sup>aɑ]~[ϕ<sup>w</sup>aɑ] ‘to know’).

The **phoneme /tɕ/**, which is regularly realized as the palatal affricate [tɕ] in non-nasal syllables, may be exceptionally heard as the palatal fricative [ç] in the oldest speakers (e.g. MVG). Most occurrences of this free variant in my corpus occur in traditional singing, as is the case in the following example:

- (5) /tɕau<sup>21</sup>-tu<sup>4/1</sup>ku<sup>3</sup>/                      [(<sup>(1)</sup>ɕaŭ<sup>(21)</sup>tɕu<sup>(4)</sup>ku<sup>(3)</sup>]  
       (ordinary realization:                      [tɕaŭ<sup>21</sup>...])  
       ‘my aunt’<sup>17</sup> [MVG B34]

The variant [ç] for /tɕ/ might be a conservative realization that reflects the former regular realization of that phoneme (see SECTION 2.8.1).

The **phoneme /g/**, although typically realized as the velar stop [g], may be heard as the velar approximant [ɣ] in unstressed syllables, especially in rapid speech among younger speakers (e.g. JSG).

The **phoneme /ʔ/**, whether in onset syllabic position or in coda syllabic position (see SECTION 2.1.3 below), often fails to involve full closure of the glottis and is instead realized as a short period of stiff voice phonation superimposed on the surrounding vocalic environment (as is cross-linguistically common; see Ladefoged & Maddieson 1994:75).

In **nasal syllables**, the bilabial consonant phonemes /b/ and /p/ are realized as [m], the alveolars /t/ and /d/ as [n], the palatals /tɕ/ and /dʒ/ as [ɲ], and the labialized velars /k<sup>w</sup>/ and /w/ as [w̃]. The phoneme /ʔ/ is realized [ʔ] in both non-

<sup>17</sup>Tones, stress, and vowel length are extrapolated from the ordinary spoken modality in the phonetic transcription of examples extracted from songs. The singing genre represented in this example and example (8) below does not reflect any properties of the tones of the ordinary spoken modality.



nasal and nasal syllables. The phonemes /k/ and /g/ do not occur in nasal syllables. Note that I represent phonological syllabic nasality with a tilde symbol placed in front of the segmental components of the syllable (/~.../). For more details on the syllabic feature [ $\pm$ nasal] and its effects on the realization of segmental phonemes, see SECTION 2.3.

An **epenthetic velar nasal [ŋ]** automatically fills empty consonant onsets in stressed syllables, whether non-nasal or nasal. This phenomenon is illustrated in the following examples, in non-nasal syllables—(6a–6b)—and in nasal syllables—(6c–6d):

- (6) a. /( $\emptyset$ )u<sup>22</sup>/                    [ʔŋu<sup>22</sup>]                    ‘tree sp.’<sup>18</sup>  
 b. /( $\emptyset$ )o<sup>MC</sup>/                    [ʔŋo<sup>o</sup>]                    ‘be visible’  
 c. /~( $\emptyset$ )a<sup>33</sup>/                    [ʔŋã<sup>33</sup>]                    ‘lowland paca’<sup>19</sup>  
 d. /~( $\emptyset$ )o<sup>MC</sup>/                    [ʔŋõ<sup>õ</sup>]                    ‘bite’

In a handful of very frequently occurring words where this epenthetic velar nasal [ŋ] immediately precedes a front vowel /e/, some younger speakers (e.g. JGS) have a strong tendency to replace it with a palatal nasal [ɲ], as shown in the following examples:

- (7) a. /( $\emptyset$ )e<sup>21</sup>ta<sup>5</sup>/                    [ʔɲe<sup>21</sup>ta<sup>5</sup>]~[ʔɲe<sup>21</sup>ta<sup>5</sup>]                    ‘where?.ALOC’  
 b. /~( $\emptyset$ )e<sup>36</sup>-~ba<sup>4/1</sup>/                    [ʔɲẽ<sup>36</sup>mã<sup>1</sup>]~[ʔɲẽ<sup>36</sup>mã<sup>1</sup>]                    ‘and then’  
 c. /~( $\emptyset$ )e<sup>33</sup>gu<sup>1</sup>~ba<sup>4</sup>/                    [ʔɲẽ<sup>33</sup>gu<sup>1</sup>mã<sup>4</sup>]~[ʔɲẽ<sup>33</sup>gu<sup>1</sup>mã<sup>4</sup>]                    ‘at that point’

I have also observed the epenthetic velar nasal [ŋ] to **optionally fill empty consonant onsets in unstressed syllables**. Such epenthesis almost only occurs in traditional singing by older speakers, as in the following example:

- (8)    /~da<sup>4</sup> = i<sup>1</sup> = ~ɲi<sup>34</sup>    ga<sup>4</sup> = ~da<sup>31</sup>-a<sup>1</sup>~de<sup>1</sup>/  
     [nã<sup>(4)</sup>ɲĩ<sup>(1)(1)</sup>ɲĩ(:)<sup>(34)</sup>    ga<sup>(4)(1)</sup>nã(:)<sup>(31)</sup>ɲã<sup>(1)</sup>nẽ<sup>(1)</sup>]  
 (ordinary realization:                    [nĩ<sup>4</sup>ĩ<sup>1</sup>ɲĩ<sup>34</sup>                    ga<sup>4</sup>nã<sup>31</sup>ã<sup>1</sup>nẽ<sup>1</sup>])  
 ‘... was the land ...’<sup>20</sup> [MVG C19]

<sup>18</sup>*Theobroma bicolor*.

<sup>19</sup>*Cuniculus paca*.

<sup>20</sup>See note 17.

## 2.1.2 Vowel phonemes

TABLE 5 provides an inventory of the language’s 6 **vowel phonemes** along with their attested realizations. Contrasts between these phonemes are exemplified by the set of (near-)minimal pairs displayed in TABLE 6.

The mid vowel **phonemes transcribed as /e/ and /o/** in TABLE 5 are typically realized as the genuine mid vowels [e̞] and [o̞] respectively (*i.e.* neither as the close-mid vowels [e, o] nor as the open-mid vowels [ɛ, ɔ]).

The **phoneme transcribed as /u/** is typically realized as the unrounded close back vowel [u], although it may occasionally be slightly fronted into the unrounded close central vowel [ɨ], especially when it immediately follows the palatal consonant phonemes /t͡ɕ/ or /t͡ʃ/, as in the following example:

- (9) /t͡ɕu<sup>34</sup>ta<sup>3</sup>/                      [t͡ɕu:<sup>34</sup>t͡a<sup>3</sup>] ~ [t͡ɕi:<sup>34</sup>t͡a<sup>3</sup>]                      ‘to get dark’

Stressed syllables may feature one of two sequences of two vowel nuclei in a row, specifically the **sequences /ai/ and /au/**. These are realized as the diphthongs [aĩ] and [aũ] respectively (or [ãĩ] and [ãũ] in nasal or nasalized syllables; see below), as in examples (10a–10b), unless they are separated by a glottal stop on the surface, as in (22c) (see SECTION 2.1.3.1). An additional sequence, /ou/ [oũ], is marginally attested in onomatopoeic words, as in (10d), and in the interjection /ʔou<sup>43</sup>/ [ʔoũ<sup>43</sup>] ‘Yes?, What?’ (used in reply to someone else’s call). No other sequences of vowel nuclei within a single syllable are attested in my data.

- (10) a. /ʔai<sup>43</sup>du<sup>4</sup>we<sup>4</sup>/                      [ʔaĩ<sup>43</sup>ru<sup>4</sup>wɛ<sup>4</sup>]                      ‘manatee’<sup>21</sup>  
 b. /tau<sup>33</sup>ke<sup>1</sup>/                      [taũ<sup>33</sup>kɛ<sup>1</sup>]                      ‘cemetery’  
 c. /~da<sup>4</sup> = tau<sup>ʔ34</sup>/                      [nã<sup>4</sup>t͡a:<sup>34</sup>ʔu<sup>3</sup>]                      ‘he’s not there’  
 d. /to<sup>MC</sup> pou<sup>21</sup>/                      [t͡o̞ p̞oũ<sup>21</sup>]                      ‘splish splash!’

The **nasal allophones of the vowel phonemes** in TABLE 5 regularly occur in **nasal syllables** (as in the first syllable of the words in examples (11b), (12b), and (13)) and, via **surface nasality spreading**, in nasalized non-nasal syllables that follow a nasal syllable. Surface nasality spreads “to the right” from any nasal syllable up to the next consonant other than /ʔ/ or to the end of the prosodic word. In

<sup>21</sup>*Trichechus inunguis*.

Height	Place of articulation		
	front	central	back
high	/i/ [i, î]		/ɯ/ /u/ [ɯ, û, ʌ] [u, û]
mid	/e/ [ɛ, ě]		/o/ [ɔ, õ]
low		/a/ [a, ā]	

TABLE 5. Inventory of SMAT vowel phonemes with their corresponding allophones

Height	Place of articulation (of vowel phoneme)		
	front	central	back
high	/pi <sup>34</sup> / [ <sup>l</sup> pi <sup>34</sup> ] 'wipe'		/bu <sup>43</sup> /pu <sup>43</sup> / [ <sup>l</sup> bɯ <sup>43</sup> ] [ <sup>l</sup> pu <sup>43</sup> ] 'split' 'be bitter'
mid	/pe <sup>43</sup> / [ <sup>l</sup> pɛ <sup>43</sup> ] 'sleep'		/po <sup>43</sup> / [ <sup>l</sup> pɔ <sup>43</sup> ] 'bend'
low		/pa <sup>43</sup> / [ <sup>l</sup> pa <sup>43</sup> ] 'be dry'	

TABLE 6. Set of (near-)minimal pairs exemplifying contrasts between vowel phonemes in SMAT stressed morphemes

other words, rightwards surface nasality spreading is automatic within the prosodic word after a nasal syllable, but it only affects vowel phonemes, and all consonant phonemes except for /ʔ/ are opaque to this process. This phenomenon is illustrated in examples (11–13) (the arrows below the phonetic representations symbolize the extent of surface nasality spreading).

- (11) a. /tɕau<sup>21</sup>-e<sup>4</sup>/            [tɕaũ<sup>21</sup>ẽ<sup>4</sup>]            ‘my mother’  
       b. /~i<sup>43</sup>-e<sup>4</sup>/                [ɲĩ:<sup>43</sup>ẽ<sup>4</sup>]                ‘her mother’
- (12) a. /tɕau<sup>21</sup>-ʔe<sup>4</sup>tɰ<sup>1</sup>/        [tɕaũ<sup>21</sup>ʔe<sup>4</sup>tɰ<sup>1</sup>]        ‘my eye’  
       b. /~i<sup>43</sup>-ʔe<sup>4</sup>tɰ<sup>1</sup>/        [ɲĩ:<sup>43</sup>ʔẽ<sup>4</sup>tɰ<sup>1</sup>]        ‘her eye’
- (13) /~i<sup>43</sup>-e<sup>4</sup>-ʔe<sup>4</sup>tɰ<sup>1</sup>/        [ɲĩ:<sup>43</sup>ẽ<sup>4</sup>ʔẽ<sup>4</sup>tɰ<sup>1</sup>]        ‘her mother’s eye’

Although much less systematic, surface nasality spreading may also occur “to the left” in rapid speech, especially when the nasal syllable that triggers it lacks an onset or has an onset /ʔ/, as shown in the following example:

- (14) /ʔau<sup>ʔ33</sup>-~a<sup>4</sup>tɕi<sup>4/1</sup>/        [ʔãũ<sup>33</sup>ʔã<sup>4</sup>tɕi<sup>4</sup>]        ‘to get sad’

The realization [ũ], which stands for /ɰ/ in **nasal or nasalized syllables**, is very frequently replaced with a syllabic nasal [ŋ] in syllables that lack a consonant onset—as in example (15a)—and less frequently in syllables with an onset /ʔ/—as in (15b–15c). The place of articulation of this syllabic nasal ([ɱ], [ɲ], [ɳ], or [ŋ]) is determined by its immediate phonetic environment.

- (15) a. /pɔ<sup>43</sup>~ɰ<sup>1</sup>/                ([pɔ<sup>43</sup>ũ<sup>1</sup>]~)[pɔ<sup>43</sup>ŋ<sup>1</sup>]        ‘bread’  
       b. /~ʔɰ<sup>33</sup>pa<sup>3</sup>/                [ʔũ:<sup>33</sup>pa<sup>3</sup>]~[ʔɱ:<sup>33</sup>pa<sup>3</sup>]        ‘formerly’  
       c. /tɕau<sup>21</sup>-~ʔɰ<sup>1</sup>ta<sup>1</sup>-gu<sup>4</sup>/    [tɕaũ<sup>21</sup>ʔũ<sup>1</sup>ta<sup>1</sup>]~[tɕaũ<sup>21</sup>ŋ<sup>1</sup>ta<sup>1</sup>]    ‘by my side’

For more details on the syllabic feature [ $\pm$ nasal] and its effects on the realization of segmental phonemes, see SECTION 2.3.

**Vowels in onsetless pre-tonic syllables**—which are always unspecified for syllabic nasality—tend to be slightly nasalized and breathy-voiced when they come first in the prosodic word, as shown in example (16a) (see also (2b) above). This also occurs in the onsetless first syllable of prosodically independent function words that are usually left unstressed, as in (16b) (see also (128) below).

- (16) a. /i<sup>3</sup> = d̥u<sup>22</sup>/                      [ĩ<sup>31</sup> d̥u<sup>22</sup>]                      ‘she died’  
 b. /~e<sup>33</sup>du<sup>4</sup>/                      ([ŋ̥ẽ<sup>33</sup>ru<sup>4</sup>]~)[ẽ<sup>3</sup>ru<sup>4</sup>]                      ‘because’

### 2.1.3 Consonant phoneme /ʔ/ in underlying coda position

The only phone that may occur in coda syllabic position is [ʔ], which I analyze as a realization of the underlying segmental phoneme /ʔ/. In this position, /ʔ/ may only contrast with its own absence, as shown by the minimal pairs in examples (17–19):

- (17) a. /do<sup>43</sup>-gu<sup>4</sup>/                      [d̥õ<sup>43</sup>gu<sup>4</sup>]                      ‘be soft (pl.)’  
 b. /doʔ<sup>43</sup>-gu<sup>4</sup>/                      [d̥õʔ<sup>43</sup>gu<sup>4</sup>]                      ‘be unripe (pl.)’
- (18) a. /ku<sup>31</sup>-~de<sup>1</sup>/                      [ku<sup>31</sup>n̥ẽ<sup>1</sup>]                      ‘your (sg.) tree’  
 b. /ku<sup>31</sup>-ʔ~de<sup>1</sup>/                      [kuʔ<sup>31</sup>n̥ẽ<sup>1</sup>]                      ‘your (sg.) weapon’
- (19) a. /~i<sup>31</sup>-ka<sup>1</sup>/                      [ŋ̥ĩ<sup>31</sup>ka<sup>1</sup>]                      ‘her liver’  
 b. /~iʔ<sup>31</sup>ka<sup>1</sup>/                      [ŋ̥ĩʔ<sup>31</sup>ka<sup>1</sup>]                      ‘to till (a patch of land)’

Note that a coda /ʔ/ may belong morphologically together with the syllable that precedes it (as in (17b), /doʔ<sup>43</sup>/ ‘be unripe’) or with the syllable that follows it (as in (18b), /-ʔ~de<sup>1</sup>/ ‘weapon’). In the latter case, a syllable boundary always separates the coda /ʔ/ from the rest of the morpheme it belongs to. I will call a coda /ʔ/ of the former type a **same-syllable coda** /ʔ/, and one of the latter type a **pre-syllabic coda** /ʔ/. The syllable that a same-syllable coda /ʔ/ belongs with may further be **either a stressed or an unstressed syllable** (a pre-syllabic coda /ʔ/, by contrast, can only belong together with an unstressed syllable).

Thus, **three subtypes of coda /ʔ/’s** are to be distinguished, as summarized in TABLE 7, where the exact position of each subtype of coda /ʔ/ within the syllabic structure is precisely identified. The different context-dependent phonological behaviors of these three subtypes are dealt with in the following sections. In cases where a coda /ʔ/ occurs inside an unanalyzable morpheme (*i.e.* not at either of its edges, as in (19b), /~iʔ<sup>31</sup>ka<sup>1</sup>/ ‘to till’), its subtype cannot be determined with certainty, and is in any case irrelevant since, by definition, the phonological context of such coda /ʔ/’s does not vary.

	<b>Coda /ʔ/ belongs morphologically together with a stressed syllable</b>	<b>Coda /ʔ/ belongs morphologically together with an unstressed syllable</b>
<b>Same-syllable coda /ʔ/</b>	(C)V <sub>1</sub> (V <sub>2</sub> )ʔ e.g. /tuʔ <sup>33</sup> / ‘to fell’, /ʔauʔ <sup>33</sup> / ‘to cry’	-(ʔ)CVʔ <sup>a</sup> e.g. /-taʔ <sup>4</sup> / ‘grandchild’, /-ʔtaʔ <sup>4</sup> / ‘lake’
<b>Pre-syllabic coda /ʔ/</b>	—	-ʔ.CV(ʔ) e.g. /-ʔpuʔ <sup>3</sup> / ‘cloth’, /-ʔtaʔ <sup>4</sup> / ‘lake’

<sup>a</sup> Enclitics may also feature a same-syllable coda /ʔ/ (*i.e.* not only suffixes), like *e.g.* /=taʔ<sup>4</sup>/ ‘FRUSTR’.

TABLE 7. *The three subtypes of coda /ʔ/’s*

Note that it is relatively frequent in discourse—although far from systematic, especially in rapid speech—for a **glottal stop to occur at the end of unstressed syllables immediately before pause**, as in the following example (see also occurrences of /=ta<sup>1</sup>/ ‘ADD’ as [...t̩aʔ<sup>1</sup>] in (76) below):

- (20) /~e<sup>33</sup>-~ba<sup>4/1</sup>-~a<sup>1</sup>ku<sup>1</sup> ~di<sup>4</sup>i<sup>1</sup> = ~ʔi<sup>34</sup> t̩a<sup>1</sup> = ʔu<sup>22</sup>-ku<sup>4/1</sup>t̩i<sup>5</sup>ʔu<sup>1</sup>-~ʔu<sup>4</sup>  
 [l̩ɛ̃:<sup>33</sup>mã<sup>1</sup>ã<sup>1</sup>ku<sup>1</sup> nĩʔ<sup>4</sup> t̩a<sup>1</sup>ʔu:<sup>22</sup>ku<sup>4</sup>t̩i<sup>5</sup>ʔi<sup>4</sup>  
 this way it is that I make manioc beer  
 i<sup>1</sup> = t̩o<sup>21</sup>-~ba<sup>4/1</sup>/  
 ĩ<sup>1</sup>t̩o:<sup>21</sup>mã<sup>1</sup> [ʔ<sup>h</sup>]  
 me  
 ‘That’s how I make manioc beer.’ [LAR D329]

This particular [ʔ] is never found at the end of stressed syllables and elsewhere than before pause. It is most likely not lexical, *i.e.* it is most likely absent from the underlying representation of the morphemes at the end of which it occurs. It might rather be intonational in nature, *i.e.* it might be a marker that encodes features of whole utterances, and not of morphemes or words. Although its exact distribution and function remain unclear, it may be tentatively characterized as an **utterance completion marker**, which signals that an utterance is now complete and finished. This would explain why it may occur at the end of a wide array of unstressed morphemes which otherwise display no signs of featuring an underlying /ʔ/. This would also explain why it does not seem to occur at the end of topicalized phrases when these precede the main predicative phrase of the utterance they belong with

and are followed by a pause. This [ʔ] seems to be especially common at the end of certain morphemes when these occur before pause, such as the anaphoric /-~ba<sup>4/1</sup>/, the subordinator /-~ʔur<sup>4</sup>/, the various inflectional forms of the relativizer, and the additive enclitic /=ta<sup>1</sup>/. This observation might in practice simply be due to a comparatively high frequency of occurrence of these morphemes utterance-finally; I have not tested this hypothesis, however. An adequate description of the glottal stop discussed in this paragraph would require further research; in any case, there is no doubt that it is unrelated to the underlying /ʔ/'s dealt with in the following sections.

### 2.1.3.1 Same-syllable coda /ʔ/ belonging with a stressed syllable

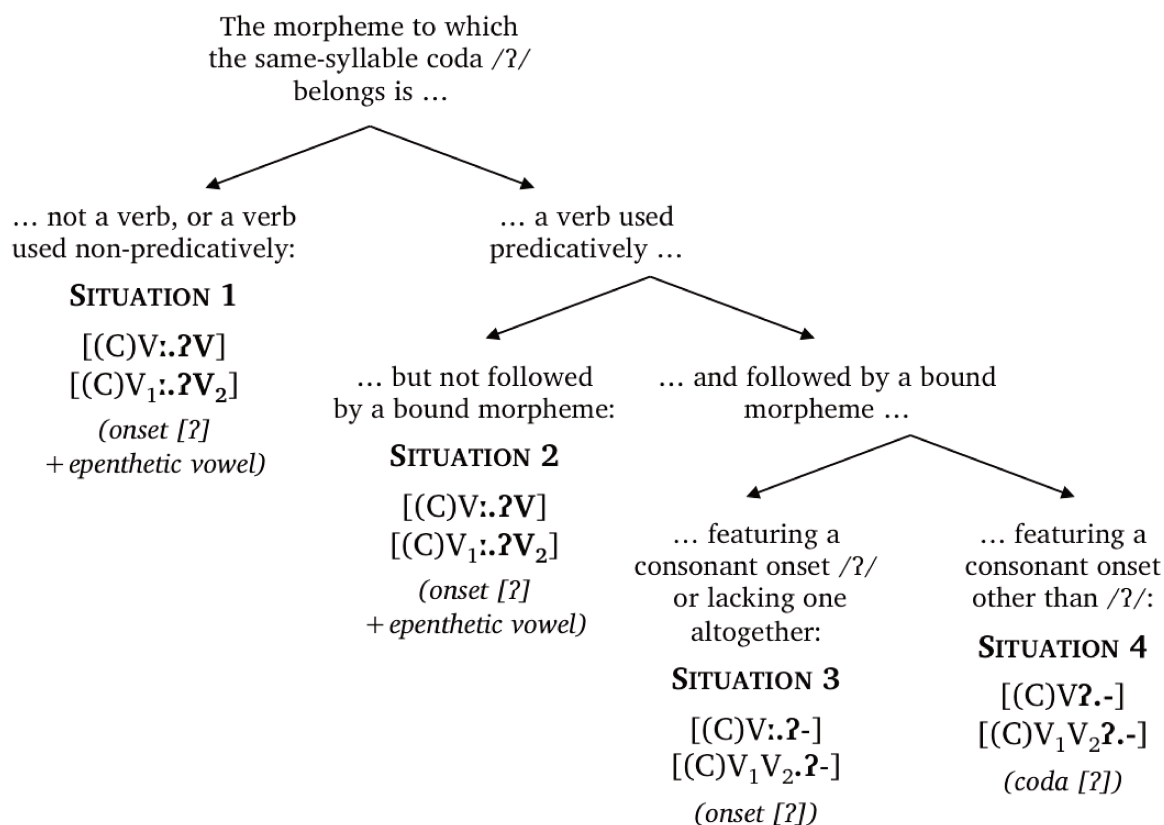
In practice, same-syllable coda /ʔ/'s may only be detected in monosyllabic (*i.e.* not in polysyllabic) stressed morphemes. They are realized in all contexts, but depending on the context they may be syllabified either as a coda [ʔ] or as an onset [ʔ], and they may or may not trigger the emergence of an epenthetic vowel right after them.

As shown in FIGURE 12, four situations may be distinguished, yielding three different surface outputs for syllables containing a same-syllable coda /ʔ/.

**(i) SITUATION 1.** If the morpheme the same-syllable coda /ʔ/ belongs to is **not a verb, or is a verb used non-predicatively (non-finite verb form)**, then on the surface that morpheme acquires a second syllable whose onset is [ʔ] and whose vowel nucleus is an epenthetic vowel (yielding [(C)V:ʔV] or [(C)V<sub>1</sub>:ʔV<sub>2</sub>]). The quality of that epenthetic vowel is determined by the underlying vowel nucleus of the morpheme (see below).

Examples (21a–21b) display independent nouns containing a same-syllable coda /ʔ/. Example (21c) shows a zero-derived nominalization of the verb /ɕur<sup>31</sup>/ ‘to dance’, yielding the meaning ‘dancing’, followed by the locative case marker /-wa<sup>5</sup>/ ‘ALOC’.

- (21) a. /oʔ<sup>CM</sup>/                      [ʔŋoʔoʔ<sup>3</sup>]                      ‘spirit’



**FIGURE 12.** Realization of same-syllable coda /ʔ/'s belonging with a stressed syllable according to context

- |  |   |                              |
|--|---|------------------------------|
| b. /tauʔ <sup>22</sup> -guʔ <sup>4</sup> / | [t̪a:ʔ <sup>22</sup> ʔu <sup>3</sup> guʔ <sup>4</sup> ] | ‘toucans’ <sup>22</sup>      |
| c. /d̪uʔ <sup>31</sup> -waʔ <sup>5</sup> / | [d̪uʔ <sup>31</sup> ʔu <sup>3</sup> waʔ <sup>5</sup> ]  | ‘for dancing, [go] to dance’ |

(ii) **SITUATION 2.** If the morpheme the same-syllable coda /ʔ/ belongs to is a verb used predicatively (finite verb form), but that verb is not followed by a bound morpheme (i.e. a bound noun or a suffix), then that morpheme is realized just as in Situation 1 above (yielding again [(C)V:ʔV] or [(C)V<sub>1</sub>:ʔV<sub>2</sub>]). This is shown in examples (22a–22c).

- |      |   |   |                  |
|------|---|---|------------------|
| (22) | a. /~da <sup>4</sup> = deʔ <sup>34</sup> /  | [nã <sup>41</sup> d̪e:ʔ <sup>34</sup> ʔe <sup>3</sup> ] | ‘it’s yellow’    |
|      | b. /~da <sup>4</sup> = ~duʔ <sup>31</sup> / | [nã <sup>41</sup> nũ:ʔ <sup>31</sup> ʔũ <sup>3</sup> ]  | ‘it’s short’     |
|      | c. /~da <sup>4</sup> = tauʔ <sup>34</sup> / | [nã <sup>41</sup> t̪a:ʔ <sup>34</sup> ʔu <sup>3</sup> ] | ‘he’s not there’ |

<sup>22</sup>Ramphastos tucanus?



As an exception to this rule, these same realizations obtain when a verb used predicatively is **immediately followed by the suffix /-~ʔu<sup>4</sup>/ [...ʔũ<sup>4</sup>] ‘SUB’, by any form of the relativizer suffix, or by the suffix /-ʔgu<sup>4/1</sup>/ [...ʔgu<sup>4</sup>] ~ [...ʔgu<sup>1</sup>] ‘CIRC’**. The former case is illustrated in example (23a) and the latter in (23b):<sup>23</sup>

- (23) a. /~da<sup>4</sup> = deʔ<sup>34</sup>-~ʔu<sup>4</sup>/ [nã<sup>41</sup> d̥ɛ:<sup>34</sup> ʔɛ<sup>4</sup> ʔũ<sup>4</sup>] ‘(that) it’s yellow’  
 b. /~duʔ<sup>31</sup>-ʔe<sup>1</sup>/ [ˈnũ:<sup>31</sup> ʔũ<sup>5</sup> ʔe<sup>1</sup>] ‘a short one (e.g. a machete)’

As shown in TABLE 8, the **epenthetic vowel** that regularly arises in Situations 1 and 2 is in most cases a **copy vowel** identical in quality to the vowel nucleus of the stressed syllable containing the same-syllable coda /ʔ/ (first five rows in TABLE 8). In two cases (sixth and seventh rows), specifically when the vowel nucleus of the stressed syllable containing the same-syllable coda /ʔ/ is an /a/ or what I label here an /o<sub>2</sub>/, the arising **epenthetic vowel** is [u] rather than a copy vowel. Note that the distinction exceptionally made in TABLE 8 between a subtype of the phoneme /o/ represented as /o<sub>1</sub>/ and another one represented as /o<sub>2</sub>/ is a purely lexical one: this distinction is only relevant in SMAT phonology in the present context and reflects the fact that some—in practice, a majority of—stressed morphemes with a same-syllable coda /ʔ/ featuring the nucleus /o/ trigger a mere copy vowel in Situations 1 and 2 (these are represented here as featuring /o<sub>1</sub>/), while others—in practice, a minority—cause an [u] to arise (these are represented here as featuring /o<sub>2</sub>/; for another instance of /o<sub>2</sub>/, see example (21a) above).<sup>24</sup> Finally, in cases where the vowel nucleus of the stressed syllable containing the same-syllable coda /ʔ/ is complex, *i.e.* when that nucleus is /ai/ or /au/ (last two rows), the position of the epenthetic vowel is occupied by the **second vowel component** of that complex vowel nucleus. Non-underlying syllables arising on the surface due to the insertion of an epenthetic vowel after a same-syllable coda /ʔ/ belonging with a stressed syllable are **realized with a tone [3]** (see end of SECTION 2.4.3 below), unless they occur in a morphosyntactic context where morphotonological alternations apply

<sup>23</sup>On the tonal realization of the non-underlying syllables arising due to the insertion of an epenthetic vowel in these examples, see end of SECTION 2.4.3.

<sup>24</sup>This /o<sub>1</sub>/ vs /o<sub>2</sub>/ distinction, a strictly lexical one with no corresponding phonetic reality in today’s language, possibly reflects the fact that a number of instances of the phoneme /o/ in contemporary SMAT (among which all cases of /o<sub>2</sub>/) may have evolved diachronically from former \*[a]’s (or a phone close to [a]). This would explain why some /o/’s, specifically /o<sub>2</sub>/’s, seem to behave as /a/’s as far as the epenthetic vowel they trigger is concerned. On this complex question, see SECTION 2.8.3.

Underlying form	Realization in Situations 1 and 2	Example
/ (C) iʔ <sup>X</sup> /	[Ci: <sup>X</sup> ʔi <sup>3</sup> ]	/~wiʔ <sup>52</sup> / [ˈwĩ: <sup>52</sup> ʔĩ <sup>3</sup> ] ‘to slip’
/ (C) eʔ <sup>X</sup> /	[Ce: <sup>X</sup> ʔe <sup>3</sup> ]	/teʔ <sup>34</sup> / [ˈtɛ: <sup>34</sup> ʔɛ <sup>3</sup> ] ‘to get stuck’
/ (C) o <sub>1</sub> ʔ <sup>X</sup> /	[Co: <sup>X</sup> ʔo <sup>3</sup> ]	/ɕo <sub>1</sub> ʔ <sup>34</sup> / [ˈɕo: <sup>34</sup> ʔo <sup>3</sup> ] ‘to chew’
/ (C) uʔ <sup>X</sup> /	[Cu: <sup>X</sup> ʔu <sup>3</sup> ]	/kuʔ <sup>22</sup> / [ˈku: <sup>22</sup> ʔu <sup>3</sup> ] ‘to kick’
/ (C) uʔ <sup>X</sup> /	[Cu: <sup>X</sup> ʔu <sup>3</sup> ]	/buʔ <sup>22</sup> / [ˈbu: <sup>22</sup> ʔu <sup>3</sup> ] ‘to bite’
/ (C) aʔ <sup>X</sup> /	[Ca: <sup>X</sup> ʔa <sup>3</sup> ]	/~aʔ <sup>34</sup> / [ˈɲã: <sup>34</sup> ʔã <sup>3</sup> ] ‘be full’
/ (C) o <sub>2</sub> ʔ <sup>X</sup> /	[Co: <sup>X</sup> ʔo <sup>3</sup> ]	/go <sub>2</sub> ʔ <sup>22</sup> / [ˈgɔ: <sup>22</sup> ʔo <sup>3</sup> ] ‘to toast’
/ (C) aiʔ <sup>X</sup> /	[Ca: <sup>X</sup> ʔi <sup>3</sup> ]	/aiʔ <sup>33</sup> / [ˈɲa: <sup>33</sup> ʔi <sup>3</sup> ] ‘to penetrate’
/ (C) auʔ <sup>X</sup> /	[Ca: <sup>X</sup> ʔu <sup>3</sup> ]	/ɕauʔ <sup>21</sup> / [ˈɕa: <sup>21</sup> ʔu <sup>3</sup> ] ‘to wash’

**N.B.:** /<sup>X</sup>/ stands for any toneme. On the distinction between two subtypes of the phoneme /o/ (specifically /o<sub>1</sub>/ and /o<sub>2</sub>/) exceptionally made in this table, see p.78.

**TABLE 8.** *Epenthetic vowel inserted after a same-syllable coda /ʔ/ belonging with a stressed syllable*

(see end of SECTION 2.6.2.1 below). For a mostly identical pattern of contextually-conditioned realization of vowels in a different situation, see SECTION 2.6.1.1.

The epenthetic vowel that arises in Situations 1 and 2 allows to **prevent coda /ʔ/'s to surface as coda [ʔ]'s at the end of syntactic words**, which is avoided in most contexts in the language. Note, however, the series of three exceptional monosyllabic stressed words in examples (24a–24c). For an unknown reason, their same-syllable coda /ʔ/'s do not trigger the appearance of an epenthetic vowel and are always realized as coda [ʔ]'s. That is how they differ on the surface from another series of underlyingly identical words which, for their part, always display epenthetic vowels; these words are shown in parentheses in examples (24a–24c).

- (24) a. /~duʔ<sup>22</sup>/ [ˈnũ:ʔ<sup>22</sup>] ‘all around here (PLOC)’  
 (≠ /~duʔ<sup>22</sup>/ [ˈnũ:<sup>22</sup>ʔũ<sup>3</sup>] ‘be here’)
- b. /~eʔ<sup>22</sup>/ [ˈɲɛ:ʔ<sup>22</sup>] ‘all around there (PLOC)’  
 (≠ /~eʔ<sup>22</sup>/ [ˈɲɛ:<sup>22</sup>ʔɛ<sup>3</sup>] ‘be there’)
- c. /ɕeʔ<sup>22</sup>/ [ˈɕɛ:ʔ<sup>22</sup>] ‘all around over there (PLOC)’  
 (≠ /ɕeʔ<sup>22</sup>/ [ˈɕɛ:<sup>22</sup>ʔɛ<sup>3</sup>] ‘be over there’)

Another exceptional situation where a [ʔ] may occur at the end of a syntactic word is in vocative truncated forms (see SECTION 2.6.1.3).

(iii) **SITUATION 3.** If the morpheme the same-syllable coda /ʔ/ belongs to is a verb used predicatively and followed by a bound morpheme, and if that bound morpheme lacks a consonant onset or features a consonant onset /ʔ/, then the same-syllable coda /ʔ/ is syllabified as an onset [ʔ] forming a single syllable together with the vowel nucleus of the bound morpheme (yielding [(C)V:ʔ-] or [(C)V<sub>1</sub>V<sub>2</sub>.ʔ-]). This is shown in the following examples :

- (25) a. /~da<sup>4</sup> = pu<sup>22</sup>-a<sup>1</sup>~de<sup>1</sup>/ [nã<sup>41</sup>pu:<sup>22</sup>ʔa<sup>1</sup>nẽ<sup>1</sup>] ‘the sky is white’  
 b. /ku<sup>3</sup> = tɕa<sup>3</sup> = ~da<sup>3</sup> = tu<sup>33</sup>-~ʔe<sup>4</sup>/  
 [ku<sup>3</sup>tɕa<sup>3</sup>nã<sup>31</sup>tɕu:<sup>33</sup>ʔẽ<sup>4</sup>ʔẽ<sup>3</sup>] ‘I have you cut it’  
 c. /~da<sup>4</sup> = ʔai<sup>34</sup>-e<sup>3</sup>/ [nã<sup>41</sup>ʔaĩ<sup>34</sup>ʔe<sup>3</sup>] ‘they are drunk’

(iv) **SITUATION 4.** Finally, if the morpheme the same-syllable coda /ʔ/ belongs to is a verb used predicatively and followed by a bound morpheme, and if that bound morpheme features a consonant onset other than /ʔ/, then the same-syllable coda /ʔ/ is syllabified as a coda [ʔ] belonging together with the syllable it is part of underlyingly (yielding [(C)Vʔ.-] or [(C)V<sub>1</sub>V<sub>2</sub>.ʔ-]). This is shown in the following examples :

- (26) a. /tɕa<sup>3</sup> = ~da<sup>3</sup> = tɕu<sup>34</sup>-na<sup>4/1</sup>/ [tɕa<sup>3</sup>nã<sup>31</sup>tɕu<sup>34</sup>nã<sup>4</sup>] ‘I disembowel it’  
 b. /~da<sup>4</sup> = de<sup>34</sup>-ʔpa<sup>3</sup>tɕi<sup>ʔC</sup>/ [nã<sup>41</sup>dẽ<sup>34</sup>pa<sup>3</sup>tɕi<sup>ʔ3</sup>] ‘it has yellow wings’  
 c. /tɕa<sup>3</sup> = dɕa<sup>3</sup> = dɕau<sup>31</sup>-gu<sup>4</sup>/ [tɕa<sup>3</sup>dɕa<sup>31</sup>dɕaũ<sup>31</sup>gu<sup>4</sup>] ‘I catch them’

An epenthetic vowel like those described for Situations 1 and 2 may occasionally occur in Situations 3 and 4, in free variation with the regular output of the latter two situations. While rare, this is not considered incorrect. In example (27), the speaker uses the exact same predicative phrase twice. Although the form employed falls within Situation 3, its first occurrence features an epenthetic vowel. Its second occurrence, by contrast, yields the expected surface output in this situation.

- (27) /~da<sup>4</sup> = ʔau<sup>33</sup>-e<sup>1</sup>tɕa<sup>1</sup>/ ‘he wouldn’t stop crying’  
 First occurrence: [nã<sup>41</sup>ʔaũ<sup>33</sup>ʔe<sup>1</sup>tɕa<sup>1</sup>]  
 Second occurrence: [nã<sup>41</sup>ʔa:<sup>33</sup>ʔu<sup>3</sup>ẽ<sup>1</sup>tɕa<sup>1</sup>]  
 [JSG B294–295]

Furthermore, three words with a same-syllable coda /ʔ/, shown in parentheses in examples (24a–24c) above, always feature an epenthetic vowel, *i.e.* including in

Situations 3 and 4. That is how they differ on the surface from another series of underlyingly identical words which, for their part, never display an epenthetic vowel, *i.e.* including in Situations 1 and 2.

When an onset /ʔ/ or a pre-syllabic coda /ʔ/ (see SECTION 2.1.3.3) immediately follows a same-syllable coda /ʔ/ belonging with a stressed syllable in a context where the latter does not trigger the emergence of an epenthetic vowel right after it (*i.e.* when two [ʔ]’s could be expected to get in contact on the surface), these **two coda /ʔ/’s are merged** and only one [ʔ] is realized. This is shown in the following examples (contact with an onset /ʔ/ in (28a), contact with a pre-syllabic coda /ʔ/ in (28b)):

- (28) a. /deʔ<sup>34</sup>-ʔe<sup>4</sup>tʰu<sup>1</sup>/ [d̚e.<sup>34</sup>ʔe<sup>4</sup>tʰu<sup>1</sup>] ‘to have yellow eyes’  
 (\*[d̚eʔ<sup>34</sup>ʔe<sup>4</sup>tʰu<sup>1</sup>])  
 b. /d̚auʔ<sup>21</sup>-ʔt̚i<sup>5</sup>du<sup>1</sup>/ [d̚auʔ<sup>21</sup>t̚i<sup>5</sup>ru<sup>1</sup>] ‘to wash clothes’  
 (\*[d̚auʔ<sup>21</sup>ʔt̚i<sup>5</sup>ru<sup>1</sup>])

### 2.1.3.2 Same-syllable coda /ʔ/ belonging with an unstressed syllable

Same-syllable coda /ʔ/’s belonging with an unstressed syllable are **realized in all contexts**. They regularly trigger the emergence of a **short epenthetic echo vowel** immediately after them. As shown in the following examples, this echo vowel is always identical in quality to the one that precedes the coda /ʔ/ (contrast the epenthetic vowel that occurs after a same-syllable coda /ʔ/ belonging with a stressed syllable; see previous section):

- (29) a. /t̚au<sup>21</sup>-ta<sup>4</sup>/ [t̚au<sup>21</sup>t̚a<sup>4</sup>a<sup>3</sup>] ‘my grandchild’  
 b. /t̚au<sup>21</sup>-e<sup>4</sup>~deʔ<sup>3</sup>/ [t̚au<sup>21</sup>e<sup>4</sup>ñe<sup>3</sup>ʔe<sup>1</sup>] ‘my brother’<sup>25</sup>  
 c. /t̚o<sup>21</sup>-ʔpa<sup>3</sup>t̚iʔ<sup>C</sup>/ [t̚oʔ<sup>21</sup>pa<sup>3</sup>t̚iʔi<sup>3</sup>] ‘my wing’  
 d. /eʔ<sup>22</sup>tʰuʔ<sup>C</sup>/ [ɲeʔ<sup>22</sup>tʰuʔu<sup>3</sup>] ‘be pubescent’

In rapid speech, this **echo vowel may be optionally deleted**, as in the following example:

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<sup>25</sup>The bound noun /-e<sup>4</sup>~deʔ<sup>[3]</sup>/ [...e<sup>4</sup>ñe<sup>3</sup>ʔe<sup>1</sup>] ‘brother’ has a variant form /-e<sup>4</sup>~deʔ<sup>[C]</sup>/ [...e<sup>4</sup>ñe<sup>3</sup>ʔe<sup>3</sup>].

- (30) /~du<sup>31</sup>-gu<sup>1</sup>-~ba<sup>24</sup> = ~be<sup>24</sup> = ga<sup>4</sup>/      [ˈnuː<sup>31</sup>gu<sup>1</sup>mã<sup>24</sup>mẽ<sup>24</sup>ga<sup>4</sup>]  
 (realization in more careful speech:      [ˈnuː<sup>31</sup>gu<sup>1</sup>mã<sup>4</sup>ʔã<sup>3</sup>mẽ<sup>4</sup>ʔẽ<sup>3</sup>ga<sup>4</sup>])  
 ‘I guess [they got married] to each other [...]’ [IGV 664]

Non-underlying syllables arising on the surface due to the insertion of an epenthetic vowel after a same-syllable coda /ʔ/ belonging with an unstressed syllable are usually **realized with a tone** [<sup>3</sup>] (cases where the lexical toneme of that unstressed syllable is /<sup>5</sup>/, /<sup>4</sup>/ or /<sup>C</sup>/) **or** [1] (cases where the lexical toneme of that unstressed syllable is /<sup>3</sup>/), unless they occur in a morphosyntactic context where morphotonological alternations apply (see end of SECTION 2.4.3 below).

### 2.1.3.3 Pre-syllabic coda /ʔ/

As was previously said, pre-syllabic coda /ʔ/'s always belong morphologically to unstressed syllables, and more specifically to unstressed bound morphemes (*i.e.* suffixes or bound nouns; pre-syllabic coda /ʔ/'s are not allowed in clitics). However, such coda /ʔ/'s may only be realized on the surface as coda [ʔ]'s belonging phonetically with a stressed syllable. In other words, they **may only be realized when the morpheme they are part of immediately follows a stressed syllable**, as in examples (31a) and (32a). When the morpheme they are part of follows an unstressed syllable, they merely remain unrealized, as in (31b–31c) and (32b–32c).

- (31) a. /ʔai<sup>31</sup>-ʔ.ka<sup>C</sup>/      [ˈʔaĩ<sup>31</sup>kã]      ‘for the jaguar’  
 b. /ʔai<sup>31</sup>-gu<sup>4</sup>-ʔ.ka<sup>C</sup>/      [ˈʔaĩ<sup>31</sup>gu<sup>C</sup>(∅)kã]      ‘for the jaguars’  
 c. /ʔai<sup>31</sup>du<sup>5</sup>-gu<sup>4</sup>-ʔ.ka<sup>C</sup>/      [ˈʔaĩ<sup>31</sup>ru<sup>5</sup>gu<sup>C</sup>(∅)kã]      ‘for the dogs’
- (32) a. /to<sup>33</sup>-ʔ.~de<sup>1</sup>/      [ˈtɔʔ<sup>33</sup>nẽ<sup>1</sup>]      ‘our weapon’  
 b. /to<sup>33</sup>-e<sup>4</sup>-ʔ.~de<sup>1</sup>/      [ˈtɔː<sup>33</sup>ɛ<sup>4</sup>(∅)nẽ<sup>1</sup>]      ‘our mother’s weapon’  
 c. /to<sup>33</sup>-~bu<sup>1</sup>ku<sup>3</sup>-ʔ.~de<sup>1</sup>/      [ˈtɔː<sup>33</sup>mũ<sup>1</sup>ku<sup>3</sup>(∅)nẽ<sup>1</sup>]      ‘our friend’s weapon’

A syllable whose onset consonant is /ʔ/ may not feature a pre-syllabic coda /ʔ/. Thus, while *e.g.* the morpheme /-ʔa<sup>3</sup>ku<sup>1</sup>/ ‘daughter’ is attested (syllabic structure /-C<sub>1</sub>VCV/ with C<sub>1</sub> = /ʔ/), no morpheme with a phonological shape such as \*/-ʔ.ʔa<sup>3</sup>ku<sup>1</sup>/ is attested (syllabic structure \*/-ʔ.C<sub>1</sub>VCV/ with C<sub>1</sub> = /ʔ/).

## 2.2 Stress

Part of the language's morphemes feature stress as one of their permanent phonological properties. Morphemes that feature stress are almost always stressed (but see below for cases of stressed morphemes that may be left unstressed in discourse), while morphemes that do not feature stress never are. Whether a morpheme belongs to the category of stressed morphemes or unstressed morphemes is not a lexical property, but rather **depends on the nature of that morpheme**; this distribution is explained below. The position of stress within a stressed morpheme is **determined automatically and is absolutely fixed**. Stressed morphemes always bear stress on their first syllable. Consequently, stress position cannot create contrasts between morphemes.

The **first syllable of independent morphemes**—*i.e.* morphemes that may be uttered on their own, including in particular verbs and independent nouns—is regularly stressed, as in examples (33a–33f). The main phonological function of stress is therefore not a contrastive one, but a **demarcative** one: stress signals the beginning of independent morphemes.

(33)	a.	/tu <sup>34</sup> /	[ <sup>1</sup> tʰu <sup>34</sup> ]	‘cotton’ <sup>26</sup>
	b.	/ʔu <sup>33</sup> /	[ <sup>1</sup> ʔu <sup>33</sup> ]	‘to say; story’
	c.	/tɕe <sup>22</sup> /	[ <sup>1</sup> tɕe: <sup>22</sup> ʔe <sup>3</sup> ]	‘to chop’
	d.	/tɕi <sup>31</sup> di <sup>5</sup> /	[ <sup>1</sup> tɕi <sup>31</sup> ri <sup>5</sup> ]	‘badly’
	e.	/ko <sup>22</sup> wu <sup>4</sup> /	[ <sup>1</sup> kɔ: <sup>22</sup> wu <sup>4</sup> ]	‘deer’ <sup>27</sup>
	f.	/~bo <sup>33</sup> ta <sup>3</sup> da <sup>3</sup> ka <sup>3</sup> di <sup>1</sup> /	[ <sup>1</sup> mɔ̃: <sup>33</sup> ta <sup>3</sup> ra <sup>3</sup> ka <sup>3</sup> ri <sup>1</sup> ]	‘ginger’ <sup>28</sup>

By contrast, dependent morphemes—*i.e.* morphemes that need to associate with some other morpheme to appear in discourse, and more specifically clitics and most bound morphemes—are **entirely unstressed**, as in (34a–86e).

(34)	a.	/-gu <sup>4</sup> /	[...gu <sup>4</sup> ]	‘PL’
	b.	/-ku <sup>4/1</sup> tɕi <sup>4/1</sup> /	[...ku <sup>4</sup> tɕi <sup>4</sup> ]~[...ku <sup>1</sup> tɕi <sup>4</sup> ]	‘in.SG’
	c.	/-pe <sup>3</sup> de <sup>3</sup> ~ba <sup>1</sup> /	[...pe <sup>3</sup> re <sup>3</sup> mã <sup>1</sup> ]	‘upper leg’

<sup>26</sup>*Gossypium* sp.

<sup>27</sup>*Mazama americana*.

<sup>28</sup>Unidentified. Local Spanish *ajengibre*.

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d. /tɕa <sup>3</sup> =/	[tɕa <sup>3</sup> ...]	‘1SG.SBJ’
e. /pa <sup>1</sup> =/	[pa <sup>1</sup> ...]	‘VOC’
f. / = ~ba <sup>3</sup> de <sup>3</sup> /	[...mã <sup>3</sup> re <sup>3</sup> ]	‘just’

A prosodic word may only contain a **single stressed morpheme**—and must contain one—while it may in principle contain **any number of unstressed morphemes**, including none. The stressing rules above equally apply when a single prosodic word is composed of both independent and dependent morphemes, as shown in the following examples:

(35) a. /ʔu <sup>33</sup> -gu <sup>4</sup> /	[ʔu: <sup>33</sup> gu <sup>4</sup> ]	‘stories’
b. /pa <sup>1</sup> = ko <sup>22</sup> wu <sup>4</sup> /	[pa <sup>1</sup> ’kɔ: <sup>22</sup> wu <sup>4</sup> ]	‘Mister Deer!’
c. /ko <sup>22</sup> wu <sup>4</sup> -pe <sup>3</sup> de <sup>3</sup> ~ba <sup>1</sup> -gu <sup>4</sup> = ~ba <sup>3</sup> de <sup>3</sup> /	[’kɔ: <sup>22</sup> wu <sup>4</sup> pe <sup>3</sup> re <sup>3</sup> mã <sup>1</sup> gu <sup>4</sup> mã <sup>3</sup> re <sup>3</sup> ]	‘just deer thighs’
d. /ba = <sup>3</sup> da <sup>4</sup> = dɕa <sup>1</sup> = du <sup>3</sup> = ʔo <sup>43</sup> -gu <sup>4</sup> /	[mã <sup>3</sup> nã <sup>4</sup> dɕa <sup>1</sup> ru <sup>3</sup> ʔɔ: <sup>43</sup> gu <sup>4</sup> ]	‘they have disappeared’

In contradiction to the general rules stated above, **a few dependent morphemes**, such as the personal roots (as in example (36a)), the deictic roots (36b), or the first part of the bipartite deictic verb (36c), are **regularly stressed**.

(36) a. /tɕau <sup>21</sup> -/	[tɕaũ <sup>21</sup> ...]	‘1SG’
b. /~e <sup>33</sup> -/	[’ɲẽ: <sup>33</sup> ...]	‘MED.NS’
c. /~dɕa <sup>36</sup> -/	[’ɲã: <sup>36</sup> ...]	‘to do thus’

Conversely, although they may be stressed, **a few independent function words are in practice left unstressed** in most of their actual occurrences in discourse, as in (37a–37c) (see also (16b) above).

(37) a. /tɕo <sup>31</sup> -ʔdu <sup>3</sup> /	[tɕo <sup>3</sup> ru <sup>3</sup> ]~[’tɕoʔ <sup>31</sup> ru <sup>3</sup> ]	‘my’
b. /du <sup>21</sup> /	[ru <sup>1</sup> ](~[’dũ <sup>21</sup> ])	‘and’
c. /~ba <sup>33</sup> du <sup>3</sup> /	[mã <sup>3</sup> ru <sup>3</sup> ](~[’mã: <sup>33</sup> ru <sup>3</sup> ])	‘PRF’

The main acoustic correlates of stress are **increased duration and, to a lesser extent, increased intensity**. Although this is not always the case in rapid spontaneous speech, stressed syllables have a strong tendency to feature a **duration at**

**least one and a half as long as that of unstressed syllables.** This implies in particular that simplex vowel nuclei (*i.e.* of the shape /V/, not /VV/) not followed by a coda [ʔ] are usually lengthened elsewhere than before pause, as shown in examples (38a–38c). This lengthening is typically omitted, however, when such vowel nuclei immediately precede a pause, as in (38d).

- (38) a. /~da<sup>4</sup> = ~be<sup>43</sup>-ʔ.ku<sup>5</sup>da<sup>1</sup>~ʔu<sup>1</sup>/ [nã<sup>41</sup>**mẽ**<sup>ʔ43</sup>ku<sup>5</sup>ra<sup>1</sup>ʔŋ<sup>1</sup>] ‘it’s beautiful’  
 b. /tɕa<sup>3</sup> = ~da<sup>3</sup> = ~be<sup>43</sup>-~ʔeʔ<sup>4</sup>/ [tɕa<sup>3</sup>nã<sup>31</sup>**mẽ**<sup>ʔ43</sup>ʔẽ<sup>4</sup>ʔẽ<sup>3</sup>] ‘I fix it’  
 c. /~da<sup>4</sup> = ~be<sup>43</sup> dɕa<sup>1</sup> = tɕoʔ<sup>31</sup>du<sup>3</sup>/  
 [nã<sup>41</sup>**mẽ**<sup>ʔ43</sup> dɕa<sup>1</sup>tɕoʔ<sup>31</sup>ru<sup>3</sup>] ‘mine is good’  
 d. /~da<sup>4</sup> = ~be<sup>43</sup>#/ [nã<sup>41</sup>**mẽ**<sup>ʔ43</sup>#] ‘it’s good’

Intensity, presumably because it is significantly affected by laryngeal gestures necessary for the realization of tones, phonation patterns, and glottal stops, is **not a reliable correlate of stress**. The presence of stress in a syllable does not automatically entail a higher intensity compared to other syllables within the same prosodic word. However, a frequent and salient feature of spontaneous speech, which I will call “**expressive emphasis**” and which involves the imposition of series of strong intensity peaks upon ordinary speech for expressive purposes, consistently selects for stressed syllables when it occurs. In example (39), which features a narrow phonetic transcription, stressed syllables are highlighted in bold and expressive emphasis is indicated by underlining. The speaker gets excited by his story and strongly emphasizes a few syllables in his utterance to make it sound more dramatic. All of these emphasized syllables are stressed syllables.

- (39) /~ʔau<sup>21</sup>-~a<sup>1</sup>ku<sup>1</sup> ~di<sup>4</sup>i<sup>3</sup>=~ʔu<sup>43</sup> ~da<sup>43</sup>-~baʔ<sup>4</sup> ~da<sup>4</sup>=guʔ<sup>31</sup>tɕa<sup>1</sup>  
 [ʔã<sup>51</sup>ã<sup>1</sup>ku<sup>1</sup> nĩ<sup>43</sup>ʔũ<sup>43</sup> nã<sup>4</sup>mã<sup>ʔ4</sup> nã<sup>41</sup>**gu**<sup>ʔ31</sup>tɕa<sup>1</sup>  
 awkwardly it walked to it it was hard  
 ga<sup>4</sup>=~daʔ<sup>4</sup> dɕa<sup>1</sup>=~ʔu<sup>31</sup>-~ʔu<sup>4</sup> ~e<sup>33</sup>du<sup>4</sup> ~da<sup>4</sup>=ka<sup>33</sup>-e<sup>1</sup>tɕa<sup>1</sup>/  
 ga<sup>4</sup>nã<sup>ʔ4</sup> dɕa<sup>1</sup>ʔũ<sup>31</sup>ʔũ<sup>4</sup> ẽ<sup>3</sup>ru<sup>4</sup> nã<sup>41</sup>**ka**<sup>33</sup>e<sup>1</sup>tɕa<sup>1</sup>]  
 to walk because it kept lying

‘[A friend and I once left the school’s pigsty open and one of the pigs came out.] It walked so awkwardly! It had a hard time walking because it kept lying all the time [*i.e.* it wasn’t used to walking]!’<sup>29</sup> [IGV 418–419]

<sup>29</sup>For a full morphosyntactic gloss of part of this example, see example (370).



Because the inventory of tonemes is not the same in stressed and unstressed syllables, the way the presence of stress affects pitch as opposed to its absence cannot be evaluated, so that **stress cannot be said to have specific pitch correlates**. However, expressive emphasis, which always targets stressed syllables, does tend to have a general raising effect on pitch. This can be seen in example (39) above, where the first two emphasized syllables (underlined in the narrow phonetic transcription) display distorted tones: under the effect of expressive emphasis, / $\sim$ ?au<sup>21</sup>/ gets realized as [ $\text{'}\text{?}\widehat{\text{a}}\text{u}^{51}$ ] instead of [ $\text{'}\text{?}\widehat{\text{a}}\text{u}^{21}$ ] and /gu<sup>31</sup>tɕa<sup>1</sup>/ as [ $\text{'}\text{g}\text{u}:\text{?}^{51}\text{t}\text{ɕ}\text{a}^1$ ] instead of [ $\text{'}\text{g}\text{u}:\text{?}^{31}\text{t}\text{ɕ}\text{a}^1$ ].

## 2.3 Nasality

Phonological nasality is a **contrastive feature of syllables** (*i.e.* not a feature of individual segments nor a feature of morphemes or larger domains). As a consequence, syllables may only be either fully non-nasal or fully nasal on the surface (“harmonic” for surface nasality). Syllables that would be partly non-nasal and partly nasal (“disharmonic” for surface nasality) are not allowed. This rule of **obligatory harmony for surface nasality** and its phonological interpretation are schematically summarized with bilabial consonant onsets in TABLE 9. Note that I transcribe phonological syllabic nasality by means of a tilde symbol preceding the segmental components of the syllable (/ $\sim$ .../).

The following are sets of (near-)minimal pairs exemplifying the contrast between phonologically non-nasal and nasal syllables:

- |      |    |                                    |  |                |
|------|----|------------------------------------|--|----------------|
| (40) | a. | /pu <sup>31</sup> /                | [ $\text{'}\text{p}\text{u}^{31}$ ]                                      | ‘to get used’  |
|      | b. | /bu <sup>31</sup> /                | [ $\text{'}\text{b}\text{u}^{31}$ ]                                      | ‘be young’     |
|      | c. | / $\sim$ Bu <sup>31</sup> /        | [ $\text{'}\text{m}\widetilde{\text{u}}^{31}$ ]                          | ‘to harpoon’   |
| (41) | a. | /tu <sup>3</sup> =/                | [ $\text{'}\text{t}\text{u}^3\dots$ ]                                    | ‘3S.ACC’       |
|      | b. | /du <sup>3</sup> =/                | [ $\text{'}\text{r}\text{u}^3\dots$ ]                                    | ‘PCrū’         |
|      | c. | / $\sim$ Du <sup>3</sup> =/        | [ $\text{'}\text{n}\widetilde{\text{u}}^3\dots$ ]                        | ‘3M/N/NS.ACC’  |
| (42) | a. | /tɕa <sup>22</sup> /               | [ $\text{'}\text{t}\text{ɕ}\text{a}^{22}$ ]                              | ‘to paint’     |
|      | b. | /ɕa <sup>22</sup> /                | [ $\text{'}\text{ɕ}\text{a}^{22}$ ]                                      | ‘to grow’      |
|      | c. | / $\sim$ Dɕa <sup>33</sup> /       | [ $\text{'}\text{n}\widetilde{\text{a}}^{33}$ ]                          | ‘to run (sg.)’ |
| (43) | a. | /k <sup>w</sup> ai <sup>22</sup> / | [ $\text{'}\text{k}^{\text{w}}\text{a}:\text{?}^{\text{22}}\text{i}^3$ ] | ‘to whip’      |

Harmonic syllable		Disharmonic syllable	
[pa <sup>X</sup> ]	/pa <sup>X</sup> /	(*[pã <sup>X</sup> ])	
[ba <sup>X</sup> ]	/ba <sup>X</sup> /	(*[bã <sup>X</sup> ])	
[mã <sup>X</sup> ]	/~Ba <sup>X</sup> /	(*[ma <sup>X</sup> ])	
[ <sup>l</sup> ŋã <sup>X</sup> ]	/~a <sup>X</sup> /	[ <sup>l</sup> ŋa <sup>X</sup> ]	/a <sup>X</sup> /

N.B.: /<sup>X</sup>/ stands for any toneme.

**TABLE 9.** Schematic illustration of the rule of obligatory harmony for surface nasality with bilabial consonant onsets, including its phonological interpretation

- b. /waiʔ<sup>22</sup>/      [wa:<sup>22</sup>ʔi<sup>3</sup>]      ‘to grind’  
 c. /~K<sup>w</sup>aiʔ<sup>22</sup>/      [wã:<sup>22</sup>ʔi<sup>3</sup>]      ‘to saw’

Note, incidentally, that [m<sup>w̃</sup>] is occasionally heard instead of [w̃] in nasal syllables with a labialized velar onset.

As shown in TABLE 9, the only systematic exception to this pattern of syllabic harmony for surface nasality is the sequence [ŋV<sub>[-nasal]</sub>] occurring in stressed syllables. The following examples exhibit a [ŋ] occurring both—unsurprisingly—in a nasal syllable (44b) and—unexpectedly—in a non-nasal syllable (44a):

- (44) a. /o<sup>MC</sup>/      [ŋo̞o̞]      ‘be visible’  
 b. /~o<sup>MC</sup>/      [ŋo̞õ̞]      ‘to bite’

This exception is not surprising if one analyzes this sequence underlyingly as /V/ and considers that its [ŋ] emerges secondarily as a default surface consonant onset that fills its underlying lack of consonant onset (see end of SECTION 2.1.1).

Note also that the phoneme /ʔ/, whether in onset or coda position, is **realized the same (i.e. as [ʔ]) in phonologically non-nasal and nasal syllables**, as shown in the following two examples:

- (45) a. /ʔa<sup>22</sup>/      [ʔa<sup>22</sup>]      ‘to sing’  
 b. /~ʔa<sup>22</sup>/      [ʔã<sup>22</sup>]      ‘mosquito’

Because a glottal stop is, for articulatory reasons, unspecified for nasality, the fact that the realization of /ʔ/ does not vary according to the phonological nasality fea-

ture of the syllable it belongs to is unsurprising and does not constitute an exception to the general pattern of obligatory harmony for surface nasality.

Possibly the only genuinely irregular exception to the pattern of syllabic harmony for surface nasality in the language occurs in the **particle used for standard negation, which is typically realized as**  $[(\text{'})\text{t}\text{ã}\text{ũ}^{34}]$ <sup>30</sup> (on the standard negative particle, see SECTION 7.2.1). The anomalous co-occurrence of a non-nasal segment  $[\text{t}]$  with a nasal diphthong  $[\text{ã}\text{ũ}]$  within a single syllable in this high-frequency morpheme clearly results from its historical origin as a phonological reduction of  $/\text{ta}^{34}\text{?u}^4\sim\text{?u}\text{u}^4/$   $[\text{'}\text{t}\text{a}:\text{34}\text{?u}^4\text{?ũ}^4]$  ‘nothing’ (this non-reduced form still exists in the language, but exclusively with a function of negative existential indefinite, *i.e.* not that of standard negator; see SECTION 7.3). The phonological nasality of the last syllable of the original form  $/\text{ta}^{34}\text{?u}^4\sim\text{?u}\text{u}^4/$  has been retained in today’s phonologically-reduced monosyllabic form  $[(\text{'})\text{t}\text{ã}\text{ũ}^{34}]$ , giving rise to an anomalous case of a nasality-wise disharmonic syllable. Interestingly, certain speakers tend to denasalize

$[(\text{'})\text{t}\text{ã}\text{ũ}^{34}]$  (whose exact phonological representation is unclear under the analysis of nasality put forward in this section) to  $[(\text{'})\text{t}\text{ã}\text{u}^{34}]$ , a phonologically unsurprising reaction that results in the regularization of the phonetic and phonological forms of the standard negator ( $[(\text{'})\text{t}\text{ã}\text{u}^{34}]$ , by contrast with  $[(\text{'})\text{t}\text{ã}\text{ũ}^{34}]$ , can be straightforwardly represented phonologically as  $/\text{tau}^{34}/$  under the analysis of nasality put forward in this section).

While all other segmental phonemes may occur in nasal syllables, the velar consonant phonemes **/k/ and /g/ do not occur in nasal syllables.**

The presence or absence of nasality in a given syllable is **entirely determined by the lexicon**; there does not exist a single phonological or morphological process in the language that ever affects this feature so as to turn a nasal syllable into a non-nasal one or vice versa.

Note that due to this, there is no language-internal way to tell whether it is a [–voice] consonant phoneme (*e.g.* a /p/) or a [+voice] consonant phoneme (*e.g.* a /b/) that underlies a given nasal consonant on the surface (*e.g.* an [m]). In other words, there is no language-internal way to decide whether a syllable such as

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<sup>30</sup>Note, incidentally, that the surface nasality that occurs in the first syllable of the more conservative variant  $[(\text{'})\text{t}\text{ã}\text{ũ}^{34}\text{?ũ}^4]$  of the standard negative particle is unproblematic as it can be accounted for as a case of anticipatory nasality spreading (on this purely phonetic phenomenon, see SECTION 2.1.2, p.73).

	Place of articulation				
	<i>bilabial</i>	<i>alveolar</i>	<i>palatal</i>	<i>velar</i>	<i>lab. velar</i>
contrastive phoneme pair	/p/ – /b/	/t/ – /d/	/tʃ/ – /dʒ/	/k/ – /g/	/kʷ/ – /w/
realizations in [–nasal] syllable	[p] – [b]	[t̚] – [d̚]	[tʃ̚] – [dʒ̚~j]	[k] – [g]	[kʷ̚~ϕ̚ʷ] – [w]
realization in [+nasal] syllable	[m]	[n]	[ɲ]	—	[w̃]
archiphoneme subsuming the phoneme pair	/B/	/D/	/Dʒ/	—	/W/

TABLE 10. Neutralization of the [ $\pm$  voice] phonological contrast in [+nasal] syllables

one realized [mã<sup>x</sup>] is to be analyzed phonologically as /~pa<sup>x</sup>/ or /~ba<sup>x</sup>/. Strictly speaking, one thus has to consider that the [ $\pm$  voice] feature of onset consonant phonemes, while contrastive in non-nasal syllables, is neutralized in nasal syllables, according to the pattern shown in TABLE 10. Consequently, the phoneme underlying a nasal consonant on the surface is to be viewed as an archiphoneme specified for place of articulation but unspecified for voicing.

In this section, I have transcribed the archiphonemes underlying nasal consonants on the surface with uppercase letters representing—arbitrarily—the [+ voice] member of the pair of phonemes corresponding to each place of articulation (e.g. /B/ for the neutralization of /p/ and /b/, i.e. for a bilabial consonant phoneme unspecified for voice; see examples (40c), (41c), (42c), and (43c) above). For simplicity's sake, however, in the remainder of this study the phonemes underlying nasal consonants on the surface are transcribed as though they were the [+ voice] member of the pair of phonemes corresponding to each place of articulation (e.g. /b/ in nasal syllables stands for /B/). This practical decision is illustrated in example (46). It should not obliterate the cross-linguistically unusual situation displayed by SMAT whereby the contrastive voicing feature of consonants becomes neutral-

ized in nasal syllables.<sup>31</sup>

- (46) [<sup>l</sup>mũ<sup>33</sup>]      ‘to weave’  
 Strict phonological transcription: /<sup>~</sup>Bu<sup>33</sup>/  
 Practical phonological transcription: /<sup>~</sup>bu<sup>33</sup>/

On surface nasality spreading, a purely phonetic phenomenon, see SECTION 2.1.2 above.

## 2.4 Toneme inventory

SMAT’s relatively complex tonology is certainly **among the most interesting aspects of the language’s phonological system**.

The Toneme Bearing Unit (TBU) in SMAT is the syllable. **Each and every syllable**—excepting only, in certain contexts, syllables whose nucleus is an epenthetic vowel—**features a toneme**, whose value is primarily specified by the lexicon.

The language’s toneme inventory is dealt with in the present section. As shown

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<sup>31</sup>See Walker (2003:68, note 16). Indeed, within a domain affected by suprasegmental phonological nasality, it is much more usual for voiced stop and glide phonemes to maintain their contrast with respect to voiceless stop phonemes. While the former are frequent targets of suprasegmental nasality cross-linguistically, the latter are typically blockers or transparent to it, rather than targets (broadly speaking, they either prevent the realization of nasality in neighboring phonemes or allow it without being themselves affected by it on the surface; Walker 2011). In the analysis of nasality that I propose in this section, however, both voiced stop and glide phonemes and voiceless stop phonemes are hypothetically seen as targets of nasality, with both yielding the same phonetic output.

An alternative analysis—among several others—could posit that nasality in SMAT starts from the left edge of the domain (in this case, the syllable) and spreads to the right until it reaches the right edge of the domain. In this analysis, while voiced onsets would be targets for nasality (hence *e.g.* /<sup>~</sup>ba<sup>X</sup>/ → [mã<sup>X</sup>]), voiceless onsets would be blockers (hence *e.g.* /<sup>~</sup>pa<sup>X</sup>/ → [pa<sup>X</sup>], not \*[pã<sup>X</sup>] nor [mã<sup>X</sup>]). This would account for the absence of *e.g.* \*[pã<sup>X</sup>] in SMAT in a cross-linguistically more usual way, without having to posit that voiceless onsets are targets of nasality. From a strictly language-internal perspective, however, I am aware of no evidence that would stand in favor of this analysis rather than the one proposed in this section. Although both analyses are, I believe, equally operational for descriptive purposes, I have deliberately opted for emphasizing what is typologically unusual in the configuration of phonological nasality in SMAT rather than devising a typologically more ordinary analysis that would have tended to underplay it based on language-external theoretical considerations.

<b>Tonemes and their typical realization</b>			
<b>in stressed syllables</b>		<b>in unstressed syllables</b>	
<i>Tonemes with pitch-related contrastive properties (tonemes proper)</i>			
/ <sup>52</sup> /	[ <sup>52</sup> ] contour tone	/ <sup>5</sup> /	[ <sup>5</sup> ] level tone
/ <sup>36</sup> /	[ <sup>36</sup> ] contour tone	/ <sup>4</sup> /	[ <sup>4</sup> ] level tone
/ <sup>43</sup> /	[ <sup>43</sup> ] contour tone	/ <sup>3</sup> /	[ <sup>3</sup> ] level tone
/ <sup>34</sup> /	[ <sup>34</sup> ] contour tone	/ <sup>1</sup> /	[ <sup>1</sup> ] level tone
/ <sup>31</sup> /	[ <sup>31</sup> ] contour tone	/ <sup>4/1</sup> /	[ <sup>4</sup> ] or [ <sup>1</sup> ] level tone
/ <sup>33</sup> /	[ <sup>33</sup> ] level tone		
/ <sup>21</sup> /	[ <sup>21</sup> ] contour tone		
/ <sup>22</sup> /	[ <sup>22</sup> ] level tone		
<i>Tonemes with phonation-related contrastive properties ("phonationemes")</i>			
/ <sup>CM</sup> /	creaky-voiced to modal contour phonation	/ <sup>C</sup> /	creaky-voiced level phonation
/ <sup>MC</sup> /	modal to creaky-voiced contour phonation		

TABLE 11. *SMAT toneme inventory*

in TABLE 11, **stressed syllables feature one of 10 different tonemic values**. The major phonetic exponent of 8 of these tonemic values is a pitch pattern, while that of the last 2 is a phonation pattern (on phonation patterns as “tonemes”, see below). The toneme inventory in stressed syllables is exemplified in detail in SECTION 2.4.1. **Two alternative analyses** of the toneme inventory in stressed syllables, which would have resulted in a reduction of that inventory to less than 10 underlying units, are considered but argued against in SECTION 2.4.2.

**Unstressed syllables feature one of only 6 different tonemic values**. Again, the major phonetic exponent of 5 of these tonemic values is a pitch pattern, while that of the last one is a phonation pattern. The toneme inventory in stressed syllables is discussed in detail in SECTION 2.4.3. Note, incidentally, that two of the tonemic values found in unstressed syllables (<sup>4/1</sup>/ and <sup>C</sup>/) in fact only occur in post-tonic syllables, and not in pre-tonic syllables (on syllabic structure, see SECTION 2.5). However, because the remaining four tonemic values of unstressed syllables are phonologically and phonetically identical in pre- and post-tonic syllables, these two syllable types are dealt with together as far as their tonological properties

are concerned.

The **phonetic realization** of all the tonemes identified in SECTIONS 2.4.1 and 2.4.3 is briefly illustrated on concrete samples in SECTION 2.4.4.

SMAT's **unusually rich toneme inventory**, together with its maximal “syntagmatic toneme density” (*i.e.* the fact that all of its underlying syllables are tonologically specified), is assessed from a cross-linguistic and an areal perspective in SECTIONS 2.4.5 and 2.4.6 respectively.

Relatively complex **morphosyntactically-conditioned processes of tonological alternations**, which may secondarily affect a syllable's lexical toneme, are discussed in SECTION 2.6.2 further below.

Note, importantly, that I **indiscriminately call “tonemes” suprasegmental phonological items whose major phonetic exponent is a tone** (tonemes proper, with pitch-related contrastive properties) **and suprasegmental phonological items whose major phonetic exponent is a phonation pattern** (which could be called “phonationemes”, with phonation-related contrastive properties). For instance, I call “tonemes” both a phonological item typically realized as a pitch contour starting from the tonal height [5] and falling to the tonal height [2] (*i.e.* toneme /<sup>52</sup>/, as in example (47a)) and a phonological item typically realized as a phonation contour starting with modal voice and ending with creaky voice (*i.e.* “toneme” /<sup>MC</sup>/, as in (47b)).

- (47) a. /wi<sup>52</sup>/      [wi<sup>52</sup>]      ‘to cut’  
 b. /gu<sup>MC</sup>/      [gu<sup>u</sup>]      ‘to finish’

The reason why I treat both types of phonological items identically, although they exhibit heterogeneous phonetic exponents, is because they do not constitute two orthogonal features but **belong instead within a single functionally-homogeneous phonological paradigm in SMAT**. Pitch has no phonological relevance in syllables that involve creaky voice phonation; no pair of such syllables consistently contrast for pitch properties under any conditions.<sup>32</sup> Conversely, phonation is but marginally relevant—only to the extent that it is *not* creaky-voiced—in syllables where pitch is the foreground contrastive feature; in these syllables, phonation

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<sup>32</sup>In practice, modal-voiced portions of syllables featuring creaky voice are typically realized with a pitch approximately corresponding to the tonal height that I transcribe as [2], but this is not always the case.

is regularly modal. In other words, the phonological items that involve creaky voice phonation (*i.e.* /<sup>CM</sup>/, /<sup>MC</sup>/, and /<sup>C</sup>/; see below) and those that rely on pitch-related exponents (the tonemes proper) stand in absolute complementary distribution. Since the phonational-tonological paradigm they constitute features more tonemes proper (8 in stressed syllables, 5 in unstressed syllables) than “phonationemes” (2 in stressed syllables, 1 in unstressed syllables), I have opted for designating both types after the usual term for the former.

On surface phenomena involving stiff voice and breathy voice phonation, see SECTION 2.1.1 on the realization of /ʔ/ and end of SECTION 2.1.2 respectively.

## 2.4.1 Inventory in stressed syllables

The **contrastive nature of 10 tonal and phonational realizations in stressed syllables** can be illustrated by sets of lexical, underived (near-)minimal pairs such as the ones in examples (48–49). I analyze each of these 10 tonal and phonational patterns as being the surface realization of a separate toneme.

- |      |    |                      |             |                       |  |
|------|----|----------------------|-------------|-----------------------|--|
| (48) | a. | [ <sup>52</sup> ba̠] | analyzed as | /bai <sup>52</sup> /  | ‘not even’                                 |
|      | b. | [ <sup>36</sup> na̠] | —           | /~dai <sup>36</sup> / | ‘other (neuter)’ <sup>33</sup>             |
|      | c. | [ <sup>43</sup> na̠] | —           | /~dai <sup>43</sup> / | ‘be spicy’ [sic]                           |
|      | d. | [ <sup>34</sup> na̠] | —           | /~dai <sup>34</sup> / | ‘be hot’ [sic]                             |
|      | e. | [ <sup>31</sup> na̠] | —           | /~dai <sup>31</sup> / | ‘tree’                                     |
|      | f. | [ <sup>33</sup> ta̠] | —           | /tau <sup>33</sup> /  | ‘be ash-colored’                           |
|      | g. | [ <sup>21</sup> na̠] | —           | /~dai <sup>21</sup> / | ‘other (feminine/masculine)’ <sup>33</sup> |
|      | h. | [ <sup>22</sup> ta̠] | —           | /tai <sup>22</sup> /  | ‘be hard’                                  |
|      | i. | [ <sup>CM</sup> ɗa̠] | —           | /ɗau <sup>CM</sup> /  | ‘to glow’                                  |
|      | j. | [ <sup>MC</sup> na̠] | —           | /~dai <sup>MC</sup> / | ‘to tie’                                   |

<sup>33</sup>The morphemes /~dai<sup>36</sup>/ [<sup>36</sup>na̠] ‘other (neuter)’ and /~dai<sup>21</sup>/ [<sup>21</sup>na̠] ‘other (feminine/masculine)’ displayed in example (48g) are two inflectional forms of a single lexical item and most likely have a partially identical diachronic origin. Note, however, that there is no reason to believe that one of them is derived from the other synchronically, given that the toneme /<sup>36</sup>/ is never productively derived from /<sup>21</sup>/ (nor /<sup>21</sup>/ from /<sup>36</sup>/) in today’s SMAT morphotonological alternation patterns (see SECTION 2.6.2). The tonemes of these two forms are thus to be considered as non-derived, lexical specifications.



(49)	a.	[ <sup>l</sup> tʰu <sup>52</sup> ]	analyzed as	/tu <sup>52</sup> /	‘to drag’
	b.	[ <sup>l</sup> dʒe <sup>36</sup> ]	—	/dʒe <sup>36</sup> /	‘all around over there’
	c.	[ <sup>l</sup> tʃo <sup>43</sup> ]	—	/tʃo <sup>43</sup> /	‘to stay (pl.)’
	d.	[ <sup>l</sup> tʃo <sup>34</sup> ]	—	/tʃo <sup>34</sup> /	‘to keep one’s mouth open’
	e.	[ <sup>l</sup> tʃa <sup>31</sup> ]	—	/tʃa <sup>31</sup> /	‘to swell up’
	f.	[ <sup>l</sup> tʰu <sup>33</sup> ]	—	/tu <sup>33</sup> /	‘to hang’
	g.	[ <sup>l</sup> tʃa <sup>21</sup> ]	—	/tʃa <sup>21</sup> /	‘to stir with water’
	h.	[ <sup>l</sup> tʃa <sup>22</sup> ]	—	/tʃa <sup>22</sup> /	‘to paint’
	i.	[ <sup>l</sup> tʃo <sup>o</sup> ]	—	/tʃo <sup>CM</sup> /	‘to open (a carved tree trunk to make it into a canoe)’
	j.	[ <sup>l</sup> tʃo <sup>o</sup> ]	—	/tʃo <sup>MC</sup> /	‘be white’

Of these 10 tonemes, **7 frequently occur in the lexical form of monosyllabic morphemes**, and especially in monosyllabic verbs (specifically the tonemes /<sup>43</sup>/, /<sup>34</sup>/, /<sup>31</sup>/, /<sup>33</sup>/, /<sup>21</sup>/, /<sup>22</sup>/, /<sup>MC</sup>/). This allows to easily collect sets of (near-)minimal pairs such as those displayed in examples (50–51), which abundantly confirm the contrastive nature of the corresponding 7 tonal and phonational patterns:

(50)	a.	[ <sup>l</sup> pa <sup>43</sup> ]	—	/pa <sup>43</sup> /	‘be dry’
	b.	[ <sup>l</sup> pa <sup>34</sup> ]	—	/pa <sup>34</sup> /	‘be full (something)’
	c.	[ <sup>l</sup> ka <sup>31</sup> ]	—	/ka <sup>31</sup> /	‘to wake’
	d.	[ <sup>l</sup> ka <sup>33</sup> ]	—	/ka <sup>33</sup> /	‘to lie (horizontally)’
	e.	[ <sup>l</sup> pa <sup>21</sup> ]	—	/pa <sup>21</sup> /	‘be tired’
	f.	[ <sup>l</sup> ka <sup>22</sup> ]	—	/ka <sup>22</sup> /	‘to stab’
	g.	[ <sup>l</sup> pa <sup>a</sup> ]	—	/pa <sup>MC</sup> /	‘to cling on’
(51)	a.	[ <sup>l</sup> nũ <sup>43</sup> ]	—	/~du <sup>43</sup> /	‘bat sp.’ <sup>34</sup>
	b.	[ <sup>l</sup> nũ <sup>34</sup> ]	—	/~du <sup>34</sup> /	‘to put (pl.)’
	c.	[ <sup>l</sup> mũ <sup>31</sup> ]	—	/~bu <sup>31</sup> /	‘to catch (with a fishing spear)’
	d.	[ <sup>l</sup> nũ <sup>33</sup> ]	—	/~du <sup>33</sup> /	‘be angry’
	e.	[ <sup>l</sup> nã <sup>21</sup> ]	—	/~da <sup>21</sup> /	‘nasal mucus’
	f.	[ <sup>l</sup> mũ <sup>22</sup> ]	—	/~bu <sup>22</sup> /	‘to send’
	g.	[ <sup>l</sup> mũũ]	—	/~bu <sup>MC</sup> /	‘to eat (a raw fruit)’

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<sup>34</sup>Unidentified.

- (52) a. [ˈd̥aũ<sup>43</sup>] — /dau<sup>43</sup>/ ‘to touch’  
 b. [ˈd̥aũ<sup>34</sup>] — /dau<sup>34</sup>/ ‘be red’  
 c. [ˈkaũ<sup>31</sup>] — /kau<sup>31</sup>/ ‘to scrape (an animal’s hair off)’  
 d. [ˈt̥aũ<sup>33</sup>] — /tau<sup>33</sup>/ ‘be ash-colored’  
 e. [ˈt̥ɕaũ<sup>21</sup>] — /t̥ɕau<sup>21</sup>/ ‘be bored’  
 f. [ˈd̥aũ<sup>22</sup>] — /dau<sup>22</sup>/ ‘to see’  
 g. [ˈgɑũ] — /gau<sup>MC</sup>/ ‘be cold (something)’

The **remaining 3 tonemes** (/<sup>52</sup>/, /<sup>36</sup>/, /<sup>CM</sup>/), by contrast, are **rarely found in the lexical form of monosyllabic morphemes**. This makes it less straightforward to observe that these tonemes too are contrastive with all the other tonemes occurring in stressed syllables. Cases of **lexical** /<sup>52</sup>/ in monosyllabic morphemes are displayed in the following example:

- (53) a. [ˈwu<sup>52</sup>] analyzed as /wu<sup>52</sup>/ ‘to scratch’  
 b. [ˈwi<sup>52</sup>] — /wi<sup>52</sup>/ ‘to cut’  
 c. [ˈgɑũ<sup>52</sup>] — /gau<sup>52</sup>/ ‘to tear’  
 d. [ˈt̥ɔː<sup>52</sup>?u<sup>3</sup>] — /to<sup>?</sup><sup>52</sup>/ ‘be twisted’

The only monosyllabic lexical items containing the **toneme** /<sup>36</sup>/ that I have come across so far are the following:

- (54) a. [ˈn̄aī<sup>36</sup>] analyzed as /~dai<sup>36</sup>/ ‘other (neuter)’  
 b. [ˈn̄ū<sup>36</sup>] — /~du<sup>36</sup>/ ‘all around here (ALOC)’  
 c. [ˈŋ̄ē<sup>36</sup>] — /~e<sup>36</sup>/ ‘all around there (ALOC)’  
 d. [ˈd̥ē<sup>36</sup>] — /d̥e<sup>36</sup>/ ‘all around over there (ALOC)’

Cases of **lexical** /<sup>CM</sup>/ in monosyllabic morphemes are displayed in the following example:

- (55) a. [ˈb̥ē] analyzed as /be<sup>CM</sup>/ ‘to flutter’  
 b. [ˈt̥ɕū] — /t̥ɕu<sup>CM</sup>/ ‘to raise its paws up’  
 c. [ˈŋ̄ū?u<sup>3</sup>] — /u<sup>?</sup><sup>CM</sup>/ ‘to bristle its hair’  
 d. [ˈt̥ɕī?i<sup>3</sup>] — /t̥ɕi<sup>?</sup><sup>CM</sup>/ ‘to give a burning sensation’

The toneme /<sup>52</sup>/ is about as rare in monosyllabic morphemes as in polysyllabic morphemes (mostly disyllabic, in practice) such as the ones shown in the following example:

- (56) a. [ʔi:<sup>52</sup>pi<sup>4</sup>] analyzed as /ʔi<sup>52</sup>pi<sup>4</sup>/ ‘Ipi (mythological figure)’  
 b. [ʔĩ:<sup>52</sup>ʔã<sup>3</sup>] — /~i<sup>52</sup>ʔa<sup>3</sup>/ ‘let’s go’  
 c. [ʔaʔ<sup>52</sup>we<sup>1</sup>] — /aʔ<sup>52</sup>we<sup>1</sup>/ ‘calabash tree’<sup>35</sup>  
 d. [ʔiʔ<sup>52</sup>ra<sup>1</sup>] — /ʔiʔ<sup>52</sup>da<sup>1</sup>/ ‘be small’

The tonemes /<sup>36</sup>/ and /<sup>CM</sup>/, by contrast, are more common in polysyllabic morphemes (mostly disyllabic, in practice) such as the ones shown in examples (57a–57c) (/<sup>36</sup>/) and (58a–58c) (/<sup>CM</sup>/):

- (57) a. [ʔ<sup>w</sup>e:<sup>36</sup>ɖu<sup>4</sup>] analyzed as /k<sup>w</sup>e<sup>36</sup>ɖu<sup>4</sup>/ ‘fish sp.’<sup>36</sup>  
 b. [wã:<sup>36</sup>ra<sup>3</sup>] — /wai<sup>33</sup>da<sup>3</sup>/ ‘açai palm’<sup>37</sup>  
 c. [ʔã:<sup>36</sup>we<sup>1</sup>] — /~ʔa<sup>36</sup>we<sup>1</sup>/ ‘coal’
- (58) a. [ʔõõʔmĩ<sup>5</sup>] analyzed as /~ʔoʔ<sup>CM</sup>~bi<sup>5</sup>/ ‘worm’  
 b. [mũũʔku<sup>3</sup>] — /~buʔ<sup>CM</sup>ku<sup>3</sup>/ ‘horsefly’  
 c. [t̥aawa<sup>1</sup>] — /ta<sup>CM</sup>wa<sup>1</sup>/ ‘be thirsty’

Outside monosyllabic morphemes, the tonemes /<sup>36</sup>/ and /<sup>CM</sup>/ can thus also be shown to contrast with each other and all other stressed syllable tonemes by sets of unanalyzable disyllabic near-minimal pairs. Such complete sets as the one presented in example (59) to illustrate the contrast of /<sup>36</sup>/ with 6 other tonemes are rare, however:

- (59) a. [kɔ:<sup>36</sup>wa<sup>1</sup>] analyzed as /ko<sup>36</sup>wa<sup>1</sup>/ ‘cocoi heron’<sup>38</sup>  
 b. [kɔ:<sup>43</sup>ɖa<sup>1</sup>] — /ko<sup>43</sup>ɖa<sup>1</sup>/ ‘caiman’<sup>39</sup>  
 c. [kɔ:<sup>34</sup>nũ<sup>3</sup>] — /ko<sup>34</sup>~du<sup>3</sup>/ ‘tongue’

<sup>35</sup>*Crescentia kujete*.

<sup>36</sup>Unidentified. Local Spanish *pez botella*.

<sup>37</sup>*Euterpe* sp.

<sup>38</sup>*Ardea cocoi*.

<sup>39</sup>*Caimaninae* sp.

d.	[ <b>kɔ:</b> <sup>31</sup> wi <sup>5</sup> ]	—	/ko <sup>31</sup> wi <sup>5</sup> /	‘fruit sp.’ <sup>40</sup>
e.	[ <b>kɔ:</b> <sup>33</sup> ri <sup>5</sup> ]	—	/ko <sup>33</sup> di <sup>5</sup> /	‘White person’
f.	[ <b>kɔ:</b> <sup>21</sup> i <sup>5</sup> ]	—	/ko <sup>21</sup> i <sup>5</sup> /	‘far away (?)’ <sup>41</sup>
g.	[ <b>kɔ:</b> <sup>22</sup> wu <sup>4</sup> ]	—	/ko <sup>22</sup> wu <sup>4</sup> /	‘deer’ <sup>42</sup>

In any case, it is likely that **most occurrences of the tonemes /<sup>36</sup>/ and /<sup>CM</sup>/ in discourse** are not as primary, lexical tonemes but as **secondary tonemes derived from primary tonemes by morphotonological rules** (see SECTION 2.6.2). As secondary tonemes, /<sup>36</sup>/ and /<sup>CM</sup>/ are derived from lexical tonemes /<sup>MC</sup>/ and /<sup>21</sup>/ respectively. In example (60b), for instance, the lexical toneme /<sup>MC</sup>/ of the verb /u<sup>MC</sup>/ [‘ɲuɯ] ‘to hurt’ automatically turns into /<sup>36</sup>/ when that verb is immediately suffixed with a bound morpheme such as /-pu<sup>1</sup>tu<sup>3</sup>we<sup>3</sup>/ [...pu<sup>1</sup>tu<sup>3</sup>we<sup>3</sup>] ‘belly’, which belongs to a lexical category of triggers of tonological alternations in compounding (Pattern 2 of morphotonological alternations; see SECTION 2.6.2.2). Contrast (60a), where that same verb retains its lexical toneme when suffixed with a bound morpheme that is not a trigger of such tonological alternations.

- (60) a. /tɕa<sup>3</sup> = u<sup>[MC]</sup>-pa<sup>3</sup>da<sup>1</sup>/  
 1SG.SBJ = hurt-leg  
 [tɕa<sup>3</sup>ɲuɯpa<sup>3</sup>ra<sup>1</sup>]  
 ‘I have sore legs’
- b. /tɕa<sup>3</sup> = u<sup>[MC]</sup>-pu<sup>1</sup>tu<sup>3</sup>we<sup>3</sup>/ → /tɕa<sup>3</sup> = u<sup>[36]</sup>-pu<sup>1</sup>tu<sup>3</sup>we<sup>3</sup>/  
 1SG.SBJ = hurt-belly  
 [tɕa<sup>3</sup>ɲu:<sup>36</sup>pu<sup>1</sup>tu<sup>3</sup>we<sup>3</sup>]  
 ‘I have stomach ache’

In the speech of a number of—mostly younger—SMAT speakers (e.g. JSG), the **toneme /<sup>CM</sup>/ has merged both phonologically and phonetically into the toneme /<sup>22</sup>/**, as shown in examples (61a–61b). This implies that the toneme inventory of these speakers in stressed syllables only includes 9 tonemes, instead of 10 in other SMAT speakers (e.g. LAR).

<sup>40</sup>*Garcinia* sp.

<sup>41</sup>See note 78 below.

<sup>42</sup>See note 27.

- (61) a. /da<sup>CM</sup>we<sup>1</sup>/ ~ /da<sup>22</sup>we<sup>1</sup>/ 'be sick'  
           [ˈd̪aawɛ<sup>1</sup>]                    [ˈd̪a:22wɛ<sup>1</sup>]  
       b. /be<sup>CM</sup>du<sup>5</sup>/ ~ /be<sup>22</sup>du<sup>5</sup>/ 'butterfly'  
           [ˈbɛɛru<sup>5</sup>]                    [ˈbɛ:22ru<sup>5</sup>]

I have found **no set of strictly minimal pairs that would illustrate the 10 tonal contrasts in stressed syllables** with the exact same segmental sequence. This is probably to be expected: when a single phonological parameter exhibits such a rich inventory of values, complete sets of strictly minimal pairs illustrating the contrasts of all of these values should be comparatively unlikely to be found, simply because the probability of coming across lexical gaps inevitably increases together with the size of the set being looked for. However, I **could relatively easily collect sets of exact tonological minimal pairs of up to 7 items**, whether through elicitation or in spontaneous data. TABLE 12 displays fifteen such sets composed of 4 to 7 items. This table provides the approximate meaning—only one of them for items with several meanings—of given combinations of segments and tonemes. Note that an empty cell does not necessarily imply that the corresponding combination does not exist, but only that it is in any case unattested in my data.

As can be seen in TABLE 12, my data **do not reveal any pattern of complementary distribution according to syllables' segments or nasality value** among the 10 tones that occur in stressed syllables. Such a pattern would have shown certain tones to be contextual allotones of a single toneme. This would have resulted in a reduction of the inventory of tonemes to less than 10 items. On the contrary, the absence of any such complementary distribution implies that all of these tones do contrast phonologically with one another. Missing combinations of a given (elsewhere attested) toneme with a given (elsewhere attested) segmental syllable are to be interpreted as mere lexical gaps.<sup>43</sup> Indeed, while a few phonotactic restrictions do apply to certain segmental combinations within a single syllable (see SECTION 2.5.2), there is **nearly no phonotactic restriction at all as to the combination of any given toneme with any given segmental string** forming a phonotactically viable syllable (for the only case of such a restriction, see end of

<sup>43</sup>During our working sessions, one of my main informants, JSG, was in fact perfectly able to repeat or make up such lexically unattested combinations, although he would eventually reject them as non-sensical. This observation is of course not definitive evidence as to the phonological status of the 10 tones in stressed syllables, but would be less expected if those combinations in fact violated phonological rules instead of merely happening to be absent from the lexicon.

Segm.	Toneme									
	/52/	/36/	/43/	/34/	/31/	/33/	/21/	/22/	/CM/	/MC/
/pa/			[ <sup>43</sup> pa]	[ <sup>34</sup> pa]			[ <sup>21</sup> pa]			[ <sup>aa</sup> pa]
			‘be dry’	‘be full’			‘be tired’			‘to cling on’
/pu/			[ <sup>43</sup> pu]		[ <sup>31</sup> pu]	[ <sup>33</sup> pu]	[ <sup>21</sup> pu]			[ <sup>uu</sup> pu]
			‘be bitter’		‘to get used’	‘to rain’	‘to plant’			‘be filled with air’
/~ba/			[ <sup>43</sup> mā]	[ <sup>34</sup> mā]				[ <sup>22</sup> mā]		[ <sup>aa</sup> mā]
			‘be sad’	‘to chop up’				‘to germinate’		‘to kill (sg.)’
/~bu/				[ <sup>34</sup> mū]	[ <sup>31</sup> mū]	[ <sup>33</sup> mū]		[ <sup>22</sup> mū]		[ <sup>uu</sup> mū]
				‘be numerous’	‘to harpoon’	‘to weave’		‘to send’		‘to eat’
/to/			[ <sup>43</sup> tɔ]		[ <sup>31</sup> tɔ]		[ <sup>21</sup> tɔ]	[ <sup>22</sup> tɔ]		[ <sup>oo</sup> tɔ]
			‘to plant’		‘to fetch’		‘other (NS)’	‘to sit’		‘kinkajou’ <sup>44</sup>
/tu/	[ <sup>52</sup> tɯ]				[ <sup>31</sup> tɯ]			[ <sup>22</sup> tɯ]		[ <sup>uu</sup> tɯ]
	‘to drag’				‘to perch’			‘to choke’		‘tree sp.’ <sup>45</sup>
/~dai/		[ <sup>36</sup> nāi]	[ <sup>43</sup> nāi]	[ <sup>34</sup> nāi]	[ <sup>31</sup> nāi]		[ <sup>21</sup> nāi]			[ <sup>aa</sup> nāi]
		‘other (N)’	‘be spicy’	‘be hot’	‘tree’		‘other (F/M)’			‘to tie’
/~du/		[ <sup>36</sup> nū]	[ <sup>43</sup> nū]	[ <sup>34</sup> nū]		[ <sup>33</sup> nū]				
		‘all around here’	‘bat sp.’ <sup>46</sup>	‘to put (pl.)’		‘to get mad’				
/tɛɛʔ/		[ <sup>36</sup> tɛɛʔe <sup>3</sup> ]			[ <sup>31</sup> tɛɛʔe <sup>3</sup> ]			[ <sup>22</sup> tɛɛʔe <sup>3</sup> ]	[ <sup>CM</sup> tɛɛʔe <sup>3</sup> ]	
		‘to light’			‘tree sp.’ <sup>47</sup>			‘to chop’	‘to open a canoe’	
/tɕi/			[ <sup>43</sup> tɕi]	[ <sup>34</sup> tɕi]			[ <sup>21</sup> tɕi]			[ <sup>ii</sup> tɕi]
			‘to chew’	‘to stand’			‘tree sp.’ <sup>48</sup>			‘be tasty’
/tɕo/			[ <sup>43</sup> tɕo]	[ <sup>34</sup> tɕo]					[ <sup>oo</sup> tɕo]	[ <sup>oo</sup> tɕo]
			‘to stay (pl.)’	‘to open one’s mouth’					‘to open’	‘be white’
/ka/					[ <sup>31</sup> ka]	[ <sup>33</sup> ka]	[ <sup>21</sup> ka]	[ <sup>22</sup> ka]		[ <sup>aa</sup> ka]
					‘to wake’	‘to lie down’	‘to ask’	‘to stab’		‘plant sp.’ <sup>49</sup>
/~ʔi/			[ <sup>43</sup> ʔi]	[ <sup>34</sup> ʔi]	[ <sup>31</sup> ʔi]	[ <sup>33</sup> ʔi]		[ <sup>22</sup> ʔi]		
			‘building’	‘to be’	‘to go (pl.)’	‘botfly larva’ <sup>50</sup>		‘to climb’		
/ʔo/			[ <sup>43</sup> ʔo]		[ <sup>31</sup> ʔo]	[ <sup>33</sup> ʔo]		[ <sup>22</sup> ʔo]		[ <sup>oo</sup> ʔo]
			‘to vanish’		‘be lazy’	‘to go out (a fire)’		‘to bear fruits’		‘be wounded’
/u/	[ <sup>52</sup> ɲu]				[ <sup>31</sup> ɲu]	[ <sup>33</sup> ɲu]	[ <sup>21</sup> ɲu]	[ <sup>22</sup> ɲu]	[ <sup>uu</sup> ɲu]	[ <sup>uu</sup> ɲu]
	‘owl sp.’ <sup>51</sup>				‘to fall’	‘to arrive’	‘to ferment’	‘tree sp.’ <sup>52</sup>	‘growl’	‘to learn’

TABLE 12. Sets of SMAT tonological minimal pairs (monosyllabic stressed morphemes)

SECTION 2.5.2).<sup>53</sup>

## 2.4.2 Alternative analyses in stressed syllables

Two hypotheses that have been suggested in studies on Tikuna tonology could have resulted in **reducing to less than 10 the total number of underlying tonemes** needed to account for the tonal contrasts found on the surface in SMAT stressed syllables. However, as shown in SECTIONS 2.4.2.1 and 2.4.2.2, where they are respectively assessed, these two hypotheses **do not receive significant support from my data**, which is the reason why I believe that the ten-toneme analysis developed in the previous section is, for language-internal descriptive purposes at the very least, the most appropriate for today's SMAT stressed syllables.

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<sup>44</sup>*Potos flavus*.

<sup>45</sup>*Cedrelinga cateniformis*.

<sup>46</sup>See note 34.

<sup>47</sup>Unidentified (at least three widely divergent identifications have been proposed for this tree).  
Local Spanish *acapú*.

<sup>48</sup>*Eschweilera* sp.

<sup>49</sup>Unidentified. Wild plant yielding small, sweet red fruits.

<sup>50</sup>Larva of *Dermatobia hominis*.

<sup>51</sup>Unidentified.

<sup>52</sup>See note 18.

<sup>53</sup>This near-complete combinability of all segmental syllables with all tonemes is particularly surprising in the case of stressed syllables surfacing with a coda [ʔ]. The vowel nucleus of such syllables is not lengthened on the surface, so that they are realized as ['CVʔ.-] or ['CṼʔ.-] (on vowel lengthening in syllables that do not feature a coda [ʔ], see SECTION 2.2). In this context, tonal contours become hardly perceptible on the surface and tonological contrasts that largely rely on distinctive contour properties (e.g. /<sup>21</sup>/ vs /<sup>22</sup>/) become extremely hard to detect. Be that as it may, words such as ['ḍaũʔ<sup>[43]</sup>.mẽʔẽ<sup>3</sup>] 'to touch somebody's hand' and ['ḍaũʔ<sup>[34]</sup>.mẽʔẽ<sup>3</sup>] 'to paint somebody's hand red' do contrast with each other phonologically, at least in careful speech. It must be noted, however, that such contrasts were obtained through elicitation.

### 2.4.2.1 Could certain pairs of tones be allotones conditioned by two values of underlying vowel length?

Firstly, SMAT has been claimed to feature a **contrast for vowel length (*i.e.* underlyingly short vs long vowels) in stressed syllables** (Montes Rodríguez 1995:56–57). If this is true in today's SMAT, then one should test the hypothesis that at least some pairs of tones might in fact be allotonic realizations of a single toneme conditioned by vowel length. A toneme can indeed be expected to have different phonetic realizations according to whether the syllable it is linked to is analyzable as mono- or bimoraic.

I have found **no evidence in support of an underlying length contrast** in contemporary SMAT, however. All segmentally-comparable stressed syllables have virtually the same average duration. To **quickly test this claim** initially based on my own perception, I examined four short recordings in which my informant JSG carefully pronounces, in a row and at a roughly steady pace, series of items featuring all the tonemes (except for /<sup>CM</sup>/, a toneme absent from JSG's speech). Each of these recordings contains sets of tonological (near-)minimal pairs (see examples (75) and (76) below for a full transcription of two of them). These samples provide stressed vowels in comparable environments illustrating all the tonemes (except for /<sup>CM</sup>/) at least four times each. With the help of the speech analysis program Praat, I measured the duration of all the stressed vowels in the four samples from the consonantal explosion that precedes them up to the consonantal implosion that follows them. I then calculated the average duration of these vowels in relation to each toneme. The results of this short experiment are shown in TABLE 13.

In the four samples under study, **all the tonemes are identically associated to an average vowel nucleus duration of 0.23–0.26 second.**<sup>55</sup> Despite the very limited amount of data examined in this experiment, I take these results as clearcut evidence for there being no correlation between tones and different vowel nucleus durations in today's SMAT. If all the tones are realized with the same average duration, then it cannot be the case that certain tones are in fact allotones of a single toneme conditioned by the vowel nucleus' underlying length.

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<sup>55</sup>The higher value corresponding to the toneme /<sup>MC</sup>/ in TABLE 13 (0.29 sec) is probably not significant. It was in any case virtually impossible to determine with precision on a spectrogram where a consonantal implosion occurred after a heavily laryngealized vowel at the end of syllables bearing the toneme /<sup>MC</sup>/.



Toneme	Average duration of vowel nucleus
/ <sup>52</sup> /	0.24 sec
/ <sup>36</sup> /	0.23 sec
/ <sup>43</sup> /	0.24 sec
/ <sup>34</sup> /	0.24 sec
/ <sup>31</sup> /	0.26 sec
/ <sup>33</sup> /	0.24 sec
/ <sup>21</sup> /	0.25 sec
/ <sup>22</sup> /	0.25 sec
(/ <sup>MC</sup> /)	0.29 sec)

**TABLE 13.** Average duration of vowel nucleus (in stressed syllables, non-pausally) as a function of the toneme of the corresponding syllable in four audio samples

Note that immediately before pause, the duration of the vowel nucleus of stressed syllables that do not feature an underlying glottal stop does indeed tend to slightly vary depending on the toneme of the syllable they belong to. In this context, the tonemes /<sup>43</sup>/ and /<sup>MC</sup>/, in particular, tend to correlate with a shorter duration of the vowel nucleus than the other tonemes. Thus, words such as / $\sim$ ba<sup>43</sup>/ [l'mã<sup>43</sup>#] ‘be sad’ or / $\sim$ ba<sup>MC</sup>/ [l'mãã#] ‘to kill (sg.)’ can be realized as perceptibly shorter than / $\sim$ ba<sup>34</sup>/ [l'mã<sup>34</sup>#] ‘to chop up’ or / $\sim$ ba<sup>22</sup>/ [l'mã<sup>22</sup>#] ‘to germinate’. However, these optional phonetic duration differences completely disappear non-pausally; they are not the stable exponents of underlying length contrasts.

#### 2.4.2.2 Could certain tones correspond to sequences of simplex tonemes, rather than unitary complex tonemes?

To reduce the toneme inventory of SMAT in stressed syllables, a second direction is to **hypothesize that certain tones are the mere surface realization of what is underlyingly a combination of tonemes**. This has been done by L. Anderson (1959:92, 118), who claims that the Cushillococha Tikuna reflexes of the SMAT tones [<sup>52</sup>], [<sup>43</sup>], and [<sup>31</sup>] are the realization of sequences of two level tonemes linked to a single syllable. He thus analyzes these three Cushillococha Tikuna tones, which he transcribes as [<sup>51</sup>], [<sup>43</sup>], and [<sup>31</sup>], as representing the underlying combinations

of tonemes  $/^{5+1}/$ ,  $/^{4+3}/$ , and  $/^{3+1}/$  respectively.<sup>56</sup>

However, I have **not found any language-internal functional evidence, whether synchronic or diachronic**, that any tone occurring in SMAT stressed syllables might really be the realization of a sequence of tonemes rather than the realization of a single toneme of its own. In fact, L. Anderson does not adduce any language-internal evidence in favor of his analysis either other than its plausibility in view of the phonetic realization of the tones in Cushillococha Tikuna. In particular, the complex morphotonological processes described in SECTION 2.6.2 do not suggest the existence in SMAT of natural classes among the tones found in stressed syllables that might correlate with the possibility that certain tones are in fact the realization of sequences of tonemes that partially coincide. For instance, if the SMAT tones  $[^{52}]$  and  $[^{31}]$  were to be analyzed as  $/^{5+1}/$  and  $/^{3+1}/$  respectively, one might expect them to behave to a certain extent identically in relation to the language's morphotonological alternations, which would reflect the fact that they share a second component  $/^1/$ . This is not the case, however: in Pattern 1 of morphotonological alternations (see SECTION 2.6.2), in particular,  $[^{52}]$  remains unchanged ( $/^{5+1}/ \rightarrow /^{5+1}/$ , hypothetically) while  $[^{31}]$  becomes  $[^{33}]$  ( $/^{3+1}/ \rightarrow /^{3+3}/$ , hypothetically).

In other words, there is as far as I know **no phenomenon in the grammatical system of SMAT that a phonological analysis of certain tones as being underlyingly sequences of tonemes would help to describe or elucidate**. I therefore see it as more economic, from a language-internal and non-theoretical perspective, and more immediately true to the data to posit ten tonemes corresponding to the ten tones and phonational patterns attested on the surface, instead of arbitrarily considering certain tones to be phonologically complex exclusively on the grounds of their relative degree of phonetic complexity.

### 2.4.3 Inventory in unstressed syllables

The contrastive nature of 5 tonal realizations—and therefore the existence of at least **5 tonemic values**—in unstressed syllables rather straightforwardly follows

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<sup>56</sup>Note that in his study, L. Anderson in fact uses the Central Americanist tone height scale (Yip 2002:21), in which  $\langle 1 \rangle$  stands for the highest relative tone height and  $\langle 5 \rangle$  for the lowest relative tone height, which is the opposite of Chao's (1930) tone height scale, the one used in the present work. For clarity, L. Anderson's transcriptions are here converted into their Chao scale equivalents.

from such sets of near-minimal pairs as the following:

- (62) a. [k̄oː<sup>33</sup>ri<sup>5</sup>] analyzed as /ko<sup>33</sup>di<sup>5</sup>/ ‘White person’  
 b. [b̄uɾ<sup>22</sup>b̄u<sup>4</sup>ri<sup>4</sup>] — /b̄uɾ<sup>22</sup>b̄u<sup>4</sup>di<sup>4</sup>/ ‘tree sp.’<sup>57</sup>  
 c. [p̄oː<sup>21</sup>ri<sup>3</sup>] — /po<sup>21</sup>~di<sup>3</sup>/ ‘edible plant sp.’<sup>58</sup>  
 d. [p̄oː<sup>33</sup>ri<sup>1</sup>] — /po<sup>33</sup>~di<sup>1</sup>/ ‘tobacco’<sup>59</sup>  
 e. [ʔ̄oː<sup>22</sup>ri<sup>1</sup>] — /ʔo<sup>22</sup>di<sup>C</sup>/ ‘fruit’<sup>60</sup>
- (63) a. [m̄ãː<sup>33</sup>m̄ã<sup>5</sup>] analyzed as /~ba<sup>33</sup>~ba<sup>5</sup>/ ‘mum’  
 b. [ʔ̄õː<sup>43</sup>m̄ẽ<sup>4</sup>] — /~ʔo<sup>43</sup>~be<sup>4</sup>/ ‘woolly monkey’<sup>61</sup>  
 c. [n̄ãː<sup>22</sup>m̄ã<sup>3</sup>] — /~da<sup>22</sup>~ba<sup>3</sup>/ ‘his path’  
 d. [d̄oː<sup>21</sup>m̄ã<sup>1</sup>] — /do<sup>21</sup>~ba<sup>1</sup>/ ‘catfish sp.’<sup>62</sup>  
 e. [n̄ãː<sup>22</sup>m̄ã<sup>1</sup>] — /~da<sup>22</sup>~ba<sup>C</sup>/ ‘its root’
- (64) a. [ʔ̄oː<sup>33</sup>t̄ã<sup>5</sup>] analyzed as /ʔo<sup>33</sup>ta<sup>5</sup>/ ‘chicken’  
 b. [n̄ãː<sup>22</sup>t̄ã<sup>4</sup>] — /~da<sup>22</sup>-ta<sup>4</sup>/ ‘its trunk’  
 c. [t̄ɕuː<sup>34</sup>t̄ã<sup>3</sup>] — /t̄ɕu<sup>34</sup>ta<sup>3</sup>/ ‘to get dark’  
 d. [p̄eː<sup>43</sup>t̄ã<sup>1</sup>] — /pe<sup>43</sup>ta<sup>1</sup>/ ‘celebration’  
 e. [n̄ãː<sup>22</sup>t̄ɕu<sup>1</sup>] — /~da<sup>22</sup>-t̄ɕu<sup>C</sup>/ ‘his rope’
- (65) a. [n̄ũ<sup>5</sup>...] analyzed as /~du<sup>5</sup>=/ ‘3M/N/NS.BEN’  
 b. [n̄ã<sup>4</sup>...] — /~da<sup>4</sup>=/ ‘3M/N/NS.SBJ’  
 c. [n̄ã<sup>3</sup>...] — /~da<sup>3</sup>=/ ‘3M/N/NS.OBJ’  
 d. [n̄ã<sup>1</sup>...] — /~da<sup>1</sup>=/ ‘3M/N/NS.SBJ\SBJV’

Like in stressed syllables, sets of strictly minimal pairs illustrating all of these 5 contrasts in unstressed syllables would be extremely hard to collect. However,

<sup>57</sup>*Manilkara* sp.

<sup>58</sup>*Macrolobium* sp.? Local Spanish *batata*.

<sup>59</sup>*Nicotiana* sp.

<sup>60</sup>This word has an alternative form /ʔo<sup>22</sup>di<sup>C</sup>/ [ʔ̄o<sup>22</sup>ri<sup>3</sup>].

<sup>61</sup>*Lagothrix lagotricha*.

<sup>62</sup>Unidentified. Local Spanish *bocón*.

nothing suggests that any two of these tones could stand in a complementary distribution relationship according to any criterion. All can contrast in essentially the same segmental and suprasegmental context, so that they may be considered to be the realizations of as many separate tonemes. In particular, note that the toneme of a given unstressed syllable is by no means conditioned by the toneme of the syllable that immediately precedes it.

Interestingly, although SMAT only exhibits 5 tonal (and phonational) realizations on the surface in unstressed syllables, these 5 realizations can be analyzed as being underlain by 6—not 5—tonemic values. Unstressed syllables featuring the toneme that I transcribe as /<sup>4/1</sup>/ may alternatively surface with the tones [<sup>4</sup>] or [<sup>1</sup>]. While in some cases the two alternative tonal realizations of these syllables appear to follow a complementary distribution rule, as in examples (66a–66c), in other cases they stand in free variation—to varying degrees—in the exact same phonological context, as in (66d) and (67):

- (66) /-gu<sup>4/1</sup>/ ‘PLOC’:
- |   | [ <sup>4</sup> ]  | [ <sup>1</sup> ]  |                |
|---|---|---|----------------|
| a. /tɕa <sup>21</sup> -gu <sup>4/1</sup> /                  | *[ <sup>1</sup> tɕa: <sup>21</sup> gu <sup>4</sup> ]                | [ <sup>1</sup> tɕa: <sup>21</sup> gu <sup>1</sup> ]                     | ‘on me’        |
| b. /~da <sup>43</sup> -gu <sup>4/1</sup> /                  | *[ <sup>1</sup> nã: <sup>43</sup> gu <sup>4</sup> ]                 | [ <sup>1</sup> nã: <sup>43</sup> gu <sup>1</sup> ]                      | ‘on it’        |
| c. /~da <sup>22</sup> -gu <sup>4/1</sup> /                  | [ <sup>1</sup> nã: <sup>22</sup> gu <sup>4</sup> ]                  | *[ <sup>1</sup> nã: <sup>22</sup> gu <sup>1</sup> ]                     | ‘on him’       |
| d. /~be <sup>33</sup> tɕa <sup>1</sup> -gu <sup>4/1</sup> / | [ <sup>1</sup> mẽ: <sup>33</sup> tɕa <sup>1</sup> gu <sup>4</sup> ] | ~ ([ <sup>1</sup> mẽ: <sup>33</sup> tɕa <sup>1</sup> gu <sup>1</sup> ]) | ‘on the table’ |
- (67) /-buw<sup>4/1</sup>/ ‘(raw) food’:
- |  | [ <sup>4</sup> ]                                      | [ <sup>1</sup> ]  |            |
|--|---|---|------------|
| a. /tɕau <sup>21</sup> -buw <sup>4/1</sup> / | [ <sup>1</sup> tɕaũ <sup>21</sup> buw <sup>4</sup> ]  | ~ [ <sup>1</sup> tɕaũ <sup>21</sup> buw <sup>1</sup> ]  | ‘my food’  |
| b. /~da <sup>43</sup> -buw <sup>4/1</sup> /  | ([ <sup>1</sup> nã: <sup>43</sup> buw <sup>4</sup> ]) | ~ [ <sup>1</sup> nã: <sup>43</sup> buw <sup>1</sup> ]   | ‘its food’ |
| c. /~da <sup>22</sup> -buw <sup>4/1</sup> /  | [ <sup>1</sup> nã: <sup>22</sup> buw <sup>4</sup> ]   | ~ ([ <sup>1</sup> nã: <sup>22</sup> buw <sup>1</sup> ]) | ‘his food’ |
| d. /to <sup>33</sup> -buw <sup>4/1</sup> /   | [ <sup>1</sup> tɔ: <sup>33</sup> buw <sup>4</sup> ]   | ~ [ <sup>1</sup> tɔ: <sup>33</sup> buw <sup>1</sup> ]   | ‘our food’ |

By exhibiting this ability to surface with two alternative tones, these syllables differ both from syllables with a lexical toneme /<sup>4</sup>/—as shown in (68)—and from syllables with a lexical toneme /<sup>1</sup>/—as shown in (69)—which lack this ability:

- (68) /-ta<sup>4/1</sup>/ ‘(maternal) uncle’ vs /-ta<sup>4</sup>/ ‘trunk’:
- |   | [ <sup>4</sup> ]                                    | [ <sup>1</sup> ]                                      |            |
|---|---|---|------------|
| a. /tɕau <sup>21</sup> -ta <sup>4/1</sup> / | [ <sup>1</sup> tɕaũ <sup>21</sup> ta <sup>4</sup> ] | ~ [ <sup>1</sup> tɕaũ <sup>21</sup> ta <sup>1</sup> ] | ‘my uncle’ |
| b. /tɕau <sup>21</sup> -ta <sup>4</sup> /   | [ <sup>1</sup> tɕaũ <sup>21</sup> ta <sup>4</sup> ] | *[ <sup>1</sup> tɕaũ <sup>21</sup> ta <sup>1</sup> ]  | ‘my trunk’ |

(69) /-ga<sup>4/1</sup>/ ‘rib’ vs /-ga<sup>1</sup>/ ‘voice’:

	[ <sup>4</sup> ]		[ <sup>1</sup> ]		
a.	/tɕau <sup>21</sup> -ga <sup>4/1</sup> /	[ <sup>4</sup> tɕaũ <sup>21</sup> ga <sup>4</sup> ]	~	[ <sup>1</sup> tɕaũ <sup>21</sup> ga <sup>1</sup> ]	‘my rib’
b.	/tɕau <sup>21</sup> -ga <sup>1</sup> /	*[ <sup>4</sup> tɕaũ <sup>21</sup> ga <sup>4</sup> ]		[ <sup>1</sup> tɕaũ <sup>21</sup> ga <sup>1</sup> ]	‘my voice’

In view of the data in (66–69) only, it may seem that the syllables that I analyze as featuring /<sup>4/1</sup>/ are merely syllables with two alternative lexical forms, one of which features /<sup>4</sup>/ and the other /<sup>1</sup>/. However, the **behavior of these syllables in relation to morphotonological alternations, because it partially differs from the behavior of syllables with /<sup>4</sup>/ and /<sup>1</sup>/**, leads me to consider /<sup>4/1</sup>/ as a separate phonological item distinct from both /<sup>4</sup>/ and /<sup>1</sup>/. Examples (70–71) illustrate this partial difference of behavior in the context of morphotonological alternations occurring in predicative phrases in the Subjunctive Inflectional Type followed by the relativizer in non-salientive /-~ʔu<sup>4</sup>/ (see SECTION 2.6.2). In (70a), the predicative phrase /e<sup>34</sup>-bu<sup>4/1</sup>/ ‘to have no (raw) food’, which outside contexts of morphotonological alternations is typically realized [<sup>1</sup>ɲɛ:<sup>34</sup>bu<sup>4</sup>], *i.e.* with a tone [<sup>4</sup>] in its second syllable, normally keeps its tone [<sup>4</sup>] when it is inflected in the Subjunctive Inflectional Type and followed by /-~ʔu<sup>4</sup>/ ‘REL.NS’. In (70b), by contrast, the predicative phrase /e<sup>34</sup>-te<sup>4</sup>/ ‘not to have a husband’, which outside contexts of morphotonological alternations is realized [<sup>1</sup>ɲɛ:<sup>34</sup>tɛ<sup>4</sup>], *i.e.* also with a tone [<sup>4</sup>] in its second syllable, sees its tone [<sup>4</sup>] turn into [<sup>5</sup>] in the same morphosyntactic context.

(70)	a.	/e <sup>34</sup> -bu <sup>4/1</sup> /	→	/e <sup>34</sup> -bu <sup>4</sup> -~ʔu <sup>4</sup> / ( ~ /e <sup>34</sup> -bu <sup>5</sup> -~ʔu <sup>4</sup> / )
		[ <sup>1</sup> ɲɛ: <sup>34</sup> bu <sup>4</sup> ](~[ <sup>1</sup> ɲɛ: <sup>34</sup> bu <sup>1</sup> ])		[ <sup>1</sup> ɲɛ: <sup>34</sup> bu <sup>4</sup> ʔŋ <sup>4</sup> ]
		‘to have no food’		‘which has no food’
	b.	/e <sup>34</sup> -te <sup>4</sup> /	→	/e <sup>34</sup> -te <sup>5</sup> -~ʔu <sup>4</sup> /
		[ <sup>1</sup> ɲɛ: <sup>34</sup> tɛ <sup>4</sup> ]		[ <sup>1</sup> ɲɛ: <sup>34</sup> tɛ <sup>5</sup> ʔŋ <sup>4</sup> ]
		‘to have no husband’		‘which has no hus- [band’

In (71a), still in the same morphosyntactic context, the predicative phrase /~ʔa<sup>33</sup>-bu<sup>4/1</sup>/ ‘to have (raw) food’, which outside contexts of morphotonological alternations is typically realized [<sup>1</sup>ʔã:<sup>33</sup>bu<sup>1</sup>], *i.e.* with a tone [<sup>1</sup>] in its second syllable, sees its tone [<sup>1</sup>] turn into [<sup>3</sup>]. This time, the morphotonological alternation undergone by /<sup>4/1</sup>/ is in fact identical to that undergone by /<sup>1</sup>/: indeed, in (70b) the predicative phrase /~ʔa<sup>33</sup>-ga<sup>1</sup>/ ‘to make noise (lit. ‘to have noise’)', which outside

contexts of morphotonological alternations is realized [ $^1\text{ʔã}^{33}\text{ga}^{\boxed{1}}$ ], *i.e.* also with a tone [ $^1$ ] in its second syllable, likewise sees its tone [ $^1$ ] turn into [ $^3$ ].

- (71) a.  $/\sim\text{ʔa}^{33}\text{-bu}^{\boxed{4/1}}/ \rightarrow / \sim\text{ʔa}^{33}\text{-bu}^{\boxed{3}}\text{-}\sim\text{ʔu}^4/$   
 $[\text{ʔã}^{33}\text{bu}^{\boxed{1}}](\sim[\text{ʔã}^{33}\text{bu}^4]) \rightarrow [\text{ʔã}^{33}\text{bu}^{\boxed{3}}\text{ʔu}^4]$   
 ‘to have food’ ‘which has food’
- b.  $/\sim\text{ʔa}^{33}\text{-ga}^{\boxed{1}}/ \rightarrow / \sim\text{ʔa}^{33}\text{-ga}^{\boxed{3}}\text{-}\sim\text{ʔu}^4/$   
 $[\text{ʔã}^{33}\text{ga}^{\boxed{1}}] \rightarrow [\text{ʔã}^{33}\text{ga}^{\boxed{3}}\text{ʔu}^4]$   
 ‘to make noise’ ‘which makes noise’

The toneme  $/^{4/1}/$  is the only one to exhibit a (partial) sandhi behavior in SMAT. In fact, the allotonic complementary distribution rule alluded to above and illustrated in (66a–66c) is likely to have been obligatory in an former stage of the language. Partially lexicalized morphological combinations involving a toneme  $/^{4/1}/$  with a fixed realization, like those displayed in (72), point to a regular sandhi rule whereby  $/^{4/1}/$  must have been regularly realized as [ $^4$ ] immediately after certain stressed tonemes while it was regularly realized as [ $^1$ ] immediately after others.

- (72)  $/\sim\text{ba}^{4/1}/$  ‘ANAPH’:                      [ $^4$ ]                      [ $^1$ ]
- a.  $/\sim\text{dai}^{\boxed{36}}\text{-}\sim\text{ba}^{4/1}/$                       [ $^1\text{nã}^{\widehat{36}}\text{mã}^1$ ]                      ‘other.N-ANAPH’
- b.  $/\sim\text{e}^{\boxed{43}}\text{-}\sim\text{ba}^{4/1}/$                       [ $^1\text{ŋe}^{43}\text{mã}^1$ ]                      ‘MED.F-ANAPH’
- c.  $/\text{ɕe}^{\boxed{34}}\text{-}\sim\text{ba}^{4/1}/$                       [ $^1\text{ɕe}^{34}\text{mã}^4$ ]                      ‘DIST.NS-ANAPH’
- d.  $/\text{ɕi}^{\boxed{31}}\text{-}\sim\text{ba}^{4/1}/$                       [ $^1\text{ɕi}^{31}\text{mã}^1$ ]                      ‘MED.N-ANAPH’
- e.  $/\sim\text{e}^{\boxed{33}}\text{-}\sim\text{ba}^{4/1}/$                       [ $^1\text{ŋe}^{33}\text{mã}^1$ ]                      ‘MED.NS-ANAPH’
- f.  $/\text{tɕo}^{\boxed{21}}\text{-}\sim\text{ba}^{4/1}/$                       [ $^1\text{tɕo}^{21}\text{mã}^1$ ]                      ‘1SG-ANAPH’
- g.  $/\text{ɕi}^{\boxed{22}}\text{-}\sim\text{ba}^{4/1}/$                       [ $^1\text{ɕi}^{22}\text{mã}^4$ ]                      ‘MED.M-ANAPH’

However, what may once have been a regular rule has now come to be a **mere tendency outside of lexicalized morphologically complex forms**. This explains the cases of free variation illustrated in (66d) and (67) above. This sandhi-like tendency is summarized in TABLE 14 for syllables with  $/^{4/1}/$  occurring immediately after a stressed syllable (my data are unclear as to how  $/^{4/1}/$  tends to be realized immediately after the toneme  $/^{\text{CM}}/$  or any of the tonemes occurring in unstressed syllables). Note that this sandhi-like tendency is generally much stronger for tonemes  $/^{4/1}/$  occurring in suffixes (*e.g.* in the derivational suffixes of the verb root and those of the predicative phrase; see SECTIONS 4.2.2 and 4.4, respectively) than in bound nouns.

Preceding toneme	Preferred realization of / <sup>4/1/</sup> /	
	[ <sup>4</sup> ]	[ <sup>1</sup> ]
/ <sup>52</sup> /		✓
/ <sup>36</sup> /		✓
/ <sup>43</sup> /		✓
/ <sup>34</sup> /	✓	
/ <sup>31</sup> /		✓
/ <sup>33</sup> /		✓
/ <sup>21</sup> /		✓
/ <sup>22</sup> /	✓	
/ <sup>CM</sup> /		✓?
/ <sup>MC</sup> /	✓	

TABLE 14. Preferred realization of toneme /<sup>4/1/</sup>/ depending on the toneme of the immediately preceding stressed syllable (sandhi-like tendency)

Non-underlying syllables that arise on the surface due to the insertion of an epenthetic vowel after a same-syllable coda /ʔ/ belonging with a stressed syllable (see SECTION 2.1.3.1) are **realized with a tone [<sup>3</sup>]**, as shown in the following examples:

- (73) a. /~eʔ<sup>43</sup>/                      [ˈŋɛː<sup>43</sup>ʔɛ̃<sup>[3]</sup>]                      ‘be ready for consuming’  
 b. /toʔ<sup>31</sup>/                              [ˈtɔː<sup>31</sup>ʔu<sup>[3]</sup>]                      ‘white-fronted capuchin’<sup>63</sup>

When the same-syllable coda /ʔ/ belongs with an unstressed syllable (see SECTION 2.1.3.2), the arising non-underlying syllable is also usually **realized with a tone [<sup>3</sup>]**, as in examples (74a–74b). However, if the toneme of the unstressed syllable with which that same-syllable coda /ʔ/ belongs is /<sup>3</sup>/, the arising non-underlying syllable is usually **realized with a tone [<sup>1</sup>]**, as in (74c). Note that these arising non-underlying syllables are of very short duration, so that the exact tone with which they are realized is in practice often barely distinguishable in rapid spontaneous speech.

- (74) a. /~da<sup>22</sup>-~daʔ<sup>4</sup>/                      [ˈnã<sup>22</sup>nã<sup>4</sup>ʔã<sup>[3]</sup>]                      ‘his neck’

<sup>63</sup>*Cebus albifrons*.

- b. /~da<sup>22</sup>-ʔduʔ<sup>C</sup>/    [ˈnã<sup>22</sup>ʔruʔu<sup>3</sup>]    ‘his anus’  
 c. /~da<sup>22</sup>-e<sup>4</sup>~deʔ<sup>3</sup>/    [ˈnã<sup>22</sup>ẽ<sup>4</sup>nẽ<sup>3</sup>ʔẽ<sup>1</sup>]    ‘his brother’<sup>64</sup>

Note that the tone with which non-underlying syllables are realized may be **different in morphosyntactic contexts where morphotonological alternations apply** (see SECTION 2.6.2).

## 2.4.4 Phonetic realization of the tonemes: a few audio samples

The graphs, waveforms, and spectrograms displayed in this section are meant to visually illustrate with concrete cases the typical realizations of SMAT tonemes as listed above in TABLE 11. Note that the four audio samples analyzed in this section may be accessed online at the following address: <<https://drive.google.com/drive/folders/17jIKlEw3cM1gkz635-364YzNuYNSpu44?usp=sharing>>.

FIGURES 13 and 14 exemplify the realization of the tonemes proper (*i.e.* those with pitch-related contrastive properties) in stressed syllables. FIGURE 13 provides the graphic representation of tones extracted from a single audio sample (Audio sample 1, see example (75)). For the sake of readability, the tones are split in two groups according to practical phonetic criteria and represented in two different graphs meant to be read together (level and rising tones above, falling tones below). FIGURE 14 represents tones from another audio sample (Audio sample 2, see (76)) following the same expositional conventions.

### (75) Audio sample 1 (see FIGURE 13):

[ˈpa: <sup>36</sup> ka <sup>1</sup> ]	analyzed as	/pa <sup>36</sup> -ka <sup>1</sup> /	‘to cling to someone’s liver’ <sup>65</sup>
[ˈtu: <sup>52</sup> ta <sup>4</sup> ]	—	/tu <sup>52</sup> = ta <sup>4</sup> /	‘to drag (in future)’
[ˈpa: <sup>43</sup> ta <sup>4</sup> ]	—	/pa <sup>43</sup> = ta <sup>4</sup> /	‘be dry (in fut.)’
[ˈpa: <sup>34</sup> ta <sup>4</sup> ]	—	/pa <sup>34</sup> = ta <sup>4</sup> /	‘be full (in fut.)’
[ˈʔu: <sup>33</sup> ta <sup>4</sup> ]	—	/ʔu <sup>33</sup> = ta <sup>4</sup> /	‘to say (in fut.)’

<sup>64</sup>See note 25.

<sup>65</sup>In the form /pa<sup>36</sup>-ka<sup>1</sup>/, the first morpheme, /pa<sup>36</sup>-, displays a secondary toneme derived by morphotonological alternation from /pa<sup>MC</sup>/ ‘to cling on’, with a primary or lexical toneme /<sup>MC</sup>/. This morphotonological alternation is triggered by the second morpheme, /-ka<sup>1</sup>/ ‘liver’, which has the lexical property of causing this process in compounding (see SECTION 2.6.2).



[ʔa: <sup>31</sup> ʔa <sup>4</sup> ]	—	/ʔa <sup>31</sup> = ta <sup>4</sup> /	‘to burn (in fut.)’
[ka: <sup>22</sup> ʔa <sup>4</sup> ]	—	/ka <sup>22</sup> = ta <sup>4</sup> /	‘to stab (in fut.)’
[pa: <sup>21</sup> ʔa <sup>4</sup> ]	—	/pa <sup>21</sup> = ta <sup>4</sup> /	‘be tired (in fut.)’
([pa: <sup>MC</sup> ʔa <sup>4</sup> ])	—	/pa <sup>MC</sup> = ta <sup>4</sup> /	‘to cling (in fut.)’ <sup>66</sup>
([pa: <sup>34</sup> ʔa <sup>4</sup> ])	—	/pa <sup>34</sup> = ta <sup>4</sup> /	‘be full (in fut.)’ <sup>66</sup>

(76) **Audio sample 2 (see FIGURE 14):**

[tʃa <sup>3</sup> nã <sup>31</sup> ŋõ: <sup>36</sup> ka <sup>1</sup> ]	/tʃa <sup>3</sup> = ~da <sup>3</sup> = ~o <sup>36</sup> -ka <sup>1</sup> /	‘I bite its liver’ <sup>67</sup>
[tʃa <sup>3</sup> nã <sup>31</sup> tu: <sup>52</sup> ʔa <sup>1</sup> ]	/tʃa <sup>3</sup> = ~da <sup>3</sup> = tu <sup>52</sup> = ta <sup>1</sup> /	‘I drag it too’ <sup>68</sup>
([tʃa <sup>3</sup> nã <sup>31</sup> mẽ: <sup>34</sup> ʔa <sup>1</sup> ])	/tʃa <sup>3</sup> = ~da <sup>3</sup> = ~be <sup>34</sup> = ta <sup>1</sup> /	‘I splash him too’ <sup>69</sup>
[tʃa <sup>3</sup> nã <sup>31</sup> mũ: <sup>34</sup> ʔa <sup>1</sup> ]	/tʃa <sup>3</sup> = ~da <sup>3</sup> = ~bu <sup>34</sup> = ta <sup>1</sup> /	‘I harass him too’
[tʃa <sup>3</sup> nã <sup>31</sup> mũ: <sup>33</sup> ʔa <sup>1</sup> ]	/tʃa <sup>3</sup> = ~da <sup>3</sup> = ~bu <sup>33</sup> = ta <sup>1</sup> /	‘I weave it too’
[tʃa <sup>3</sup> nã <sup>31</sup> mũ: <sup>31</sup> ʔa <sup>1</sup> ]	/tʃa <sup>3</sup> = ~da <sup>3</sup> = ~bu <sup>31</sup> = ta <sup>1</sup> /	‘I harpoon it too’
[tʃa <sup>3</sup> nã <sup>31</sup> mũ: <sup>22</sup> ʔa <sup>1</sup> ]	/tʃa <sup>3</sup> = ~da <sup>3</sup> = ~bu <sup>22</sup> = ta <sup>1</sup> /	‘I send it too’
[tʃa <sup>3</sup> nã <sup>31</sup> ŋa: <sup>21</sup> ʔa <sup>1</sup> ]	/tʃa <sup>3</sup> = ~da <sup>3</sup> = a <sup>21</sup> = ta <sup>1</sup> /	‘I scold him too’
([tʃa <sup>3</sup> nã <sup>31</sup> mũũ <sup>1</sup> ʔa <sup>1</sup> ])	/tʃa <sup>3</sup> = ~da <sup>3</sup> = ~bu <sup>MC</sup> = ta <sup>1</sup> /	‘I eat it too’ <sup>69</sup>
[tʃa <sup>3</sup> nã <sup>31</sup> ʔu: <sup>43</sup> ʔa <sup>1</sup> ]	/tʃa <sup>3</sup> = ~da <sup>3</sup> = ʔu <sup>43</sup> = ta <sup>1</sup> /	‘I cook it too’

Each of the two audio samples on which FIGURES 13 and 14 are based contains nearly-minimally contrasting items pronounced in a row by my informant JSG, with a short pause after each item. Within each sample, all items (to the exception of the first, for morphophonological reasons) are identical except in one of their syllables which, while always displaying comparable segments, differs in tone from all other varying syllables in the other items. Each of the two samples thus provides a set of immediately comparable realizations of all pitch-related tonemes. Note that in FIGURES 13 and 14, only the portion of the F0 signal corresponding to the portion of the items written in bold dark type is represented, *i.e.* only vocalic portions from a consonant release to a consonant closure.<sup>70</sup>

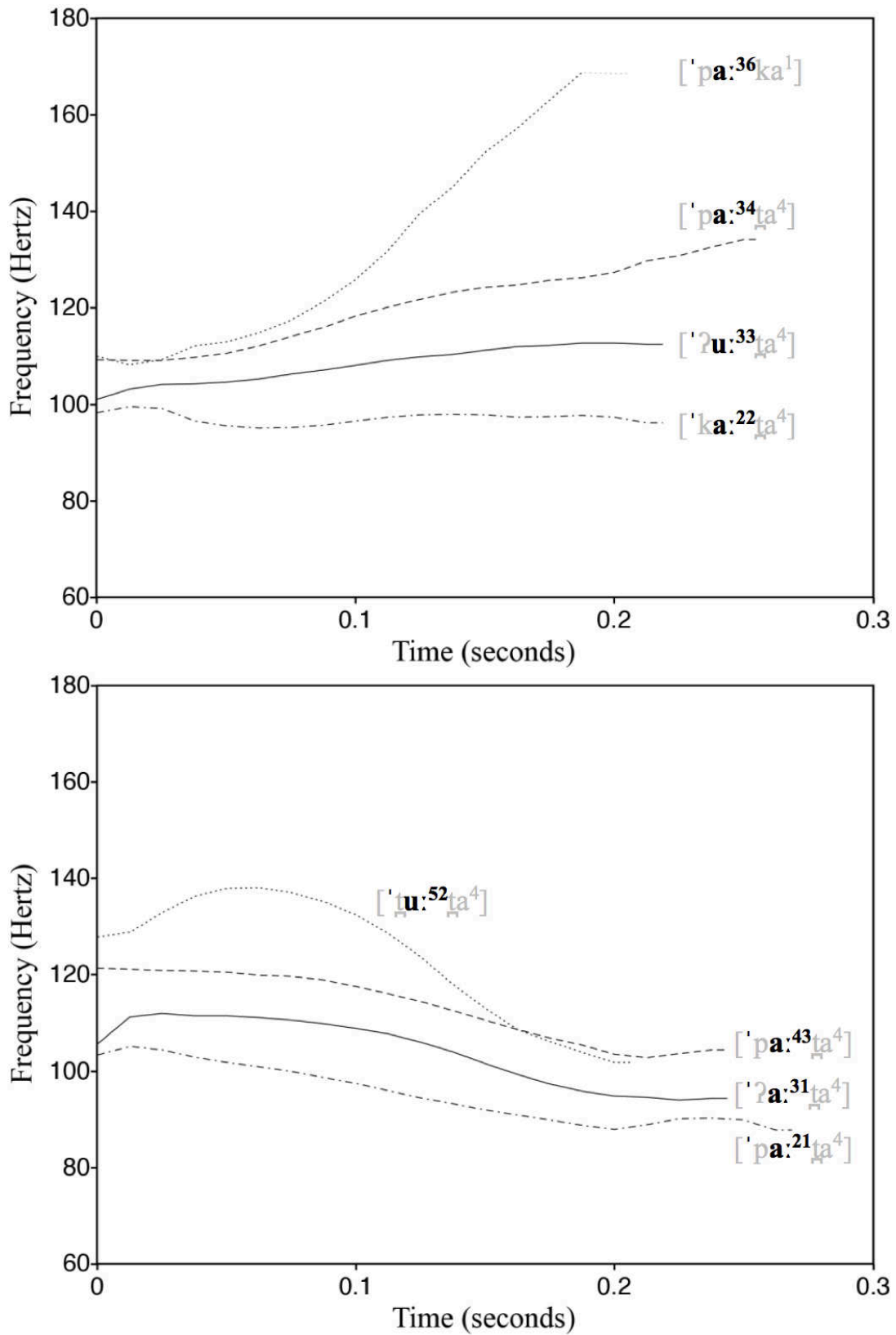
<sup>66</sup>Item not included in FIGURE 13.

<sup>67</sup>In the form /tʃa<sup>3</sup> = ~da<sup>3</sup> = ~o<sup>36</sup>-ka<sup>1</sup>/, the morpheme /~o<sup>36</sup>-, displays a secondary toneme derived by morphotonological alternation from /~o<sup>MC</sup>/ ‘to bite’, with a primary or lexical toneme /<sup>MC</sup>/. This morphotonological alternation is triggered by the second morpheme, /-ka<sup>1</sup>/ ‘liver’, which has the lexical property of causing this process in compounding (see SECTION 2.6.2).

<sup>68</sup>On the non-underlying final glottal stop in [...ʔa<sup>1</sup>], for /= ta<sup>1</sup>/ ‘ADD’, see SECTION 2.1.3, p.74.

<sup>69</sup>Item not included in FIGURE 14.

<sup>70</sup>Strictly speaking, values of F0 are shown up to the moment when there is no longer voicing, which indeed roughly corresponds to the closure of the (voiceless) stops that immediately follow



**FIGURE 13.** *Graphic representation of phonetically level and rising tones (above) and falling tones (below) from Audio sample 1 (see example (75))*

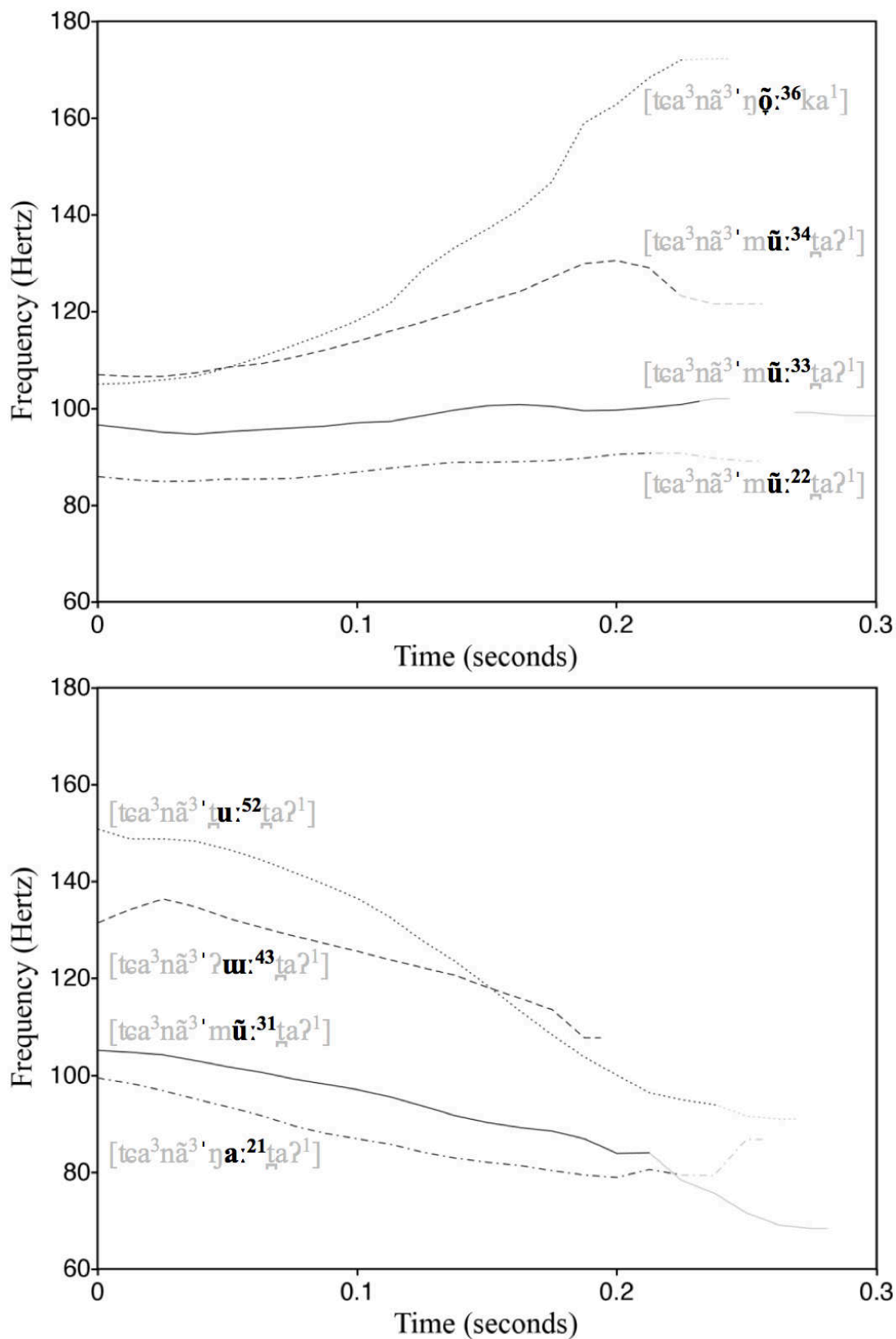


FIGURE 14. Graphic representation of phonetically level and rising tones (above) and falling tones (below) from Audio sample 2 (see example (76))

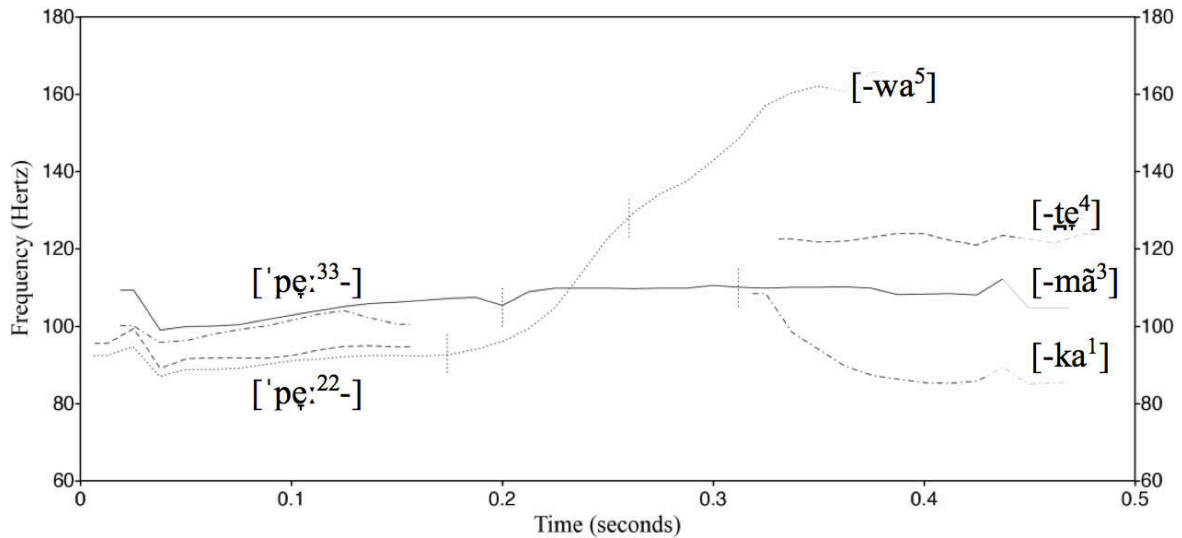


FIGURE 15. Graphic representation of tones from Audio sample 3 (see example (77))

FIGURE 15 shows tonemes proper in unstressed syllables. It is based on a third audio sample (Audio sample 3, see (77)) that also contains segmentally-comparable contrasting items pronounced in a row by JSG, with a short pause after each item.

(77) **Audio sample 3 (see FIGURE 15):**

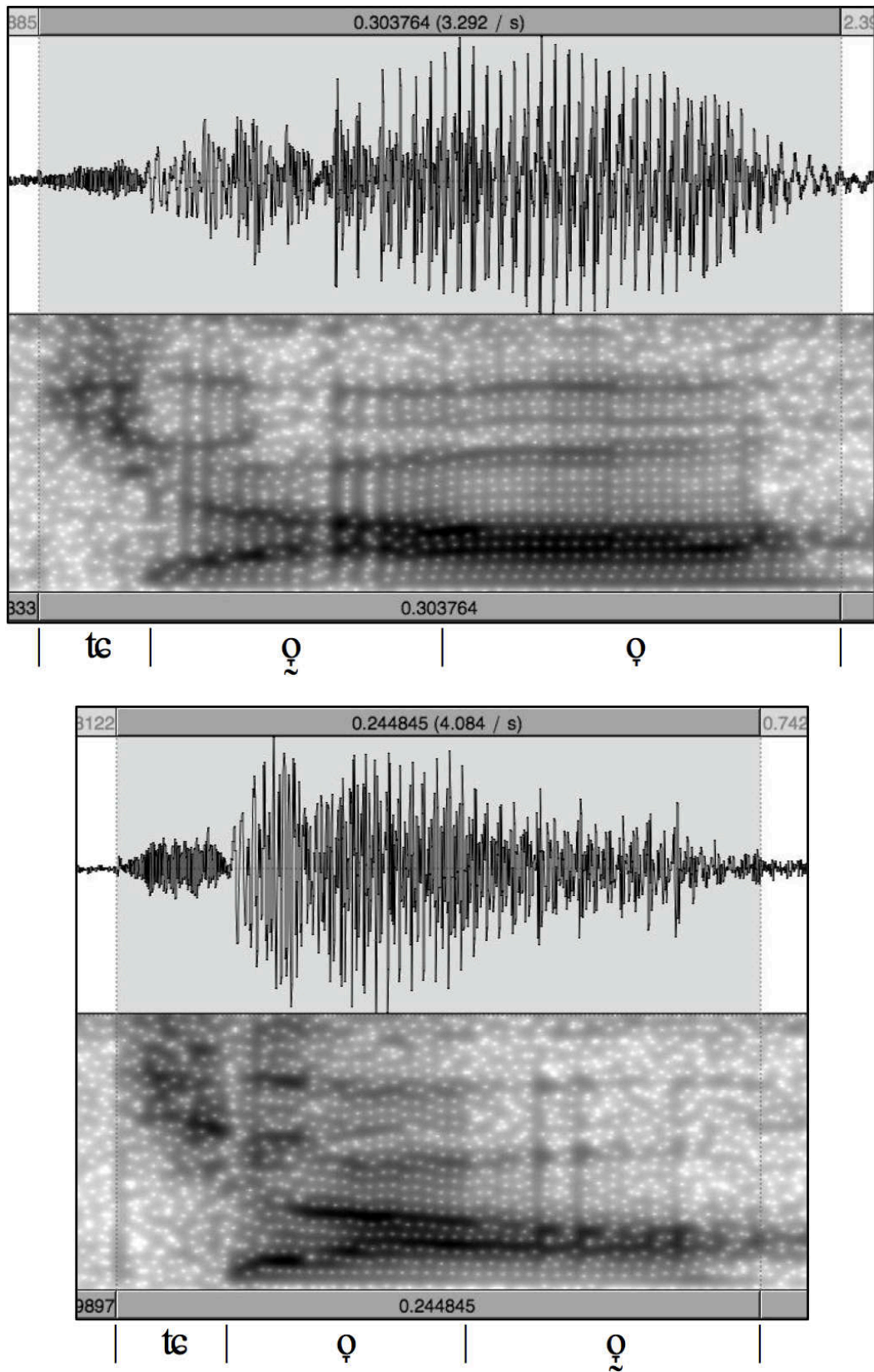
['pe:33mã3]	analyzed as	/pe33-~ba3/	'your (pl.) path'
(['pe:33nẽ3]	—	/pe33-~de3/	'your (pl.) son') <sup>71</sup>
['pe:22te4]	—	/pe22-te4/	'your (pl.) husbands' <sup>72</sup>
['pe:22wa5]	—	/pe22-wa5/ <sup>72</sup>	'at you (pl.)'
['pe:33ka1]	—	/pe33-ka1/	'your (pl.) livers'

Note that contrary to FIGURES 13 and 14, FIGURE 15 features whole items, *i.e.* not only single vowel nuclei. Vertical dotted bars in FIGURE 15 roughly indicate where the consonants [w] and [m] start and end in the items ['pe:22-wa<sup>5</sup>] and ['pe:33-mã<sup>3</sup>] respectively.

the vowel nuclei under study. Note that the graphs in FIGURES 13 through 15 were made in Praat. In medium-quality recordings such as those used here, Praat sometimes detects pitch where there is *perceptually* none; portions of the curves I identify as such artifacts are in light gray.

<sup>71</sup>Item not included in FIGURE 15.

<sup>72</sup>The personal root /pe<sup>33</sup>-/ '2PL' may take an optional allomorph /pe<sup>[22]</sup>-/ when immediately preceding a syllable with the toneme /<sup>5</sup>/ or /<sup>4</sup>/.



**FIGURE 16.** *Waveform and spectrogram of the words /tɕo<sup>CM</sup>/ [ʰtɕoŋ] ‘to open (a canoe)’ (above) and /tɕo<sup>MC</sup>/ [ʰtɕoŋ] ‘be white’ (below) from Audio sample 4 (see example (78))*

Finally, FIGURE 16 is meant to illustrate the interesting contrast that obtains between the tonemes /<sup>CM</sup>/ and /<sup>MC</sup>/ in stressed syllables, *i.e.* a contrast in left- vs right-alignment of creaky voice phonation within the syllable. It is based on a last audio sample (Audio sample 4, see (78)) that contains two minimally-contrasting items pronounced in a row by my informant LAR, with a short pause after the first item.

(78) **Audio sample 4 (see FIGURE 16):**

[ <sup>1</sup> t̤o̤o̤]	analyzed as	/t̤o <sup>MC</sup> /	‘be white’
[ <sup>1</sup> t̤o̤o̤]	—	/t̤o <sup>CM</sup> /	‘to open (a canoe)’

## 2.4.5 Typological assessment

SMAT’s inventory of ten tonemes in stressed syllables, *i.e.* the language’s maximum number of phonological contrasts between primarily pitch- or phonation-related suprasegmental realizations in the same segmental and morphosyntactic context, is **rather exceptional cross-linguistically**. It is delicate, however, to assess exactly how exceptional it is. Because a cross-linguistic operational definition of what should be counted as a toneme is not straightforward, toneme inventories are not established in the same way across different languages and are therefore not directly comparable. Even the analysis of a single tonal language may yield significantly divergent inventories from the perspective of different authors. This is especially true of languages with large toneme inventories.

That being said, and duly taken into account, one may nevertheless make an attempt at a statistical study of toneme inventory size across languages. Maddieson (1978:364–365), in such a study based on a genetically balanced sample of 207 tone languages, observed an exponential decay in number of languages as one increases the number of units in their toneme inventory. Thus, languages with a two-toneme inventory account for slightly more than 50% of his sample, those with a three-toneme inventory for about 30%, and those with four-, five-, and six-toneme inventories for only 6 to 7% each. Maddieson notes “a further sharp reduction [...] in the frequency of systems with more than 6 [contrastive] tones”, and adds that his 207-language sample, which happens not to contain languages with more than eight tonemes, allows to conclude that “**probably less than 1 in 200 tone languages contrasts 8 or more tones**”. These results were roughly replicated in another, more recent study by Maddieson (2012) based on an independent, slightly wider but less genetically balanced sample of tone languages. A quick survey by Gor-

don (2016:221–222) based on the 29 tone languages featured in the 100-language WALS sample (Dryer & Haspelmath 2013) also yields comparable results, implying that statistically extremely few languages display an inventory of more than six tonemes.

Although one may legitimately question the details of the three aforementioned studies, the overall picture that emerges from them is clear and consistent. Whether the two phonation-related tonemes of SMAT, /<sup>CM</sup>/ and /<sup>MC</sup>/, are to be counted as tonemes in the narrow sense or not, it can reasonably be assumed that the language stands among the **probably less than 0.5% (i.e. 1/200) of the languages of the world to display an inventory of eight or more tonemes**. Other such languages include a dozen of mostly Hmong-Mien, but also Sino-Tibetan and Tai-Kadai languages spoken in the south of China, a handful of Oto-Manguean languages from the southern Mexican states of Oaxaca and Guerrero, and a few outliers.<sup>73</sup>

In addition to featuring a typologically highly remarkable paradigmatic density, SMAT's tonological system also lies at a **typological extreme in terms of syntagmatic density**. SMAT's syntagmatic toneme density, which I define here as the average rate of underlying Toneme Bearing Units (TBUs) that are lexically specified for toneme in the language (as opposed to those that are tonologically underspecified),<sup>74</sup> is 100%. In other words, every single underlying syllable in SMAT is specified for toneme. While “omniprosodicity” (Hyman 2012:13), i.e. a 100% syntagmatic toneme density, by definition situates SMAT at the very upper extreme of a typological scale based on this parameter (Hyman 2009:214), **this property cannot be satisfactorily evaluated yet in terms of cross-linguistic usual- or unusualness**. Gussenhoven (2004:35) tentatively states that full syntagmatic toneme density “appears to be rare” among the languages of the world, but it seems that no extensive statistical cross-linguistic study of this typological parameter has been

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<sup>73</sup>Here is a (non-exhaustive) list of these languages based on my interpretation of the corresponding sources. At least one variety of the following languages is claimed to be able to make a contrastive use of eight or more distinct clusters of pitch- and phonation-related phonetic properties in the exact same segmental environment. *Hmong-Mien*: A-Hmao (Mortensen 2002:16–18), Hmong (Mortensen 2006a:73, Mouton 2018), Hmu (Sands 2003), Kim Mun (Strecker 1990), Mashan (Mortensen 2006b), Pa-Hng (Edmondson 1992:163–164). *Sino-Tibetan*: Bai (Wiersma 2003:655, 658), Khatso (Donlay 2015:102). *Tai-Kadai*: Kam (Tang 2008:87). *Oto-Manguean (Eastern branch)*: Amuzgo (Kim 2011), Chatino (Cruz 2011b, Rasch 2002:38), Triqui (DiCano 2008, Matsukawa 2012:29). *Lakes Plain (New Guinea)*: Iau (Bateman 1990). *Nilotic (South Sudan)*: Shilluk (Remijnsen & Ayoker 2014).

<sup>74</sup>This definition is based on Gussenhoven's use of his concept of “tonal density” (2004:35).



attempted to date that may support this statement, as was already observed by Hyman (2012:16) a few years ago.

### 2.4.6 Areal assessment

Yet it is from an **areal perspective**, *i.e.* within the context of Amazonia, that the paradigmatic density of SMAT’s tonological system, and to some extent its syntagmatic density, stand out the most. At the time L. Anderson wrote that Cushillococha Tikuna’s “system of five phonemic levels of pitch [made] up the **first such intricate system of tone to be found in South America**”<sup>75</sup> (1959:76–77), very little was known about South American tone languages, a state of affairs still noted by Yip (2002:246) at the beginning of the 2000s. Due to the publication of good-quality descriptions of a number of Amazonian tone systems over the last two decades, the situation has now improved significantly, opening the way to a more satisfactory overall understanding of Amazonian tonology (although this field of research is still without a doubt in its early stages, as observed by Gomez-Imbert (2012)).

Hyman’s (2010) is to date the most extensive survey of South American tone languages. From Hyman’s (2010:391) perspective, of the 49 South American tone languages taken into account in his study, “only Ticuna contrasts more than two tone heights”. Aikhenvald, in a less detailed survey, notes that “[j]ust a few [Amazonian] languages have three contrastive tones” and mentions Andoque, Southern Nambikuára, Tikuna, and possibly Pirahã as instances of such languages (2012:122, 417). She adds that “Puinave [...] is unusual for Amazonia” in apparently featuring four contrastive tones (2012:121). A few more Amazonian languages, such as Kakua (Maddieson et al. 2014-2018, Bolaños Quiñónez 2016:70–90) and Yuhup (Ospina Bozzi 2002:121–124, Maddieson et al. 2014-2018), have been reported to possibly have toneme inventories of more than two values. Although the analytic perspectives of these authors differ to some extent, and the details of the tonological systems of many Amazonian languages are still poorly understood, it is clear from Hyman’s and Aikhenvald’s surveys that the **vast majority of the many tone languages of Amazonia have minimal toneme inventories that only exceptionally reach three, or possibly up to four values**. This makes SMAT’s ten-toneme inventory—or eight-toneme inventory, if one does not want to count SMAT’s phonation-related tonemes, /<sup>CM</sup>/ and /<sup>MC</sup>/, as tonemes proper—**not only**

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<sup>75</sup>Boldface is mine.



**apparently unique in Amazonia (and, in fact, in all of South America), but also remarkably distinct from any other toneme inventory in the region.**

Interestingly, SMAT is spoken in Western Amazonia, in the heart of a large region noted by Hyman (2010:377–378) and Aikhenvald (2012:123–125) to feature most South American tone languages. The relevance of this observation remains unclear, however, as SMAT’s tonological system does not seem to be significantly closer to those of its neighboring tone languages than to those of any other South American tone languages.

SMAT’s syntagmatic toneme density is even harder to assess from an areal perspective. I shall simply observe that many Amazonian tone languages have been described as featuring “pitch-accent” systems. As noted by Hyman, “[m]any of these so-called [“pitch-accent”] systems have a relatively low ‘tonal density’ [*i.e.* syntagmatic toneme density]” (2012:15). One may thus reasonably assume **that the average syntagmatic toneme density among the Amazonian tone languages is rather low, and in any case far from SMAT’s 100%-density.** Nevertheless, SMAT’s areal unusualness is likely much less striking in this regard than in regard to the size of its toneme inventory.

## 2.5 Phonotactics

### 2.5.1 Syllabic structure

Three types of syllables need to be distinguished within the prosodic word depending on their position relative to stress: **stressed syllables, pre-tonic syllables, and post-tonic syllables.** Pre-tonic and post-tonic syllables are two distinct types of unstressed syllables that respectively precede and follow a prosodic word’s stressed syllable.

These three types of syllables are **structurally different, both in terms of segmental components and suprasegmental components,** as summarized in TABLE 15.

The **minimal segmental structure of all three syllable types is /V/**, as shown in examples (79a–79c). Note that on the surface an epenthetic velar nasal [ŋ] automatically fills the empty onset position of stressed /V/-shaped syllables, as in (79b); such [ŋ] epenthesis does not normally occur in pre-tonic and post-tonic /V/-shaped syllables, as shown in (79a) and (79c) respectively (see end of SECTION 2.1.1).

	Syllable type		
	pre-tonic	stressed	post-tonic
<b>Segmental components</b>	(C)V	(C)V <sub>1</sub> (V <sub>2</sub> )(?)	(C)V(?)
<b>Suprasegmental components</b>	[±nasal] [toneme]	[stress] [±nasal] [toneme]	[±nasal] [toneme]
<b>Number within prosodic word</b>	none, one, or several	one	none, one, or several

TABLE 15. *Phonological structure of syllables in native SMAT morphemes*

- (79) a. /i<sup>1</sup> = /      [ĩ<sup>1</sup>...]      ‘LK.NS’  
 b. /a<sup>21</sup> /      [ʰŋa<sup>21</sup>]      ‘to tie’  
 c. /-e<sup>4</sup> /      [...e<sup>4</sup>]      ‘mother’

The **maximal segmental structure** of syllables in native morphemes goes from /CV/ for pre-tonic syllables to /CV<sub>1</sub>V<sub>2</sub>?/ for stressed syllables. Post-tonic syllables’ maximal segmental structure can be analyzed as /CV?/. Instances of segment-wise maximally complex syllables are provided in the following examples (on the phonetic realization of (80b–80c), see SECTION 2.1.3.1):

- (80) a. /pe<sup>3</sup> = /      [pɛ<sup>3</sup>...]      ‘2PL.SBJ’  
 b. /baiŋ<sup>36</sup> /      [ʰba:ʰi<sup>36</sup>]      ‘to illuminate’  
 c. /ɕauŋ<sup>31</sup> /      [ʰɕa:ʰu<sup>31</sup>]      ‘to seize’  
 d. /-pɯŋ<sup>C</sup> /      [...pɯŋ<sup>3</sup>]      ‘spherical shape’  
 e. /=~ŋa<sup>3</sup> /      [...ŋã<sup>3</sup>ã<sup>1</sup>]      ‘QUOT’

Morphemes starting with a post-tonic syllable may additionally feature a pre-syllabic coda /ʔ/, thus displaying the form /-ʔ.CV(?)(...)/ from a morphological perspective (see SECTION 2.1.3.3). However, because such pre-syllabic coda /ʔ/’s, when realized, are by definition always syllabified as the coda of an immediately preceding stressed syllable, I analyze them here as belonging structurally not to post-tonic syllables but to stressed syllables from a strictly phonological perspective.

As shown in TABLE 16, the **inventories of segmental phonemes available in onset (/C/) and nucleus (/V/) positions vary slightly from syllable type to syl-**

Segmental component	Syllable type		
	pre-tonic	stressed	post-tonic
/k <sup>w</sup> /		✓	
onset /ʔ/ (/f̩/)		✓	✓ (✓)
/o/	✓	✓	(✓)
all others	✓	✓	✓

TABLE 16. Available segmental phonemes by syllable type in native SMAT morphemes

**lable type.** The phoneme /k<sup>w</sup>/ is only available in stressed syllables. As an onset, /ʔ/ does not occur in pre-tonic syllables (note that it does not occur either as a coda in pre-tonic syllables, as shown in TABLE 15). The hapax phoneme /f̩/ occurs in a single morpheme in post-tonic syllables (see SECTION 2.1.1). In native morphemes, the vowel phoneme /o/ does not occur in post-tonic syllables. The only exceptions to this restriction are found in post-tonic syllables that immediately follow the stressed syllable in case the latter itself contains a nucleus /o/<sup>76</sup> (as in the lexical items /wo:<sup>43</sup>o<sup>5</sup>/ [ˈwɔ:<sup>43</sup>o<sup>5</sup>] ‘admittedly’ or /to<sup>43</sup>~ʔo<sup>5</sup>~de<sup>1</sup>/ [ˈtɔ:<sup>43</sup>ʔo<sup>5</sup>n̩e<sup>1</sup>] ‘stairs’). In discourse, most of these exceptions arise as a consequence of the morphophonological processes described in SECTIONS 2.6.1.1 and 2.6.1.2. As discussed in these sections, when it immediately follows a stressed /o/, a post-tonic syllable with no onset or an onset /ʔ/ that features an unspecified vowel position or a nucleus /a/ underlyingly is normally realized with a contextual nucleus /o/. This phenomenon is shown in examples (81b) (unspecified vowel contextually realized as /o/) and (82b) (/a/ contextually shifting to /o/). Contrast these examples with (81a) and (82a) respectively, where the stressed syllable features a nucleus other than /o/; (82a) in particular, by contrast with (82b), shows that a post-tonic syllable’s /a/ only turns into /o/ following a stressed syllable’s /o/, *i.e.* not following any other nucleus.

- (81) a. /pe<sup>33</sup>-/+/-ʔV<sup>3</sup>~de<sup>1</sup>/ → /pe<sup>33</sup>-ʔe<sup>3</sup>~de<sup>1</sup>/ ‘your (pl.) bodies’  
 [ˈpɛ:<sup>33</sup>ʔɛ<sup>3</sup>n̩e<sup>1</sup>]

<sup>76</sup>Or, even more exceptionally, in post-tonic syllables that immediately follow a post-tonic syllable that contains an /o/ and itself immediately follows a stressed syllable containing an /o/, as in /o<sup>31</sup>f̩o<sup>1</sup>f̩o<sup>3</sup>/ [ˈŋɔ:<sup>31</sup>f̩o<sup>1</sup>f̩o<sup>3</sup>] ‘nocturnal rat sp.’ (on which see note 15 above).

	b.	/to <sup>33</sup> -/ + /-ʔV <sup>3</sup> ~de <sup>1</sup> /	→	/to <sup>33</sup> -ʔo <sup>3</sup> ~de <sup>1</sup> /	‘our bodies’
				[ <sup>l</sup> t̚o: <sup>33</sup> ʔo <sup>3</sup> nẽ <sup>1</sup> ]	
(82)	a.	/pe <sup>33</sup> -/ + /-a <sup>1</sup> ~de <sup>1</sup> /	→	/pe <sup>33</sup> -a <sup>1</sup> ~de <sup>1</sup> /	‘your (pl.) farm plots’
				[ <sup>l</sup> pɛ: <sup>33</sup> a <sup>1</sup> nẽ <sup>1</sup> ]	
	b.	/to <sup>33</sup> -/ + /-a <sup>1</sup> ~de <sup>1</sup> /	→	/to <sup>33</sup> -o <sup>1</sup> ~de <sup>1</sup> /	‘our farm plots’
				[ <sup>l</sup> t̚o: <sup>33</sup> o <sup>1</sup> nẽ <sup>1</sup> ]	
		(in free variation with: /to <sup>33</sup> -a <sup>1</sup> ~de <sup>1</sup> /		[ <sup>l</sup> t̚o: <sup>33</sup> a <sup>1</sup> nẽ <sup>1</sup> ])	

All other segmental phonemes are indiscriminately available in all three syllable types.

As shown in TABLE 15 above, all three syllable types **may feature phonological nasality and all three obligatorily feature a toneme**. The tonological inventories available in pre-tonic, stressed, and post-tonic syllables are different, however; these inventories are displayed in TABLE 17 (for more details on the toneme inventory of SMAT, see SECTION 2.4 above).

Remember that the **position of stress in SMAT is absolutely static** (see SECTION 2.2). Stress only occurs on the first syllable of certain morphemes (including verbs and independent nouns in particular) and never shifts from there. All other morphemes are always unstressed and, depending on their nature, they either systematically precede (proclitics) or systematically follow (suffixes, bound nouns, enclitics) the stressed syllable of the prosodic word they belong to. As a consequence, the fact that a syllable’s position relative to stress has implications as to that syllable’s phonological shape is not to be understood dynamically. That is, it **should not be taken to mean that morphemes regularly alternate their phonological form according to their position relative to stress** in actual occurrences (thus adapting to the syllabic structure associated with that position), since a given morpheme’s position relative to stress is a stable property of that morpheme in SMAT. Note, however, that a few stressed function words are in practice frequently left unstressed (see examples (16b) and (37a–37c) above). In other words, although stress never shifts position within a given prosodic word, it may occasionally be dropped altogether. When this happens, the phonological shape of these function words seems to be remodeled so as to comply with the phonological restrictions that apply to pre-tonic syllables. The following example shows how the first syllable of the stressed word /ku<sup>31</sup>-ʔdu<sup>3</sup>/ ‘your’, when left unstressed, drops its coda /ʔ/ (coda /ʔ/’s do not occur in pre-tonic syllables) and sees its toneme /<sup>31</sup>/ turn

Toneme	Syllable type		
	pre-tonic	stressed	post-tonic
/52/		✓	
/36/		✓	
/43/		✓	
/34/		✓	
/31/		✓	
/33/		✓	
/21/		✓	
/22/		✓	
/CM/		✓	
/MC/		✓	
/5/	✓		✓
/4/	✓		✓
/3/	✓		✓
/1/	✓		✓
/4/1/			✓ <sup>a</sup>
/C/			✓

<sup>a</sup> /4/1/ does not occur in enclitics.

TABLE 17. Available tonemes by syllable type

into /<sup>3</sup>/ (only the latter may occur in unstressed syllables):

- (83) **Stressed:** /ku<sup>31</sup>-ʔdur<sup>3</sup>/ ~ **Unstressed:** /ku<sup>3</sup>dur<sup>3</sup>/ ‘your’  
 [k<sup>1</sup>kuʔ<sup>31</sup>ru<sup>3</sup>] [ku<sup>3</sup>ru<sup>3</sup>]

As shown in TABLE 15 above, a prosodic word may only feature a **single stressed syllable**, while it may feature **any number of unstressed (i.e. pre-tonic or post-tonic) syllables**, including none (see SECTION 2.2 and example (35) above). Apart from cases discussed in the preceding paragraph where a stressed morpheme is left unstressed, prosodic words must generally feature a stressed syllable.

From a morphosyntactic perspective, pre-tonic syllables are syntactically independent **proclitics** (as in example (84a)) or part of them (84b). Stressed syllables are syntactically **independent words** (85a) or part of them (85b). Finally, post-tonic syllables either **belong to polysyllabic syntactically-independent words** (86a), or are **bound morphemes** (86b), syntactically independent **enclitics** (86d), or part of them ((86c) and (86e)).

- (84) a. /t̤a<sup>3</sup>=/            [t̤a<sup>3</sup>...]            ‘1SG.SBJ’  
       b. /t̤i<sup>3</sup>i<sup>1</sup>=/           [t̤i<sup>3</sup>i<sup>1</sup>...]            ‘1SG.SBJ.PCì’
- (85) a. /ku<sup>33</sup>/            [ʰku<sup>33</sup>]            ‘fish sp.’<sup>77</sup>  
       b. /ku<sup>33</sup>du<sup>3</sup>du<sup>5</sup>/    [ʰku:<sup>33</sup>ru<sup>3</sup>ru<sup>5</sup>]    ‘toad’
- (86) a. /ku<sup>33</sup>du<sup>3</sup>du<sup>5</sup>/    [ʰku:<sup>33</sup>ru<sup>3</sup>ru<sup>5</sup>]    ‘toad’  
       b. /-ka<sup>1</sup>/            [...ka<sup>1</sup>]            ‘liver’  
       c. /-t̤i<sup>5</sup>ka<sup>1</sup>/        [...t̤i<sup>5</sup>ka<sup>1</sup>]        ‘spot’  
       d. /=~ba<sup>3</sup>/        [...mã<sup>3</sup>]            ‘precisely’  
       e. /=~ba<sup>3</sup>de<sup>3</sup>/      [...mã<sup>3</sup>rɛ<sup>3</sup>]        ‘just’

## 2.5.2 Combinatorial restrictions

Although the many combinations of phonological items potentially derivable from the model in TABLE 15 are allowed for the most part, these **combinations are subject to a few restrictions**.

The labialized velar consonant onsets /k<sup>w</sup>/ and /w/ cannot co-occur with the labialized vowel nucleus /u/ within a single syllable (\*k<sup>w</sup>u/, \*wu/). It seems that /k<sup>w</sup>/ is not allowed to co-occur with /o/ either (\*k<sup>w</sup>o/).<sup>78</sup> The bilabial consonants /p/ and /b/ and the labialized velar consonants /k<sup>w</sup>/ and /w/ cannot co-occur with the complex nucleus /au/ (\*pau/, \*bau/, \*k<sup>w</sup>au/, \*wau/). The palatal consonants /t̤/ and /d̤/ only marginally co-occur with the complex nucleus /ai/ ((\*t̤ai/, (\*d̤ai/); these combinations are only attested in SMAT in one onomatopoeia (/t̤ai<sup>34</sup>/ [ʰt̤ai<sup>34</sup>] ‘short rattling noise’) and in a hapax word of obscure meaning found in a song sung by the legendary character Iya-Iya at the end of his tale (/~d̤aidu/ [(<sup>1</sup>)nairu] ‘maloca (?)’<sup>79</sup>).<sup>80</sup>

<sup>77</sup>Unidentified. Local Spanish *lisa*.

<sup>78</sup>I am uncertain of the exact phonological form of the rare and, according to my consultant JSG, old-fashioned word /ko<sup>21</sup>i<sup>5</sup>/ ‘far away (?)’, which might in fact be /k<sup>w</sup>o<sup>21</sup>i<sup>5</sup>/. This would imply that the combination /k<sup>w</sup>/ + /o/, although exceedingly rare in discourse, is not phonologically prohibited.

<sup>79</sup>On the transcription of this word, see note 17.

<sup>80</sup>But see, in Cushillococha Tikuna, the words <ni<sup>25</sup>chax<sup>15</sup>e<sup>2</sup>tü<sup>5</sup>> ‘he has a pierced eye’ (Anderson 1962:352) and <i<sup>4</sup>na<sup>3</sup>chax<sup>4</sup>i<sup>2</sup>chi<sup>2</sup>> ‘to melt’ (Anderson & Anderson 2016:39), which both contain an underlying syllable /t̤ai(??)/.

A coda /ʔ/ may not co-occur with an empty onset in post-tonic syllables (/V/ and /CVʔ/ are allowed, but not \*/Vʔ/).

Phonological nasality cannot co-occur with the velar onset consonants /k/ and /g/ (\*/~k.../, \*/~g.../), whether in stressed or unstressed syllables. In unstressed syllables, it never co-occurs with the labialized velar consonants /k<sup>w</sup>/ and /w/ (\*/~k<sup>w</sup>.../, \*/~w.../), and it is only attested to co-occur with one of the palatal consonants /tɕ/ and /dʒ/ in the morpheme /-~dʒi<sup>5</sup>~ʔur<sup>1</sup>/ [-ɲĩ<sup>5</sup>ʔũ<sup>1</sup>] ‘breast’<sup>81</sup> (\*/~tɕ.../, (\*/~dʒ.../). Phonological nasality is further neutralized in onsetless pre-tonic syllables, *i.e.* it cannot create contrasts between *e.g.* /V = / vs /~V = /.

Finally, the tonemes /<sup>1</sup>/ and /<sup>4/1</sup>/ are not compatible with the coda /ʔ/ in post-tonic syllables (\*/(C)Vʔ<sup>4/1</sup>/, \*/-(C)Vʔ<sup>1</sup>/). In that same context, the toneme /<sup>5</sup>/ is only attested to co-occur with a coda /ʔ/ in a single morpheme (\*/(C)V<sup>5</sup>/). That morpheme, /-tɕur<sup>5</sup>/ [...tɕur<sup>5</sup>ʔur<sup>3</sup>] ‘liquid’, is also attested under the disyllabic form /-tɕi<sup>5</sup>ʔur<sup>3</sup>/ [...tɕi<sup>5</sup>ʔur<sup>3</sup>], where the /ʔ/ is not interpreted as a coda but as an onset.<sup>82</sup>

## 2.6 Morphophonology

This section on morphophonological processes is divided in two parts. SECTION 2.6.1 deals with the comparatively simple processes whose effects occur at the **segmental level**. SECTION 2.6.2 describes in detail the more complex processes whose effects occur at the **tonological level**.

### 2.6.1 Segmental morphophonology

**Three segmental morphophonological phenomena** that occur in several morphemes are discussed in the following sections. Other segmental morphophonological phenomena that only concern single morphemes are discussed in the respective sections covering these morphemes (see, in particular, SECTIONS 3.3.1 and 3.4.3).

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<sup>81</sup>In Cushillococha Tikuna, this morpheme is attested under the form <na<sup>3</sup>nix<sup>5</sup>ũ<sup>1</sup>> ‘breast’, *i.e.* with a dental reflex <n> in place of the SMAT palatal [ɲ] (Anderson & Anderson 2016:112).

<sup>82</sup>It is under the latter segmental shape that this morpheme is attested in Cushillococha Tikuna, as in *e.g.* <tax<sup>5</sup>tü<sup>2</sup>chix<sup>1</sup>ü<sup>5</sup>> ‘water (of the Amazon river)’ (Anderson & Anderson 2016:218).





b.	/tɕo <sup>34</sup> -ʔV <sup>4/1</sup> tɕi <sup>4/1</sup> /	→	/tɕo <sup>34</sup> -ʔo <sup>4/1</sup> tɕi <sup>4/1</sup> /	‘to unhook’
			[ <sup>1</sup> tɕo: <sup>34</sup> ʔo <sup>4</sup> tɕi <sup>4</sup> ]	
c.	/~ɕa <sup>33</sup> -V <sup>3</sup> tɕi <sup>1</sup> /	→	/~ɕa <sup>33</sup> -u <sup>3</sup> tɕi <sup>1</sup> /	‘to run (closer to a ground)’
			[ <sup>1</sup> nã: <sup>33</sup> ũ <sup>3</sup> tɕi <sup>1</sup> ]	
d.	/ʔai <sup>34</sup> -ʔV <sup>1</sup> da <sup>1</sup> /	→	/ʔa <sup>34</sup> ʔ-i <sup>1</sup> da <sup>1</sup> /	‘be a bit drunk’
			[ <sup>1</sup> ʔa: <sup>34</sup> ʔi <sup>1</sup> ra <sup>1</sup> ]	
e.	/tɕau <sup>21</sup> -ʔV <sup>3</sup> ~de <sup>1</sup> /	→	/tɕa <sup>21</sup> -ʔu <sup>3</sup> ~de <sup>1</sup> /	‘my body’
			[ <sup>1</sup> tɕa: <sup>21</sup> ʔu <sup>3</sup> nẽ <sup>1</sup> ]	
f.	/tɕi <sup>31</sup> di <sup>5</sup> -ʔV <sup>1</sup> da <sup>1</sup> /	→	/tɕi <sup>31</sup> di <sup>5</sup> -ʔu <sup>1</sup> da <sup>1</sup> /	‘a bit badly’
			[ <sup>1</sup> tɕi <sup>31</sup> ri <sup>5</sup> ʔu <sup>1</sup> ra <sup>1</sup> ]	
g.	/~do <sup>31</sup> di <sup>5</sup> -ʔV <sup>5</sup> tɕi <sup>1</sup> /	→	/~do <sup>31</sup> di <sup>5</sup> - <span style="border: 1px solid black; padding: 0 2px;"> </span> ʔu <sup>5</sup> tɕi <sup>1</sup> /	‘at the very beginning’
			[ <sup>1</sup> nõ <sup>31</sup> ri <sup>5</sup> ʔũ <sup>5</sup> tɕi <sup>1</sup> ]	

### 2.6.1.2 Unstressed /a/ shifting to /o/ after a stressed /o/

A handful of bound nouns and suffixes usually see the vowel /a/ in their first (or single) syllable turn into an /o/ when they immediately follow a stressed syllable with a nucleus /o/. They all share the property of having a first (or single) syllable that lacks an onset or features an onset /ʔ/. They include at least the following four morphemes:

- /-a<sup>c</sup>/ [...a] ‘mouth’;
- /-ʔa<sup>3</sup>ku<sup>1</sup>/ [...ʔa<sup>3</sup>ku<sup>1</sup>] ‘child’;
- /-a<sup>1</sup>~de<sup>1</sup>/ [...a<sup>1</sup>nẽ<sup>1</sup>] ‘space’;
- /-~a<sup>4</sup>tɕi<sup>4/1</sup>/ [...ã<sup>4</sup>tɕi<sup>4</sup>] ‘upslope’.<sup>84</sup>

This morphophonological process is illustrated in the following examples (see also (82) above):

(88)	/tɕo <sup>43</sup> -~a <sup>4</sup> tɕi <sup>4/1</sup> /	→	/tɕo <sup>31</sup> -~o <sup>4</sup> tɕi <sup>4/1</sup> /	‘to go up (pl.)’
			[ <sup>1</sup> tɕo: <sup>31</sup> õ <sup>4</sup> tɕi <sup>4</sup> ]	

<sup>84</sup>This list is likely to additionally include /-~a<sup>5</sup>e<sup>1</sup>/ [...ã<sup>5</sup>ʔẽ<sup>1</sup>] ‘mind’ and /-~a<sup>1</sup>ku<sup>1</sup>/ [...ã<sup>1</sup>ku<sup>1</sup>] ‘MAN’, which are attested to show this behavior in Cushillococha Tikuna (see e.g. Anderson & Anderson 2016:121, 199).

- (89) /go<sup>34</sup>-~a<sup>4</sup>tɕi<sup>4/1</sup>/ → /go<sup>34</sup>-~o<sup>4</sup>tɕi<sup>4/1</sup>/ ‘to run up’  
 [ˈgɔː<sup>34</sup>õ<sup>4</sup>tɕi<sup>4</sup>]
- (90) /ʔo<sup>43</sup>-a<sup>1</sup>~de<sup>1</sup>/ → /ʔo<sup>31</sup>-o<sup>1</sup>~de<sup>1</sup>/ ‘to die out (from a land)’  
 [ˈʔɔː<sup>31</sup>o<sup>1</sup>nẽ<sup>1</sup>]

It is **apparently becoming optional** in today’s SMAT, especially in younger speakers (see example (82) above).

Note that this phenomenon might in fact apply to all post-tonic morphemes whose first (or single) syllable features a nucleus /a/ and lacks an onset or features an onset /ʔ/. The reason why I have not observed /a/ to /o/ shifts in other morphemes with such a phonological shape might be due to the limited size of my data. This would imply that the phenomenon under discussion is conditioned phonologically, not morphologically, and is not strictly speaking a morphophonological phenomenon, but a phonological one that by nature only occurs in polymorphemic words.

### 2.6.1.3 Noun truncation in vocative phrases

Independent nouns and proper nouns (including Spanish proper nouns inserted by code-mixing) used in the vocative are often—but not obligatorily—**truncated to their first syllable only**, as in example (91a). This is especially common when they are preceded by the vocative proclitic /pa<sup>1</sup> = /, as in (91b), or followed by the probable vocative enclitic /=ka<sup>1</sup>/, as in (91c).

- (91) a. /~ba<sup>33</sup>~ba<sup>1</sup>/ → /~ba<sup>33</sup>/ ‘Mommy!’<sup>85</sup>  
 [ˈmã<sup>33</sup>]
- b. /pa<sup>1</sup> = ʔo<sup>MC</sup>i<sup>5</sup>/ → /pa<sup>1</sup> = ʔo<sup>MC</sup>/ ‘Grandpa!’  
 [pa<sup>1</sup>ʔo<sup>MC</sup>]
- c. /Eu<sup>33</sup>se<sup>4</sup>vio<sup>1</sup> = ka<sup>1</sup>/ → /Eu<sup>33</sup> = ka<sup>1</sup>/ ‘Eusevio!’<sup>86</sup>  
 [eũ<sup>33</sup>ka<sup>1</sup>]

Note that when this process occurs, the resulting form retains any glottal stop /ʔ/ that immediately follows the nucleus of the first syllable in the original form.

<sup>85</sup>Perhaps from /~ba<sup>33</sup>~ba<sup>5</sup>/ ‘mum’ rather than from /~ba<sup>33</sup>~ba<sup>1</sup>/ ‘mommy’.

<sup>86</sup>On the phonological representation of words inserted by code-mixing, see note 119.

Such glottal stops are realized as word-final [ʔ]’s in the resulting form. This process of truncation thus produces **forms that regularly end with a glottal stop /ʔ/ realized as a word-final [ʔ]**, a situation usually avoided in SMAT (see SECTION 2.1.3.1, p.79).

$$(92) \quad /pa^1 = bi^{31}\?i^5/ \quad \rightarrow \quad /pa^1 = bi\?^{31}/ \quad \text{‘Mother!’}$$

$$\quad [pa^1bi\?^{31}]$$

For the traces of an unrelated, no longer productive process of truncation retaining only the first two syllables of independent nouns, see end of SECTION 2.7.3.1 below.

## 2.6.2 Morphotonology

SMAT displays at least **three relatively complex patterns of tonological alternations occurring in specific morphosyntactic contexts**. In these contexts, a syllable’s lexical (or initial) toneme is replaced by a specific alternating (or resulting) toneme. For convenience, I refer to these patterns as Pattern 1, 2, and 3. Pattern 2, for instance, involves the replacement of a lexical toneme /<sup>43</sup>/ by a toneme /<sup>31</sup>/ in the personal roots when these are immediately suffixed morphemes from a certain lexical category of morphemes (which I call “triggers”). This particular morphotonological alternation is illustrated in example (94), where the lexical toneme /<sup>43</sup>/ of the personal root of the second person singular (/ku<sup>43</sup>-/ [‘ku:<sup>43</sup>...]) turns into /<sup>31</sup>/ when the personal root is attached with the bound noun /-ʔa<sup>3</sup>ku<sup>1</sup>/ [...ʔa<sup>3</sup>ku<sup>1</sup>] ‘child, daughter’, which happens to be lexically specified as a trigger of the morphotonological alternations of Pattern 2 (contrast (93), where the same personal roots retains its lexical toneme when attached with a bound noun that is not lexically specified as a trigger for Pattern 2 alternations):

$$(93) \quad /ku^{[43]}-/ + /-we^3t\?i^1/ \quad \rightarrow \quad /ku^{[43]}-we^3t\?i^1/ \quad \text{‘your container’}$$

$$\quad [‘ku:<sup>43</sup>we^3t\?i^1]$$

$$(94) \quad /ku^{[43]}-/ + /-ʔa^3ku^1/ \quad \rightarrow \quad /ku^{[31]}-ʔa^3ku^1/ \quad \text{‘your daughter’}$$

$$\quad [‘ku:<sup>31</sup>ʔa^3ku^1]$$

TABLE 18 gives a **general overview** of most of the morphotonological alternations attested in SMAT arranged by morphosyntactic context of occurrence (*i.e.* by pattern). The morphotonological alternation just discussed, for instance, is repre-

		Resulting toneme			
Initial toneme		Pattern 1 (... \SBJV)	Pattern 2 (suffixation)	Pattern 3a (...-ʔgu <sup>[4]</sup> /1)	Pattern 3b (...-ʔgu <sup>[4]</sup> /1)
in stressed syllable	/52/	—	—	*	—
	/36/	NA	NA	NA	NA
	/43/	/31/	/31/	*	—
	/34/	/21/	—	(—)	—
	/31/	/33/	—	*	—
	/33/	/21/	—	*	—
	/21/	/CM/	—	*	—
	/22/	/MC/	—	/MC/	(—)
	/CM/	—	—	—	—
	/MC/	/36/	/36/	—	(/36/)
in unstressed syllable	/5/	NA	NA	NA	NA
	/4/	/5/	—	(—)	—
	/3/	/1/	—	—	—
	/1/	/3/	—	/C/	—
	/4/1/	/5/, /4/, /3/, or /C/	—	/C/	—
	/C/	/5/	—	—	—

**Key:**

- in this situation, the initial toneme remains unchanged
- ( ) this situation occurs but is dispreferred
- \*
- NA this situation, if possible at all, is unattested in my data

**TABLE 18.** *SMAT morphotonological alternation patterns in coda-less syllables*

sented in the third row of this table (in stressed syllables, initial toneme /43/ → resulting toneme /31/ in Pattern 2).

Let me stress that the tonological alternations dealt with in this section are not conditioned phonetically or phonologically, but morphosyntactically. In other words, they are **not cases of allophonic realizations** of single lexical tonemes (whereby a given lexical toneme has two realizations in complementary distribution depending on the phonetic or phonological context), but—so to say—**cases of “toneme allomorphy”** (whereby each lexical toneme has one or occasionally several corresponding “allomorphic tonemes” that occur in specific morphosyntactic contexts).

The morphosyntactic contexts where the morphotonological alternations of Pattern 1, 2, and 3 occur, as well as the specific alternations that each of these patterns involves, are respectively discussed in SECTIONS 2.6.2.1, 2.6.2.2, and 2.6.2.3.

### 2.6.2.1 Pattern 1 of morphotonological alternations

This complex pattern of morphotonological alternations occurs in the **last (or single) syllable of predicative phrases of any kind**—whether verbal or non-verbal—when these are **inflected in the Subjunctive Inflectional Type** (SBJV; see CHAPTER 5). It does not apply, however, in predicative phrases in SBJV that are suffixed with  $/-ʔgu^{4/1}/$  [ $\dotsʔgu^4$ ]~[ $\dotsʔgu^1$ ] ‘CIRC’ (on the morphotonological alternations triggered by this morpheme, see SECTION 2.6.2.3 below),  $/-ɕa^1\sim de^5/$  [ $\dotsɕa^1n\tilde{e}^5$ ] ‘SIMULT.CIRC’, or  $/-\sim a^1ku^1/$  [ $\dots\tilde{a}^1ku^1$ ] ‘MAN’.

**(i) SIMPLER CASES.** As shown in TABLE 18, Pattern 1 involves the **following morphotonological alternations in stressed syllables** (*i.e.* in monosyllabic verbs):

- $/^{43}/ \rightarrow /^{31}/$ ;
- $/^{34}/$  and  $/^{33}/ \rightarrow /^{21}/$ ;
- $/^{31}/ \rightarrow /^{33}/$ ;
- $/^{21}/ \rightarrow /^{CM}/$  (or  $\rightarrow /^{22}/$  in speakers who have merged  $/^{CM}/$  into  $/^{22}/$ ; see SECTION 2.4.1, p.97);
- $/^{22}/ \rightarrow /^{MC}/$  (only applies in predicative phrases in Bare SBJV or that bear the relativizer suffix in its feminine form; see below);
- $/^{MC}/ \rightarrow /^{36}/$ .

These are illustrated in examples (95a–95g). These examples display the lexical form of a series of monosyllabic verbs (*i.e.* the form they exhibit in most contexts, in particular in any context where they are not the single syllable of a predicative phrase inflected in SBJV) alongside short utterances where the same verbs appear in a context where they are inflected in Bare SBJV, *i.e.* SBJV in the absence of the relativizer suffix or the suffix  $/-\sim ʔu^4/$  [ $\dotsʔ\tilde{u}^4$ ] ‘SUB’ (*e.g.* in assertive main clauses, as in (95a), in directive main clauses, as in (95d), or in dependent clauses meaning ‘until ...’, as in (95e); see SECTION 5.2.5).

- (95) a. /do<sup>[43]</sup>/ → /~da<sup>1</sup> = do<sup>[31]</sup> = ~da<sup>5</sup>/  
 [nã<sup>1</sup>ḍo:<sup>31</sup>nã<sup>5</sup>]  
 ‘it’s soft, you know!’
- b. /~bu<sup>[34]</sup>/ → /~da<sup>1</sup> = ~bu<sup>[21]</sup> = ~da<sup>5</sup>/  
 [nã<sup>1</sup>mũ:<sup>21</sup>nã<sup>5</sup>]  
 ‘they are many, you know!’
- c. /tau<sup>[33]</sup>/ → /~da<sup>1</sup> = tau<sup>[21]</sup> = ~da<sup>5</sup>/  
 [nã<sup>1</sup>ṭaũ<sup>21</sup>nã<sup>5</sup>]  
 ‘its grey, you know!’
- d. /~ʔi<sup>[31]</sup>/ → /ḍe<sup>36</sup>-a<sup>1</sup> ~da<sup>1</sup> = ~ʔi<sup>[33]</sup>/  
 [ḍe:<sup>36</sup>a<sup>1</sup> nã<sup>1</sup>ʔi<sup>33</sup>]  
 ‘let them go there!’
- e. /pa<sup>[21]</sup>/ → /~ḍu<sup>MC</sup>~ba<sup>4</sup> = ta<sup>1</sup> ḍa<sup>1</sup> = pa<sup>[CM]</sup>/  
 [ʔnũũmã<sup>4</sup>ṭa<sup>1</sup> ḍa<sup>1</sup>paa]  
 ‘until he was tired’
- f. /dau<sup>[22]</sup>/ → /~nu<sup>31</sup>-gu<sup>1</sup>-~da<sup>1</sup> ~da<sup>1</sup> = dau<sup>[MC]</sup>/  
 [ʔnũ:<sup>31</sup>gu<sup>1</sup>nã<sup>1</sup> nã<sup>1</sup>ḍaũ]  
 ‘let him take care!’
- g. /gu<sup>[MC]</sup>/ → /~ḍu<sup>MC</sup>~ba<sup>4</sup> = ta<sup>1</sup> ~da<sup>1</sup> = gu<sup>[36]</sup>/  
 [ʔnũũmã<sup>4</sup>ṭa<sup>1</sup> nã<sup>1</sup>gu<sup>36</sup>]  
 ‘until it was finished’

Note that the morphotonological alternation /22/ → /MC/ **only applies in predicative phrases in Bare SBJV or that bear the relativizer suffix in its feminine form.** In other words, it does not apply in predicative phrases in SBJV that bear the suffix /-~ʔu<sup>4</sup>/ [...ʔũ<sup>4</sup>] ‘SUB’ nor in predicative phrases in SBJV that bear the relativizer suffix in its masculine, neuter, salientive, or non-salientive forms. Contrast example (95f) above, where the morphotonological alternation under discussion does apply (predicative phrase in Bare SBJV), and the following example, where it does not (predicative phrase in SBJV + /-~ʔu<sup>4</sup>/ [...ʔũ<sup>4</sup>] ‘SUB’):

- (96) /dau<sup>[22]</sup>/ → /~nu<sup>31</sup>-gu<sup>1</sup>-~da<sup>1</sup> ~da<sup>1</sup> = dau<sup>[22]</sup>-~ʔu<sup>4</sup>/  
 [ʔnũ:<sup>31</sup>gu<sup>1</sup>nã<sup>1</sup> nã<sup>1</sup>ḍaũ<sup>22</sup>ʔũ<sup>4</sup>]  
 ‘(that) he takes care’

While, as has just been said, the lexical toneme /22/ usually remains unaffected in Pattern 1 of morphotonological alternations when it occurs in a predicative

phrase that bears the relativizer suffix in its salientive form, a **morphotonological alternation /22/→/36/ is exceptionally attested** in that context. This rare morphotonological alternation is illustrated in the following example:

- (97) /ʔu<sup>[22]</sup>/ → /ku<sup>43</sup>-~baʔ<sup>4</sup> wi<sup>33</sup>ɖa<sup>3</sup>-~ʔu<sup>3</sup> ʔu<sup>[36]</sup>ʔe<sup>1</sup>/  
 ['ku:<sup>43</sup>mā<sup>4</sup>? 'wi:<sup>33</sup>ɖa<sup>3</sup>ʔũ<sup>3</sup> 'ʔu:<sup>36</sup>ʔe<sup>1</sup>]  
 ‘the one who will sing songs for you (lit. ‘make songs with you’)’ [IGS 517]

This marginal phenomenon, which I have observed in older speakers, might be a (lexicalized?) remnant of an alternation that used to be regular but has mostly become obsolete in today’s SMAT. In any case, the historical and dialectological data currently available on Tikuna do not allow to test this hypothesis.

Pattern 1 further involves the **following morphotonological alternations in unstressed syllables** (i.e. in the last syllable of polysyllabic predicative phrases):

- /<sup>4</sup>/ and /<sup>C</sup>/ → /<sup>5</sup>/;
- /<sup>3</sup>/ → /<sup>1</sup>/;
- /<sup>1</sup>/ → /<sup>3</sup>/;
- /<sup>4/1</sup>/ → /<sup>5</sup>/, /<sup>4</sup>/, /<sup>3</sup>/, or /<sup>C</sup>/.

The first four are illustrated in examples (95a–95g). These examples display the lexical form of a series of polysyllabic predicative phrases alongside short utterances where the same predicative phrases appear in a context where they are inflected in Bare SBJV.

- (98) a. /to<sup>43</sup>-gu<sup>[4]</sup>/ → /pe<sup>3</sup> = ~da<sup>3</sup> = to<sup>43</sup>-gu<sup>[5]</sup>/  
 [pe<sup>3</sup>nã<sup>3</sup>ʔo:<sup>43</sup>gu<sup>5</sup>]  
 ‘(you guys) plant them!’
- b. /ʔai<sup>31</sup>du<sup>5</sup>~a<sup>[C]</sup>/ → /~da<sup>1</sup> = ʔai<sup>31</sup>du<sup>5</sup>~a<sup>[5]</sup> = ~da<sup>5</sup>/  
 [nã<sup>1</sup>ʔai<sup>31</sup>ru<sup>5</sup>ã<sup>5</sup>nã<sup>5</sup>]  
 ‘he has a dog, you know!’
- c. /ɖu<sup>34</sup>ta<sup>[3]</sup>/ → /~ɖu<sup>MC</sup>~ba<sup>4</sup> = ta<sup>1</sup> ~da<sup>1</sup> = ɖu<sup>34</sup>ta<sup>[1]</sup>/  
 [ʔũũmã<sup>4</sup>ta<sup>1</sup> nã<sup>1</sup>ɖu:<sup>34</sup>ta<sup>1</sup>]  
 ‘until it was night’

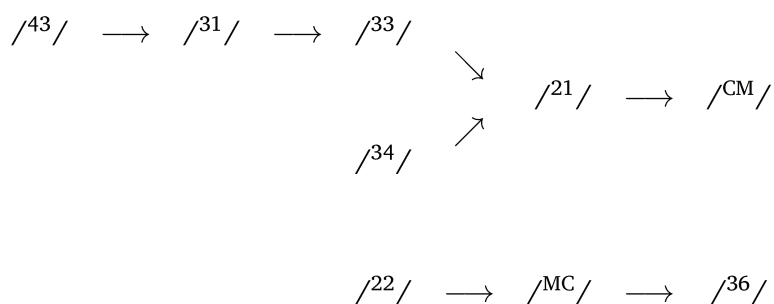
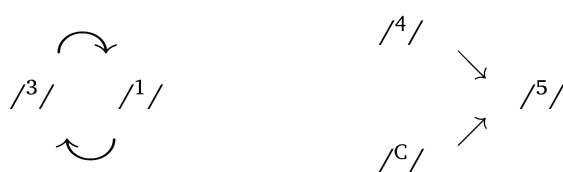
- d. / $\sim$ be<sup>31</sup>-tɕi<sup>1</sup>ga<sup>1</sup>/ → / $\sim$ da<sup>1</sup> =  $\sim$ be<sup>31</sup>-tɕi<sup>1</sup>ga<sup>3</sup> =  $\sim$ da<sup>5</sup>/  
 [nã<sup>1</sup>mẽ:<sup>31</sup>tɕi<sup>1</sup>ga<sup>3</sup>nã<sup>5</sup>]  
 ‘it’s interesting, you know!’

Note, importantly, that **none of the morphotonological alternations of Pattern 1 described so far in this section apply in predicative phrases in SBJV that bear the relativizer suffix in its feminine form** (/ -ku<sup>3</sup> / [...ku<sup>3</sup> ‘REL.F’), except for the alternation /22/ → /MC/, which was said above to apply only in this context and in predicative phrases in Bare SBJV. In those SMAT speakers that still clearly distinguish them, the feminine and masculine forms of the relativizer suffix, which are segmentally homonymous, indeed only differ by their distinct effects on the application of the morphotonological alternations of Pattern 1 in the syllable that immediately precedes them. These distinct effects allow to distinguish forms such as (99a) (feminine subject relativization of the verb /bu<sup>31</sup> / [‘bu<sup>31</sup>] ‘be young’, where the application of the morphotonological alternations of Pattern 1 are inhibited) and (99b) (masculine subject relativization of the same verb, where the morphotonological alternations of Pattern 1 do apply).

- (99) a. /bu<sup>31</sup>/ → /bu<sup>31</sup>-ku<sup>3</sup>/  
 [‘bu:<sup>31</sup>ku<sup>3</sup>]  
 ‘young one (fem.)’ or ‘girl’  
 b. /bu<sup>31</sup>/ → /bu<sup>33</sup>-ku<sup>3</sup>/  
 [‘bu:<sup>33</sup>ku<sup>3</sup>]  
 ‘young one (masc.)’ or ‘boy’

Interestingly, the morphotonological alternations of Pattern 1 discussed so far in this section constitute a **case of morphosyntactically-conditioned chain shift**: in the morphosyntactic contexts where Pattern 1 occurs, almost every lexical toneme changes to another one from the language’s inventory of tonemes, creating what looks like a chain—in fact, three chains and a “circle”—which can be represented as in FIGURE 17. The top chain in this figure is to be read as follows: a lexical toneme /<sup>43</sup>/ becomes /<sup>31</sup>/ in Pattern 1; a lexical toneme /<sup>31</sup>/, in its turn, becomes /<sup>33</sup>/ in Pattern 1; a lexical toneme /<sup>33</sup>/, as well as a lexical toneme /<sup>34</sup>/, become /<sup>21</sup>/ in Pattern 1; finally, a lexical toneme /<sup>21</sup>/ becomes /<sup>CM</sup>/ in Pattern 1. A lexical toneme /<sup>CM</sup>/, for its part, remains unchanged in Pattern 1. The other two chains in FIGURE 17 are to be read in the same way. The “circle” in the bottom left part of this figure signifies that a lexical toneme /<sup>3</sup>/ becomes /<sup>1</sup>/ in Pattern 1, while in the same context a lexical toneme /<sup>1</sup>/ becomes /<sup>3</sup>/. Partially similar tonal chain



**In stressed syllables****In unstressed syllables**

**FIGURE 17.** *SMAT morphotonological chain shift (Pattern 1 of morphotonological alternations, used in the encoding of SBJV)*

shifts, or chains of tonal changes, have been described in the Min Chinese languages (see Yip 2002:120–121, 189–194) and in at least one Mazatecan (Oto-Manguean) language (see Yip 2002:231–232). A detailed examination of these parallel cases would be required to assess the extent to which they compare with the SMAT facts.

(ii) **MORPHOTONOLOGICAL ALTERNATIONS UNDERGONE BY  $/^{4/1}/$ .** The morphotonological alternations undergone by the toneme  $/^{4/1}/$  in **Pattern 1** are **intricate**. They display some intergenerational variation and their application varies with the degree of lexicalization of the predicative phrase in whose last syllable it appears. A toneme  $/^{4/1}/$  realized as  $[^1]$  in the predicative phrase’s initial form (on the realization of  $/^{4/1}/$  outside of contexts of morphotonological alternations, see SECTION 2.4.3) regularly **behaves just like  $/^1/$**  in Pattern 1, *i.e.* turns into  $/^3/$  in most resulting forms in SBJV. This is shown in example (100), which again contains a predicative phrase in its lexical form alongside an occurrence of the same predicative phrase in a context where the morphotonological alternations of Pattern 1 apply (in this case, in a predicative phrase bearing the suffix  $/-\sim?u^4/$  [ $\dots?u^4$ ] ‘SUB’).

- (100) /ʔw<sup>43</sup>-ku<sup>[4/1]</sup>/ → /ɖʌ<sup>1</sup> = ʔw<sup>43</sup>-ku<sup>[3]</sup>-~ʔw<sup>4</sup>/  
 [ʔw<sup>43</sup>ku<sup>[1]</sup>] [ɖʌ<sup>1</sup>ʔw<sup>43</sup>ku<sup>3</sup>ʔũ<sup>4</sup>]  
 ‘(that) he went in’

A toneme /<sup>4/1</sup>/ realized as [<sup>4</sup>] in the predicative phrase’s initial form **may similarly behave just like** /<sup>4</sup>/ in Pattern 1, *i.e.* turn into /<sup>5</sup>/ in most resulting forms in SBJV, as shown in the upper half of the following example (case of a predicative phrase bearing the suffix /-~ʔw<sup>4</sup>/ [...ʔũ<sup>4</sup>] ‘SUB’):

- (101) /~eʔ<sup>22</sup>-~ba<sup>[4/1]</sup>/ → /~da<sup>1</sup> = ~eʔ<sup>22</sup>-~ba<sup>[5]</sup>-~ʔw<sup>4</sup>/  
 [ʔẽʔ<sup>22</sup>mã<sup>[4]</sup>] [nã<sup>1</sup>ʔẽʔ<sup>22</sup>mã<sup>5</sup>ʔũ<sup>4</sup>]  
 (more common output: /~da<sup>1</sup> = ~eʔ<sup>22</sup>-~ba<sup>[4]</sup>-~ʔw<sup>4</sup>/  
 [nã<sup>1</sup>ʔẽʔ<sup>22</sup>mã<sup>4</sup>ʔũ<sup>4</sup>])  
 ‘(that) there is’

This seems to be a recent simplification of the language’s complex system of morphotonological alternations, however, as it is found mostly in younger speakers and in less lexicalized morphological collocations. Alternatively, such occurrences of /<sup>4/1</sup>/ **may have specific outputs** (*i.e.* outputs that differ from those of /<sup>4</sup>/) when the resulting predicative phrase in which they occur is in Bare SBJV, bears the suffix /-~ʔw<sup>4</sup>/ [...ʔũ<sup>4</sup>] ‘SUB’, or bears the relativizer suffix in its feminine, masculine, or non-salientive forms. When the resulting predicative phrase is in Bare SBJV or bears the relativizer in its feminine form (/~kuw<sup>3</sup>/ [...kuw<sup>3</sup>] ‘REL.F’), such occurrences of /<sup>4/1</sup>/ may **turn into** /<sup>C</sup>/, as shown in the following example (case of a predicative phrase in Bare SBJV):

- (102) /~du<sup>34</sup>-ku<sup>[4/1]</sup>/ → /~ɖu<sup>MC</sup>~ba<sup>4</sup> = ta<sup>1</sup> ~da<sup>1</sup> = ~du<sup>34</sup>-ku<sup>[C]</sup>/  
 [nũ:³⁴ku<sup>[4]</sup>] [ɖũũmã<sup>4</sup>ta<sup>1</sup> nã<sup>1</sup>nũ:³⁴kũ]  
 ‘until they were put in’

When the resulting predicative phrase bears the suffix /-~ʔw<sup>4</sup>/ [...ʔũ<sup>4</sup>] ‘SUB’ or the relativizer in its masculine or non-salientive forms (respectively /~kuw<sup>3</sup>/ [...kuw<sup>3</sup>] ‘REL.M’, which is segmentally homonymous with the masculine form of the relativizer, and /-~ʔw<sup>4</sup>/ [...ʔũ<sup>4</sup>] ‘REL.NS’), such occurrences of /<sup>4/1</sup>/ may **turn into** /<sup>4</sup>/, as shown in the following example (case of a predicative phrase bearing the suffix /-~ʔw<sup>4</sup>/ [...ʔũ<sup>4</sup>] ‘SUB’; see also the more common output in the lower half of example (101) above):

$$(103) \quad /e^{34}\text{-bu}^{\boxed{4/1}}/ \quad \rightarrow \quad / \sim \text{da}^1 = e^{34}\text{-bu}^{\boxed{4}} \sim \text{?u}^4 /$$

$$[{}^1\eta\epsilon:^{34}\text{bu}^{\boxed{4}}] \quad [n\tilde{a}^1\eta\epsilon:^{34}\text{bu}^4\text{?u}^4]$$

‘(that) he doesn’t have raw food’

Importantly, these outputs of  $/^{4/1}/$  in Pattern 1 that are specific to it (inasmuch as they differ from the respective outputs of  $/^4/$  and  $/^1/$ ) are the **reason why I treat the toneme  $/^{4/1}/$  as a distinct underlying unit from both  $/^4/$  and  $/^1/$** , rather than as a mere phenomenon of lexical variation that would occur in morphemes that happen to have two variant forms, one displaying  $/^4/$  and the other displaying  $/^1/$  (see SECTION 2.4.3, p.106).

Note that these specific outputs of  $/^{4/1}/$  in Pattern 1 additionally **reveal that the last toneme of a number of synchronically unanalyzable polysyllabic verbs is underlyingly  $/^{4/1}/$** , and not  $/^4/$  as it may seem at first sight. Out of contexts of morphotonological alternations, the tone of the second syllable of the unanalyzable verb  $/\text{du}^{34}\text{da}^{4/1}/$  [ ${}^1\text{du}^{34}\text{ra}^4$ ] ‘be unkind’, for instance, is always  $[^4]$  and does not vary with  $[^1]$ . It may thus seem that this tone is the realization of a lexical toneme  $/^4/$ . No morpheme  $*/\text{-da}^{4/1}/$  exists synchronically to suggest that this might not be the case. However, in contexts of morphotonological alternations, the second syllable of this verb usually behaves as one with a lexical toneme  $/^{4/1}/$  by displaying a resulting toneme  $/^4/$ , rather than  $/^5/$ , which would be the expected resulting toneme for a lexical toneme  $/^4/$ . This is shown in the following example:<sup>87</sup>

$$(104) \quad /du^{34}\text{da}^{\boxed{4/1}}/ \quad \rightarrow \quad / \text{ɕa}^1 = \text{du}^{34}\text{da}^{\boxed{4}} \sim \text{?u}^4 /$$

$$[{}^1\text{du}^{34}\text{ra}^4] \quad [\text{ɕa}^1{}^1\text{du}^{34}\text{ra}^4\text{?u}^4]$$

‘(that) he’s unkind’

**(iii) TONE OF NON-UNDERLYING SYLLABLES.** The morphosyntactic contexts where the morphotonological alternations of Pattern 1 occur also **affect the tone**

<sup>87</sup>Interestingly, from an etymological perspective, knowing that the synchronically unanalyzable syllable  $*/\text{-da}^{4/1}/$  of this verb has a lexical toneme  $/^{4/1}/$  may lead us to expect it to appear in other unanalyzable verbs not only with a tone  $[^4]$ , but also with a tone  $[^1]$ , as is characteristic of syllables with a lexical toneme  $/^{4/1}/$ . This allows us to compare  $/\text{du}^{34}\text{da}^{4/1}/$  [ ${}^1\text{du}^{34}\text{ra}^{\boxed{4}}$ ] ‘be unkind’ not only with the verb  $/\text{po}^{22}\text{da}^{4/1}/$  [ ${}^1\text{po}^{22}\text{ra}^{\boxed{4}}$ ] ‘be strong’, but also with the verb  $/\text{tu}^{21}\text{da}^1/$  [ ${}^1\text{tu}^{21}\text{ra}^{\boxed{1}}$ ] ‘be weak’. Although the second syllable of the latter verb is to be analyzed synchronically as featuring  $/^1/$  (remember that a toneme  $/^{4/1}/$  realized as  $[^1]$  in a predicative phrase’s initial form regularly behaves just like  $/^1/$  in Pattern 1; see above),  $/\text{tu}^{21}\text{da}^1/$  [ ${}^1\text{tu}^{21}\text{ra}^1$ ] ‘be weak’ is very likely—diachronically speaking—to feature the same syllable  $*/\text{-da}^{4/1}/$  as the former two verbs.

with which non-underlying syllables arising due to the insertion of an epenthetic vowel after a same-syllable coda /ʔ/ are realized (on the tonal realization of such syllables out of contexts where morphotonological alternations occur, see end of SECTION 2.4.3). The resulting tone depends 1) on whether the syllable that the same-syllable coda /ʔ/ belongs with is stressed or unstressed, 2) on the lexical toneme of the syllable the same-syllable coda /ʔ/ belongs with, and 3) on the particular subcontext of use of sbjv in which the predicative phrase occurs. This complex pattern is summarized in TABLE 19. The first two rows of this table represent cases where the syllable that the same-syllable coda /ʔ/ belongs with is stressed. The first row represents cases where that stressed syllable has a lexical toneme /<sup>34</sup>/ or /<sup>MC</sup>/, while the second row represents cases where it has any other lexical toneme. The last three rows of TABLE 19 represent cases where the syllable that the same-syllable coda /ʔ/ belongs with is unstressed. The third row represents cases where that unstressed syllable has a lexical toneme /<sup>5</sup>/ or /<sup>4</sup>/, the fourth row represents cases where it has a lexical toneme /<sup>3</sup>/, and the last row represents cases where it has a lexical toneme /<sup>C</sup>/. For each of these specific phonological contexts, the resulting tone of the non-underlying syllable is given depending on the specific context of use of sbjv in which the predicative phrase occurs.

The following examples provide instances of the cases marked with a superscript letter in parentheses in TABLE 19 for illustration (<<sup>(a)</sup>> = example (105a), <<sup>(b)</sup>> = example (105b), etc.):

- (105) a. /tauʔ<sup>34</sup>/ → /~da<sup>1</sup> = tauʔ<sup>34</sup> = ~da<sup>5</sup>/  
 [ʔa:<sup>34</sup>ʔu<sup>3</sup>] [nã<sup>1</sup>ʔa:<sup>34</sup>ʔu<sup>3</sup>nã<sup>5</sup>]  
 ‘there isn’t, you know!’
- b. /tauʔ<sup>34</sup>/ → /~da<sup>1</sup> = tauʔ<sup>34</sup>-~ʔu<sup>4</sup>/  
 [ʔa:<sup>34</sup>ʔu<sup>3</sup>] [nã<sup>1</sup>ʔa:<sup>34</sup>ʔu<sup>4</sup>ʔũ<sup>4</sup>]  
 ‘(that) there isn’t’
- c. /tuʔ<sup>33</sup>/ → /pe<sup>3</sup> = ~da<sup>3</sup> = tuʔ<sup>33</sup>/  
 [ʔu:<sup>33</sup>ʔu<sup>3</sup>] [pɛ<sup>3</sup>nã<sup>3</sup>ʔu:<sup>33</sup>ʔu]  
 ‘(you guys) cut it down!’
- d. /tuʔ<sup>33</sup>/ → /pe<sup>3</sup> = ~da<sup>3</sup> = tuʔ<sup>33</sup>-~ʔu<sup>4</sup>/  
 [ʔu:<sup>33</sup>ʔu<sup>3</sup>] [pɛ<sup>3</sup>nã<sup>3</sup>ʔu:<sup>33</sup>ʔu<sup>1</sup>ʔũ<sup>4</sup>]  
 ‘(that) you (pl.) cut it down’
- e. /tɕi<sup>43</sup>buw<sup>1</sup>-~ʔeʔ<sup>4</sup>/ → /tuw<sup>3</sup> = pe<sup>3</sup> = tɕi<sup>43</sup>buw<sup>1</sup>-~ʔeʔ<sup>4</sup>/  
 [ʔɕi:<sup>43</sup>buw<sup>1</sup>ʔɛ<sup>4</sup>ʔɛ<sup>3</sup>] [ʔuw<sup>3</sup>pɛ<sup>3</sup>tɕi:<sup>43</sup>buw<sup>1</sup>ʔɛ<sup>4</sup>ʔɛ<sup>3</sup>]  
 ‘(you guys) feed him!’

Initial tone	Resulting tone by context of use of SBJV			
	Bare SBJV	SBJV + REL.N	SBJV + REL.NS	
	SBJV + REL.F	SBJV + REL.S	SBJV + SUB	SBJV + REL.M
/CVʔ <sup>34</sup> / [ʔCV: <sup>34</sup> ʔV <sup>3</sup> ] or /CVʔ <sup>MC</sup> / [ʔCVʔV <sup>3</sup> ]	[ʔ] <sup>(a)</sup>	[V <sup>5</sup> ]	[V <sup>4</sup> ] <sup>(b)</sup>	[V <sup>4</sup> ]
/CVʔ <sup>X</sup> / [ʔCV: <sup>X</sup> ʔV <sup>3</sup> ] with any other lexical toneme	[ʔ] <sup>(c)</sup>	[V <sup>5</sup> ]	[V <sup>1</sup> ] <sup>(d)</sup>	[V <sup>1</sup> ]
/-CVʔ <sup>5</sup> / [...CV <sup>5</sup> ʔV <sup>3</sup> ] or /-CVʔ <sup>4</sup> / [...CV <sup>4</sup> ʔV <sup>3</sup> ]	[ʔ] <sup>(e)</sup>	— or [V <sup>5</sup> ]	[V <sup>1</sup> ] <sup>(f)</sup>	[V <sup>1</sup> ]
/-CVʔ <sup>3</sup> / [...CV <sup>3</sup> ʔV <sup>1</sup> ]	[ʔ]	[V <sup>3</sup> ] or [V <sup>5</sup> ]	[V <sup>3</sup> ]	[V <sup>3</sup> ]
/-CVʔ <sup>C</sup> / [...CVʔV <sup>3</sup> ]	[ʔ]	— or [V <sup>5</sup> ]	[ʔ] or [V <sup>5</sup> ]	[V <sup>1</sup> ]

**Key:**REL.F /-ku<sup>3</sup>/ [...ku<sup>3</sup>]REL.M /-ku<sup>3</sup>/ [...ku<sup>3</sup>]REL.N /-(~ʔu<sup>4</sup>)~de<sup>1</sup>/ [...(ʔũ<sup>4</sup>)nẽ<sup>1</sup>]REL.S /-ʔe<sup>1</sup>/ [...ʔẽ<sup>1</sup>]REL.NS /-~ʔu<sup>4</sup>/ [...ʔũ<sup>4</sup>]SUB /-~ʔu<sup>4</sup>/ [...ʔũ<sup>4</sup>]

(a), (b)... this case is illustrated in example (105a), (105b), etc.

— in this situation, the initial tone remains unchanged

**TABLE 19.** *Effects of the morphosyntactic contexts that trigger Pattern 1 of morphotological alternations on the tone of non-underlying syllables arising due to the insertion of an epenthetic vowel*

f. /tɕi<sup>43</sup>bu<sup>1</sup>-~ʔe<sup>4</sup>/ → /tu<sup>3</sup> = pe<sup>3</sup> = tɕi<sup>43</sup>bu<sup>1</sup>-~ʔe<sup>4</sup>-~ʔu<sup>4</sup>/  
 [ʔtɕi:<sup>43</sup>bu<sup>1</sup>ʔẽ<sup>4</sup>ʔẽ<sup>3</sup>] [ʔtu<sup>3</sup>pe<sup>3</sup>tɕi:<sup>43</sup>bu<sup>1</sup>ʔẽ<sup>4</sup>ʔẽ<sup>1</sup>ʔũ<sup>4</sup>]  
 ‘(you guys) feed him!’

### 2.6.2.2 Pattern 2 of morphotonological alternations

This pattern of morphotonological alternations occurs in **monosyllabic verbs with a lexical toneme /<sup>43</sup>/ or /<sup>MC</sup>/** that do not feature a same-syllable glottal

stop,<sup>88</sup> as well as in the **personal roots with a lexical toneme** /<sup>43</sup>/ (specifically /ku<sup>43</sup>-/ [ʰku:<sup>43</sup>...] ‘2SG’, /~i<sup>43</sup>-/ [ʰĩ:<sup>43</sup>...] ‘3F’, and /~da<sup>43</sup>-/ [ʰnã:<sup>43</sup>...] ‘3N/NS’). In this pattern, as shown in TABLE 18 above, a lexical or initial toneme /<sup>43</sup>/ is converted in a resulting toneme /<sup>31</sup>/, and a lexical or initial toneme /<sup>MC</sup>/ in /<sup>36</sup>/. Pattern 2 does not apply in any other tonological context, and in particular to tonemes in unstressed syllables. The morphotonological alternations of Pattern 2 are **triggered by the immediate suffixation of specific, lexically-determined bound nouns, relational nouns, and suffixes** to a monosyllabic verb or a personal root.

Example (106a-ii) shows a verb undergoing a morphotonological alternation of Pattern 2 as a result of the suffixation of a trigger bound noun (contrast (106a-i), where the verb features its unaltered lexical toneme when suffixed with a non-trigger bound noun; see (60) above for a parallel example). Example (106b-ii) similarly shows a verb undergoing a morphotonological alternation of Pattern 2 as a result of the suffixation of a trigger suffix (contrast (106b-i), where the verb features its unaltered lexical toneme when suffixed with a non-trigger suffix).

- (106) a. i. /u<sup>MC</sup>-ku<sup>4/1</sup>tu<sup>3</sup>/ ‘to have sore feet’  
           [ʰu<sup>u</sup>ku<sup>4</sup>t<sup>u</sup>³]  
       ii. /u<sup>MC</sup>-pu<sup>1</sup>ta<sup>1</sup>/ → /u<sup>36</sup>-pu<sup>1</sup>ta<sup>1</sup>/ ‘to have a tooth ache’  
           [ʰu:<sup>36</sup>pu<sup>1</sup>t<sup>a</sup>¹]  
       b. i. /ta<sup>43</sup>-ʔV<sup>5</sup>tɕi<sup>1</sup>/ ‘be very big’  
           [ʰt<sup>a</sup>:<sup>43</sup>ʔu<sup>5</sup>tɕi<sup>1</sup>]<sup>89</sup>  
       ii. /ta<sup>43</sup>-ʔV<sup>1</sup>da<sup>1</sup>/ → /ta<sup>31</sup>-ʔu<sup>1</sup>da<sup>1</sup>/ ‘be a bit big’  
           [ʰt<sup>a</sup>:<sup>31</sup>ʔu<sup>1</sup>ra<sup>1</sup>]<sup>89</sup>

Examples (107a-ii), (107b-ii), (107c-ii), and (107d-ii) show how the lexical toneme /<sup>43</sup>/ of the second person singular, third person feminine, and third person neuter and non-salientive personal roots turns into the toneme /<sup>31</sup>/ when these

<sup>88</sup>The morphotonological alternations of Pattern 2 might also have formerly applied regularly in monosyllabic verbs that do exhibit a same-syllable glottal stop, although it no longer seems to be the case in today’s SMAT. This is suggested by a probably lexicalized form such as /do<sup>31</sup>ʔ(-)o<sup>1</sup>~de<sup>1</sup>/ [ʰd<sup>o</sup>:<sup>31</sup>ʔo<sup>1</sup>nẽ<sup>1</sup>] ‘be of recent formation (a land in a mythological account)’, from the verb /do<sup>43</sup>/ [d<sup>o</sup>:<sup>43</sup>ʔu<sup>3</sup>] ‘be unripe’ and the bound noun /-a<sup>1</sup>~de<sup>1</sup>/ [...a<sup>1</sup>nẽ<sup>1</sup>] ‘space’ (on /a/→/o/ in this bound noun, see SECTION 2.6.1.2). The toneme /<sup>31</sup>/ found in the first syllable of the compound is derived from the toneme /<sup>43</sup>/ found in the uncompounded verb as a result of a Pattern 2 morphotonological alternation /<sup>43</sup>/→/<sup>31</sup>/ triggered by the bound noun ‘space’.

<sup>89</sup>On the unspecified vowel /V/ and its realization, see SECTION 2.6.1.1 above.

are suffixed a trigger bound noun or relational noun (contrast (107a-i), (107b-i), (107c-i), and (107d-i), where the same personal roots feature their unaltered lexical toneme when suffixed with a non-trigger bound noun or relational noun).

- (107) a. i. /ku<sup>43</sup>-ʔ~be<sup>ʔC</sup>/ ‘your hand’<sup>90</sup>  
 [ʰkuʔ<sup>43</sup>mẽʔẽ<sup>3</sup>]  
 ii. /ku<sup>[43]</sup>-ʔta<sup>ʔC</sup>/ → /ku<sup>[31]</sup>-ʔta<sup>ʔC</sup>/ ‘your body hair’  
 [ʰkuʔ<sup>31</sup>ʈaʔa<sup>3</sup>]
- b. i. /~i<sup>43</sup>-ʔta<sup>ʔ4</sup>/ ‘her lake’  
 [ʰĩʔ<sup>43</sup>ʈa<sup>4</sup>ʔa<sup>3</sup>]  
 ii. /~i<sup>[43]</sup>-ta<sup>ʔ4</sup>/ → /~i<sup>[31]</sup>-ta<sup>ʔ4</sup>/ ‘your grandchild’  
 [ʰĩ:ʔ<sup>31</sup>ʈa<sup>4</sup>ʔa<sup>3</sup>]
- c. i. /~da<sup>43</sup>-~de<sup>3</sup>/ ‘(his) son’  
 [ʰnã:ʔ<sup>43</sup>nẽ<sup>3</sup>]  
 ii. /~da<sup>[43]</sup>-~de<sup>1</sup>/ → /~na<sup>[31]</sup>-~de<sup>1</sup>/ ‘(his) tree’  
 [ʰnã:ʔ<sup>31</sup>nẽ<sup>1</sup>]
- d. i. /~da<sup>43</sup>-ʔka<sup>C</sup>/ ‘for it’  
 [ʰnãʔ<sup>43</sup>kã]  
 ii. /~da<sup>[43]</sup>-ʔtçi<sup>1</sup>/ → /~na<sup>[31]</sup>-ʔtçi<sup>1</sup>/ ‘out of repulsion from it’  
 [ʰnãʔ<sup>31</sup>tçi<sup>1</sup>]

The nature of triggers of the Pattern 2 morphotonological alternations of these bound nouns and suffixes is **ultimately a lexical property** of these morphemes in SMAT. It is, however, **largely—but not fully—conditioned by the toneme of the first syllable of these morphemes**. All bound nouns and suffixes with an initial toneme /<sup>1</sup>/ are triggers, as well as a majority of those with /<sup>C</sup>/ in that position (but see examples (107a-i) and (107d-i) for cases of a bound noun and a relational noun that are not triggers despite their initial toneme /<sup>C</sup>/). Few of those with initial /<sup>4</sup>/ or /<sup>3</sup>/ are triggers (but see (107b-ii) for an exceptional case of bound noun that is a trigger despite its initial toneme /<sup>4</sup>/). None of those with initial /<sup>5</sup>/ or /<sup>4/1</sup>/ is a trigger.

Note that the two alternations occurring in Pattern 2, /<sup>43</sup>/→/<sup>31</sup>/ and /<sup>MC</sup>/→/<sup>36</sup>/, also occur in Pattern 1 of morphotonological alternations. Pattern 2 thus appears as a **reduced version of Pattern 1** occurring in a different morphosyntactic context.

<sup>90</sup>The bound noun /-ʔ~be<sup>ʔC</sup>/ [...ʔmẽʔẽ<sup>3</sup>] ‘hand, finger’ has a variant form /-ʔ~be<sup>C</sup>/ [...ʔmẽ].

The morphological alternations of Pattern 2 are **occasionally omitted**, especially in rarer morphological collocations and in younger speakers.

### 2.6.2.3 Pattern 3 of morphotonological alternations

Pattern 3 of morphotonological alternations occurs in the **last (or single) syllable of predicative phrases of any kind**—whether verbal or non-verbal—when these are **attached the circumstantial suffix**  $/-ʔgu^{4/1}/$   $[...ʔgu^4] \sim [...ʔgu^1]$  ‘CIRC’. The tonological effects of this suffix are different depending on whether it is realized  $[...ʔgu^4]$  or  $[...ʔgu^1]$ .

(i) **PATTERN 3a (BEFORE  $/-ʔgu^{4/1}/$  ‘CIRC’ REALIZED  $[...ʔgu^4]$ )**. The suffix  $/-ʔgu^{4/1}/$  ‘CIRC’ is usually realized  $[...ʔgu^4]$  (rather than  $[...ʔgu^1]$ ) in cases where it immediately follows a stressed syllable featuring the toneme  $/^{22}/$  or  $/^{MC}/$ . It is also occasionally found suffixed after a stressed syllable featuring  $/^{34}/$  or after an unstressed syllable featuring  $/^4/$ , although  $[...ʔgu^1]$  is preferred in these contexts.<sup>91</sup> After a stressed syllable featuring  $/^{CM}/$  or an unstressed syllable featuring  $/^3/$ ,  $/^1/$ ,  $/^{4/1}/$ , or  $/^C/$ ,  $[...ʔgu^4]$  and  $[...ʔgu^1]$  are about as likely to occur. As shown in TABLE 18 above, the presence of  $/-ʔgu^{4/1}/$  ‘CIRC’ realized  $[...ʔgu^4]$  only has a tonological effect on the preceding syllable in three of these cases (in the other cases, the lexical toneme of the last—or single—syllable of the predicative phrase is left unchanged). Specifically, it triggers the following **three morphotonological alternations**:

- $/^{22}/ \rightarrow /^{MC}/$  ;
- $/^1/$  and  $/^{4/1}/ \rightarrow /^C/$ .

These are respectively illustrated in examples (108a), (108b), and (108c), which contain a predicative phrase in its lexical form alongside an occurrence of the same predicative phrase in a context where the morphotonological alternations of Pattern 3a apply. Note that a few speakers (e.g. JGS) do not carry out the  $/^1/ \rightarrow /^C/$  alternation.

<sup>91</sup>Note that the sandhi-like pattern described in TABLE 14 regarding the preferred realizations of  $/^{4/1}/$  after specific tonemes in stressed syllables would have led to expect  $[...ʔgu^4]$  to be the preferred realization of  $/-ʔgu^{4/1}/$  ‘CIRC’ after a stressed syllable featuring  $/^{34}/$ , but for an unknown reason this is not the case.



- (108) a. /dau<sup>[22]</sup>/ → /~du<sup>3</sup> = ku<sup>1</sup> = dau<sup>[MC]</sup>-ʔgu<sup>4/1</sup>/  
 [ˈd̥aũ<sup>[22]</sup>] [nũ<sup>3</sup>ku<sup>1</sup>ˈd̥aũʔgu<sup>[4]</sup>]  
 ‘if you see him’
- b. /~da<sup>31</sup>-ʔtɕa<sup>1</sup>~ʔu<sup>[1]</sup>/ → /ku<sup>1</sup> = ~da<sup>31</sup>-ʔtɕa<sup>1</sup>~ʔu<sup>[C]</sup>-ʔgu<sup>4/1</sup>/  
 [ˈnãʔ<sup>31</sup>tɕa<sup>1</sup>ʔũ<sup>[1]</sup>] [ku<sup>1</sup>nãʔ<sup>31</sup>tɕa<sup>1</sup>ʔũgu<sup>[4]</sup>]  
 ‘if you want it’
- c. /~du<sup>34</sup>-ku<sup>[4/1]</sup>/ → /~da<sup>1</sup> = ~du<sup>34</sup>-ku<sup>[C]</sup>-ʔgu<sup>4/1</sup>/  
 [ˈnũ:<sup>34</sup>ku<sup>[4]</sup>] [nã<sup>1</sup>nũ:<sup>34</sup>ku<sup>[4]</sup>]  
 ‘if they are put in’

Additionally, when /-ʔgu<sup>4/1</sup>/ ‘CIRC’ realized [...ʔgu<sup>[4]</sup>] occurs immediately after a non-underlying syllable arising on the surface due to the insertion of an epenthetic vowel after a same-syllable coda /ʔ/, that **non-underlying syllable is realized as creaky-voiced** (whether the same-syllable coda /ʔ/ belongs with a stressed or an unstressed syllable, and regardless of the toneme of that syllable). This is shown in the following example:

- (109) /deʔ<sup>34</sup>/ → /~da<sup>1</sup> = deʔ<sup>34</sup>-ʔgu<sup>4/1</sup>/  
 [ˈd̥e:<sup>34</sup>ʔe<sup>[3]</sup>] [nã<sup>1</sup>d̥e:<sup>34</sup>ʔe<sup>[4]</sup>]  
 ‘if it’s yellow’

(ii) **PATTERN 3b (BEFORE /-ʔgu<sup>4/1</sup>/ ‘CIRC’ REALIZED [...ʔgu<sup>[1]</sup>]).** The suffix /-ʔgu<sup>4/1</sup>/ ‘CIRC’ is usually realized [...ʔgu<sup>[1]</sup>] (rather than [...ʔgu<sup>[4]</sup>]) in cases where it immediately follows a stressed syllable featuring nearly any toneme other than /<sup>22</sup>/ or /<sup>MC</sup>/. Although dispreferred, it is also occasionally found after the latter two tonemes. The realization [...ʔgu<sup>[1]</sup>] is further preferred after unstressed syllables featuring /<sup>4</sup>/. In all other attested contexts, [...ʔgu<sup>[4]</sup>] and [...ʔgu<sup>[1]</sup>] are about as likely to occur. As shown in TABLE 18 above, the presence of /-ʔgu<sup>4/1</sup>/ ‘CIRC’ realized [...ʔgu<sup>[1]</sup>] only has a tonological effect on the preceding syllable in one of these cases. Specifically, it triggers the **morphotonological alternation** /<sup>MC</sup>/ → /<sup>36</sup>/, illustrated in the following example:

- (110) /d̥au<sup>[MC]</sup>/ → /~da<sup>1</sup> = d̥au<sup>[36]</sup>-ʔgu<sup>4/1</sup>/  
 [ˈd̥aũ] [nã<sup>1</sup>d̥aũ<sup>[36]</sup>ʔgu<sup>[1]</sup>]  
 ‘if it’s blue’

The suffix /-ʔgu<sup>4/1</sup>/ ‘CIRC’ realized [...ʔgu<sup>[1]</sup>] has **no effect on the tonal realization of non-underlying syllables** arising on the surface due to the insertion of

an epenthetic vowel after a same-syllable coda /?/.

## 2.7 Phonology of contact phenomena

This section explores aspects of SMAT phonology related to **contact situations** between the language and other languages that used to be, or still are, spoken in its surroundings. SECTION 2.7.1 gives a **brief sketch of the history of these contacts**. SECTION 2.7.2 then describes the **segmental adaptations** that are undergone by words borrowed into SMAT (2.7.2.1) or inserted in an SMAT utterance by code-mixing with Spanish (2.7.2.2). SECTION 2.7.3 describes how these same words are further **attributed tonemes** so that they should feature one toneme per syllable like native SMAT words. Former patterns of toneme imposition that are attested in loanwords but are no longer productive are discussed in SECTION 2.7.3.1, while SECTION 2.7.3.2 deals with the toneme imposition patterns that are still productive in today's SMAT.

### 2.7.1 Historical outline of language contacts involving Tikuna

The Tikunas have been in contact with a number of groups in the last centuries, of which a few have left significant traces in their language. FIGURE 18 provides a **chronological outline of the main attested contacts** between Tikuna and other languages.

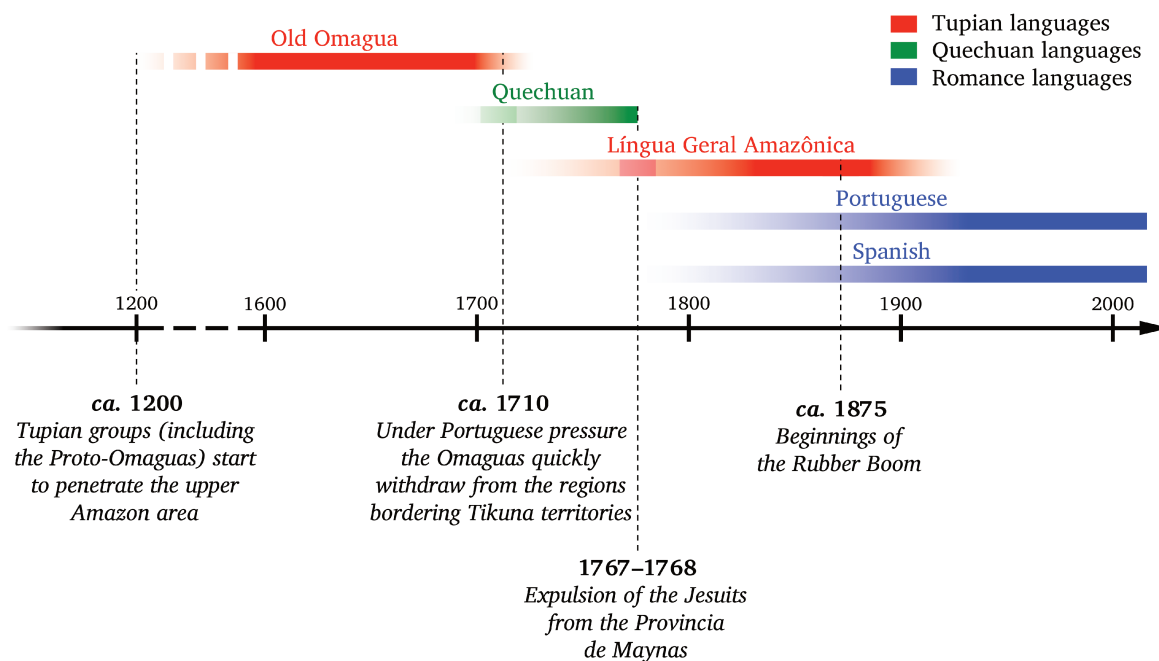
Among the languages that have had a significant and detectable influence on Tikuna are **Old Omagua**<sup>92</sup> (from some point after the penetration of the Proto-Omaguas in the region starting in the 12th century, until the first decades of the 18th century; Eriksen 2011:28, Michael 2014:321–325) and unidentified varieties of **Língua Geral Amazônica** (LGA)<sup>93</sup> (from the intensification of the penetration of the Portuguese into the upper Amazon region at the beginning of the 18th cen-

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<sup>92</sup>On Old Omagua, see Michael & O'Hagan (2016).

<sup>93</sup>On the definition and the history of Língua Geral Amazônica—also often called Nheengatu, although note that the use of this name now tends to be restricted to refer specifically to the Nheengatu variety still spoken to this day in the Upper Rio Negro and described by e.g. Cruz (2011a)—see, among many other references, Bessa (1983, 2004), Rodrigues (1996:9–10), and Moore (2014).

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**FIGURE 18.** *Timeline of the main contacts between Tikuna and other languages spoken in its surroundings*

ture, until the beginning of the 20th century; Stradelli 1929:64, Freitas de Rezende 2006:144–155). Both of these relatively closely related Tupí-Guaraní languages<sup>94</sup> have long ceased to be spoken in the areas currently inhabited by the Tikunas. The Omaguas had a dominant position in the upper Amazon region along the Tikuna territories until they were hit by epidemics introduced by European carriers in the 16th and 17th centuries and withdrew from the area in the first decades of the 18th century in an attempt to escape from the penetration of the Portuguese. LGA was brought by the Portuguese and over the course of the 18th century it gradually became the lingua franca of a large portion of the territories occupied by the Tikunas. Its importance only really decreased in the last decades of the 19th century, when its function definitively transferred to Portuguese, although LGA remained in use in the region well into the 20th century. LGA was still partially remembered, although no longer used, by a few older Tikuna speakers at the very end of the 20th century (see *e.g.* Fagua Rincón 2004:46).

Contacts with **Portuguese and Spanish** were still very scarce in the last decades

<sup>94</sup>On the non-strictly-genetic relationship between Omagua and the Tupí-Guaraní languages, see Michael (2014).

of the 18th century and probably only started to have a significant impact on Tikuna about a century later, in the last three decades of the 19th century, when they were reinforced by a strong influx of speakers of these two Romance languages immigrating from peripheral areas of South America (mostly from coastal and Andean Peru and the Brazilian Nordeste) in the context of the Amazonian Rubber Boom (Bessa Freire 1983:69–70, San Román 1994:144–151, Pau 2019:260–263). Portuguese—the national language of today’s Brazil—and Spanish—the national language of today’s Peru and Colombia—remain to this day, by far, the languages with which Tikuna is in most intense contact. Note that I have not identified with precision the main Portuguese and Spanish dialects from which the loanwords attested in Tikuna were borrowed, except for recent borrowings from Spanish which most likely stem from Spanish as it is currently spoken locally. As a consequence, in the following sections, the proposed phonetic transcriptions of Portuguese and Spanish source words are for the most part given for reference only, based on the conventional pronunciation of Portuguese used in nationwide Brazilian media (see e.g. Silveira 2008) and on the Spanish variety spoken by the younger generations of SMAT speakers (represented by e.g. JSG; on the variety of Spanish spoken in San Martín de Amacayacu, see end of SECTION 2.7.2.2).

Although included in FIGURE 18, **Quechuan** had in fact very little influence on Tikuna. This is relatively surprising since the Jesuits, who created and managed missionary settlements in the vicinity of the Tikuna territories from the end of the 17th century to their expulsion from the Provincia de Maynas in 1767–1768, usually employed and taught a Quechuan language<sup>95</sup> as a *lingua franca* in these settlements (Michael 2014:325–329). A number of Tikunas are known to have lived in some of the Jesuit missions, at least intermittently and especially towards the end of the Jesuit presence (Zárate Botía 1998), but the traces of contact with Quechuan that this could lead to expect are not to be found in Tikuna.<sup>96</sup>

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<sup>95</sup>I have not identified with precision this Quechuan variety.

<sup>96</sup>Note, by contrast, that toponymy along the Colombian section of the Amazon river up into Peru until the westernmost edge of the territories presently inhabited by the Tikunas does display traces of a Quechuan influence. See, in particular, the names of the Tikuna communities Bufeococha, Cabal-lococha, and Cushillococha, which are Quechuan compounds made of Spanish lexemes put together with the Quechuan lexeme /qutʃa/ or /kutʃa/ ‘lake’ (lit. ‘dolphin lake’, ‘horse lake’, and ‘knife lake’, respectively), the river names Amacayacu and Loretoyacu, compounded again of Spanish lexemes and Quechuan /jaku/ ‘water, river’ (lit. ‘hammock river’ and ‘river of Loreto’), and the name of the lakes system Yahuaraca, from Quechuan /jawaɾ/ ‘blood’ and /qaqa/ or /kaka/ ‘rock, cliff’ (lit. ‘blood cliff’ or ‘blood rock’). It is unlikely, however, that this Quechuan influence dates back from

Other relatively intense contacts may have occurred, *e.g.* with speakers of Arawakan languages,<sup>97</sup> but I have not been able to detect significant influences on Tikuna from other languages than the ones listed above.

Note the following **abbreviations** used in the remainder of this section: LGA = Língua Geral Amazônica, M. Om. = Modern Omagua, O. Om. = Old Omagua, Prt. = Portuguese, Sp. = Spanish.

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the Jesuit presence in the Provincia de Maynas, among other reasons because—to the best of my knowledge—no Quechuan toponyms are featured in the territories occupied by the Tikunas on the maps that were made under or just after the end of the Jesuit presence (see in particular Velasco’s (1789) relatively detailed map). The Quechuan influence in question more probably developed in non-missionary social contexts in the last decades of the 18th century and over the course of the 19th century, although it remains unclear exactly how. A Quechuan variety might have been in use at that time in the upper Amazon region as a lingua franca resorted to in contacts with people coming from upriver areas (while LGA was, broadly speaking, the regional lingua franca for contacts with people from downriver). Martius (1867:289, footnote), probably based on reports from his fellow explorer Spix who traveled across the area in 1819, writes that “Kechua or Quichua is not infrequently heard in S. Paulo d’Olivença [= São Paulo de Olivença, about 250 km downriver from the Colombia–Brazil border], Tabatinga [on the Colombia–Brazil border], and other places in the upper Solimões [= Amazon river], and it is, by the name of Inca language, the vehicular language of the traveling salesmen from Maynas and Peru. Like the *Língua geral brasileira* [= LGA], it has penetrated, with numerous changes, the idioms of the Indians of these regions” (translation is mine). Muysken (2012:250), in view of the influence of Quechuan on Kokama and on the variety of Spanish spoken in the Peruvian department of Loreto (Crevels & Muysken 2005:192–199), hypothesizes that there might have existed “an earlier Quechua-based pidgin used in the upper Amazon”, although he does not venture to propose dates for that possible historical phenomenon. In any case, very little research has apparently been done on the influence of Quechuan languages in northeastern Peru after the expulsion of the Jesuits, which does not allow to understand for now why Tikuna features so few lexical borrowings from Quechuan while part of the area where it is spoken exhibits a significant amount of Quechuan toponyms. Note that because the hypothesis of a Quechuan lingua franca in the 19th century upper Amazon remains relatively speculative, I do not include it in FIGURE 18.

<sup>97</sup>At least one SMAT word, /ʔo<sup>33</sup>pu<sup>3</sup>ɕa<sup>1</sup>/ [ʔo<sup>33</sup>pu<sup>3</sup>ɕa<sup>1</sup>], a rare synonym for /~u<sup>21</sup>~u<sup>1</sup>/ [ʔñū<sup>21</sup>ñ<sup>1</sup>] ‘collared peccary’ (*Pecari tajacu*), is obviously borrowed from an Arawakan language of northwestern Amazonia. Compare in particular the form <apytza> (for approximately \*[a<sup>1</sup>pidza]?) ‘[dicotyles] torquatus’ (*i.e.* *Pecari tajacu*) reported by Martius (1867:267) as a word of the <Mariate> (or <Muriaté>) language collected at the mouth of the Putumayo-Içá river (but see also Martius’ forms <hapychtschá> ‘*id.*’ from the <Uainumá> language (p.249) and <apuya> ‘dicotyles labiatus’ (*i.e.* *Tayassu pecari*) from the <Jumána> language (p.252)).

## 2.7.2 Segmental transfer

### 2.7.2.1 Correspondences attested in older borrowings

As is to be expected, loanwords were usually adapted to SMAT phonetics and phonology when entering the language's lexicon. In a number of cases, no significant adjustments were required as the source form could easily be accurately reproduced by Tikuna speakers (on the presence of tonemes in the resulting SMAT form, see SECTION 2.7.3 below):

- (111) /tu<sup>33</sup>pa<sup>3</sup>~da<sup>1</sup>/ 'God' < LGA /tu'pana/ 'God'<sup>98</sup>  
 [t̥u:<sup>33</sup>pa<sup>3</sup>nã<sup>1</sup>]

In most cases, however, adjustments were needed. At the segmental level, this implied **reinterpretations of phones in the source morphemes in terms of SMAT phonology**. A number of non-trivial correspondences due to such reinterpretations are listed and exemplified in TABLE 20.

In some cases, especially in direct borrowings from Portuguese or Spanish, the **syllabic structure of the source form had to be adapted too**. In example (112a), a coda [s] (or [ʃ]?) in the source form is dropped in the resulting form, as only /ʔ/ may occur in coda position in native SMAT morphemes. In (112b), the same restriction causes the emergence of an epenthetic echo vowel /a/ at the end of the resulting form so as to allow for the reinterpretation of a coda [r]~[r] in the source form as an onset /d/ in the resulting form (see also /~bu<sup>33</sup>tu<sup>4</sup>du<sup>1</sup>/ 'motor (boat)' in TABLE 20).

- (112) a. /pe<sup>43</sup>ta<sup>1</sup>/ 'celebration' < Prt. *fiesta*/Sp. *fiesta* 'id.'<sup>99</sup>  
 [p̥e:<sup>43</sup>t̥a<sup>1</sup>]  
 b. /ʔa<sup>33</sup>t̥u<sup>4</sup>ka<sup>1</sup>da<sup>1</sup>/ 'sugar' < Prt. *açúcar*/Sp. *azúcar* 'id.'<sup>100</sup>  
 [ʔa:<sup>33</sup>t̥u<sup>4</sup>ka<sup>1</sup>ra<sup>1</sup>]

Note that the patterns of phonological and phonetic adjustment described here are generally **falling into disuse among younger speakers**, now that a vast ma-

<sup>98</sup>Stradelli (1929:684).

<sup>99</sup>Prt. [ˈfɛ:sɿɐ], Sp. [ˈfjɛʃɿta].

<sup>100</sup>Prt. [aˈsu:kah], Sp. [aˈsukar].

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SMAT phoneme	Source phone	Example
/(\emptyset)/ [ŋ]	< [\emptyset]	/(\emptyset)ur <sup>33</sup> dur <sup>3</sup> ka <sup>3</sup> de <sup>1</sup> / ‘mosquito net’ < O. Om. */Øiri <sup>1</sup> kari/ ‘id.’ <sup>101</sup> [ <sup>1</sup> ŋur <sup>33</sup> ru <sup>3</sup> ka <sup>3</sup> rɛ <sup>1</sup> ]
/p/	< [f]	/ka <sup>33</sup> pe <sup>4</sup> / ‘coffee’ < Prt./Sp. <i>café</i> ‘id.’ <sup>102</sup> [ <sup>1</sup> ka <sup>33</sup> pɛ <sup>4</sup> ]
/d/ [d̥]/[r]	< [d̥]	/d̥a <sup>33</sup> ~ur <sup>3</sup> ga <sup>3</sup> da <sup>1</sup> / ‘raft’ < Prt. <i>jangada</i> ‘id.’ <sup>103</sup> [ <sup>1</sup> d̥a <sup>33</sup> ŋ <sup>3</sup> ga <sup>3</sup> ra <sup>1</sup> ]
	< [ʃ]/[l]	/do <sup>33</sup> t̥a <sup>1</sup> / ‘spear’ < Prt. <i>lança</i> [ <sup>1</sup> d̥o <sup>33</sup> t̥a <sup>1</sup> ] or Sp. <i>lanza</i> ‘id.’ <sup>104</sup>
	< [r]	/do <sup>43</sup> ki <sup>1</sup> / ‘Rocky (first name)’ < Sp. <i>Rocky</i> ‘id.’ <sup>105</sup> [ <sup>1</sup> d̥o <sup>43</sup> ki <sup>1</sup> ]
/t̥/	< [s]	/de <sup>33</sup> t̥u <sup>1</sup> / ‘handkerchief’ < Prt. <i>lenço</i> ‘id.’ <sup>107</sup> [ <sup>1</sup> d̥e <sup>33</sup> t̥u <sup>1</sup> ]
	< [z]	/ku <sup>33</sup> t̥i <sup>3</sup> ~a <sup>1</sup> / ‘cooking shed’ < Prt. <i>cozinha</i> ‘kitchen’ <sup>108</sup> [ <sup>1</sup> ku <sup>33</sup> t̥i <sup>3</sup> ã <sup>1</sup> ]
	< [ʃ]	/tu <sup>33</sup> ku <sup>3</sup> t̥i <sup>4</sup> / ‘tucuxi’ <sup>109</sup> < LGA /tuku <sup>1</sup> ʃi/ ‘id.’ <sup>110</sup> [ <sup>1</sup> t̥u <sup>33</sup> ku <sup>3</sup> t̥i <sup>4</sup> ]
/d̥/	< [ʒ]	/d̥a <sup>33</sup> ~ur <sup>3</sup> ga <sup>3</sup> da <sup>1</sup> / ‘raft’ < Prt. <i>jangada</i> ‘id.’ <sup>103</sup> [ <sup>1</sup> d̥a <sup>33</sup> ŋ <sup>3</sup> ga <sup>3</sup> ra <sup>1</sup> ]
	< [j]	/po <sup>733</sup> po <sup>3</sup> d̥u <sup>1</sup> / ‘papaya’ <sup>111</sup> < Sp. <i>papayo</i> ‘id.’ <sup>112</sup> [ <sup>1</sup> pɔ <sup>733</sup> pɔ <sup>3</sup> d̥u <sup>1</sup> ]
/w/	< [b]	/wo <sup>33</sup> ~de <sup>3</sup> da <sup>1</sup> / ‘flag’ < Prt. <i>bandeira</i> [ <sup>1</sup> wɔ <sup>33</sup> nɛ <sup>3</sup> ra <sup>1</sup> ] or Sp. <i>bandera</i> ‘id.’ <sup>113</sup>
/o/	< [a]	/ko <sup>33</sup> pi <sup>3</sup> wa <sup>3</sup> da <sup>1</sup> / ‘capybara’ < O. Om. */kapi <sup>1</sup> wara/ <sup>114</sup> [ <sup>1</sup> kɔ <sup>33</sup> pi <sup>3</sup> wa <sup>3</sup> ra <sup>1</sup> ] or LGA /kapi <sup>1</sup> wara/ ‘id.’ <sup>115</sup>
/u/	< [o]	/~bu <sup>33</sup> tu <sup>4</sup> du <sup>1</sup> / ‘motor (boat)’ < Prt./Sp. <i>motor</i> ‘id.’ <sup>116</sup> [ <sup>1</sup> mũ <sup>33</sup> t̥u <sup>4</sup> ru <sup>1</sup> ]

**TABLE 20.** *Non-trivial attested correspondences between SMAT phonemes in loanwords and their corresponding source phone*

<sup>101</sup>Compare M. Om. *irikari* ‘mosquito net’ (O’Hagan 2011:7).

<sup>102</sup>Prt. [ka<sup>1</sup>fe:], Sp. [ka<sup>1</sup>φ<sup>w</sup>ɛ].

<sup>103</sup>[ʒ̥<sup>33</sup>ga:d̥ɛ].

<sup>104</sup>Prt. [ʃ̥<sup>3</sup>se], Sp. [ˈlãɲsa].

majority of SMAT speakers are also fairly to fully proficient in Spanish.

### 2.7.2.2 Minimal productive adjustments in recent borrowings from Spanish and SMAT-Spanish code-mixing

The phonological target of recent borrowings from Spanish and Spanish words inserted by code-mixing in SMAT utterances is **segmentally identical to the Spanish source form**. Such morphemes virtually undergo no systematic adaptations at the segmental level.

In SMAT speakers that are fully proficient in Spanish, this implies **realizations that are for the most part indistinguishable segmentally from the ones they would produce in a Spanish utterance**, including in cases where the phonological target clearly does not conform to the phonological patterns of native SMAT morphemes. Example (113) displays an SMAT verb recently borrowed from Spanish (/se<sup>43</sup>do<sup>1</sup>/ [ʰse:<sup>43</sup>rɔ<sup>1</sup>] ‘be absent’, which I have only observed in the speech of younger speakers and is a synonym for the sociolinguistically less marked word /tau<sup>34</sup>/ [ʰta:<sup>34</sup>ʔu<sup>3</sup>]) whose realization is typically identical segmentally to its source form, although native SMAT phonology does not feature a phoneme /s/ or a phone [s] (see SECTION 2.1.1) and only allows /o/’s in post-tonic syllables when these immediately follow a stressed syllable that itself features a nucleus /o/ (see SECTION 2.5.1), which is not the case here:

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<sup>105</sup>[ʰrɔki].

<sup>106</sup>Prt. [aʰho:is], Sp. [aʰrɔs].

<sup>107</sup>[ʰt̪e:su].

<sup>108</sup>[koʰzi:je].

<sup>109</sup>*Sotalia fluviatilis*.

<sup>110</sup>Stradelli (1929:682).

<sup>111</sup>Also attested under the form /poʰ<sup>33</sup>pa<sup>3</sup>ɕu<sup>1</sup>/ [ʰpɔʰ<sup>33</sup>pa<sup>3</sup>ɕu<sup>1</sup>].

<sup>112</sup>[paʰpaɕɔ].

<sup>113</sup>Prt. [b̃<sup>n</sup>ɖe:re], Sp. [b̃<sup>n</sup>ɖe:ra].

<sup>114</sup>Compare M. Om. *kapiwara* ‘capybara’ (O’Hagan 2011:9).

<sup>115</sup>Stradelli (1929:397).

<sup>116</sup>Prt. [moʰto:h], Sp. [mɔʰto:r].



- (113) / $\sim$ da<sup>4</sup> = se<sup>43</sup>do<sup>1</sup>/ with Sp. *cero* ‘zero’<sup>117</sup>  
 [nã<sup>41</sup>se:<sup>43</sup>rɔ<sup>1</sup>]  
 ‘he’s not there’

A similar comment applies to the case of code-mixing in example (114) (see also (118) and (126) below). The inserted Spanish form *perdonando* ‘forgiving’ is realized by the younger speaker JSG virtually as it would be in a Spanish utterance, despite the fact that its underlying and surface forms do not conform to native SMAT phonology and phonetics (two occurrences of natively prohibited consonant codas, two natively prohibited occurrences of /o/ in post-tonic syllables, occurrence of [ɖ] in unstressed syllable, occurrence of the non-native phone [ð]):

- (114) / $\sim$ daʔ<sup>4</sup> tɕa<sup>3</sup> =  $\sim$ da<sup>1</sup> = per<sup>33</sup>do<sup>3</sup>nan<sup>4</sup>do<sup>3</sup>- $\sim$ ?u<sup>4</sup>/ with Sp. *perdonando* ‘forgiving’<sup>118</sup>  
 [nãʔ<sup>4</sup> tɕa<sup>3</sup>nã<sup>1</sup> pɛr<sup>33</sup>ðɔ<sup>3</sup>nã<sup>4</sup>do<sup>3</sup>?u<sup>4</sup>]  
 ‘that he should forgive me’<sup>119</sup> [ANO1 164]

In SMAT speakers that are not fully proficient in Spanish, the realizations of recent borrowings from Spanish and Spanish words inserted by code-mixing, although they appear to equally target a phonological form identical to that of the source form, are unstable and tend to undergo **variable segmental adaptations that lead them to partially—but often incompletely—conform to the phonological and phonetic patterns found in native SMAT morphemes**. The realization by the older speaker HGA of the inserted Spanish phrase *como treinta kilo(s)* ‘about 30 kilos’ in example (115) retains a natively prohibited onset consonant cluster [tɾ] and a consonant coda [ŋ], but simultaneously features segmental alterations that follow for the most part the increasingly obsolete patterns of segmental transfer discussed in the preceding section ([ɔ] > [u]~[ã], [ẽ] > [ē], [l] > [r]; see also example (125) below):

- (115) /co<sup>3</sup>mo<sup>3</sup> trein<sup>43</sup>ta<sup>1</sup> ki<sup>43</sup>lo<sup>1</sup>-gu<sup>4</sup>/ with Sp. *como treinta kilo(s)* ‘id.’<sup>120</sup>  
 [ku<sup>3</sup>mã<sup>3</sup> tɾɛ̃ŋ<sup>43</sup>ta<sup>1</sup> ki:<sup>43</sup>ru<sup>1</sup>gu<sup>4</sup>]

<sup>117</sup>[‘sɛrɔ].

<sup>118</sup>[pɛrðɔ‘nãɖɔ].

<sup>119</sup>I do not attempt to provide phonological representations for the segmental content of Spanish words inserted by code-mixing. Theory-wise neuter orthographic transcriptions are exceptionally given instead.

<sup>120</sup>[kɔmɔ tɾɛ̃ŋta ‘kilo(s)].

‘about 30 kilos’ [HGA 37]

Although in recent borrowings and code-mixing segmental adaptations generally tend to be minimal, note that the **Spanish word-final sequence -ado**, which is regularly realized disyllabically as [...<sup>1</sup>a.(ə)o] in utterances in local Spanish, is **typically realized monosyllabically as [...<sup>43</sup>aũ]** in SMAT utterances, even in careful speech and in SMAT speakers with full Spanish proficiency. This is shown in the following example, uttered by a younger speaker:

- (116) /tʃa<sup>3</sup> = can<sup>33</sup>sau<sup>43</sup>/ with Sp. *cansado* ‘tired’<sup>121</sup>  
 [tʃa<sup>3</sup>kãŋ<sup>33</sup>saũ<sup>43</sup>]  
 ‘I was tired’ [ANO1 110]

The other two adaptations that are still regularly undergone, even in SMAT speakers with full Spanish proficiency, by recent borrowings from Spanish and Spanish words inserted by code-mixing are 1) the **relocation of stress on their first syllable** with its potential characteristic effect of vowel lengthening, regardless of the position of stress in the source form (see *e.g.* example (118) below, where the resulting SMAT form features stress on its first syllable while its source Spanish form bears stress on its second syllable), and 2) the **attribution of tonemes**, which is the topic of SECTION 2.7.3.2.

**A NOTE ON LOCAL SPANISH.** The variety of Spanish spoken in San Martín de Amacayacu, a community located in a territory that was definitively transferred—after decades of intermittent conflicts between Peru and Colombia (see *e.g.* Garay Vera 2015, Zárate Botía 2015, Camacho Arango 2016)—from de facto Peruvian authority to de jure Colombian sovereignty in 1934 by virtue of the Rio de Janeiro Protocol, still seems to be largely similar to this day to what may be broadly identified as Peruvian Amazonian Spanish or Loreto Spanish (see Lipski 1996:344, Ramírez 2003, Vallejos Yopán 2014), although this general similarity would require a detailed examination to be better evaluated. Note, in any case, the following **distinctive features** of SMA Spanish:

- realization of /j/ (corresponding to <y, ll> essentially) as the affricate [tʃ] (*e.g.* *llamar* [tʃa<sup>1</sup>mar] ‘to call’);

<sup>121</sup> [kãŋ<sup>1</sup>saðo].

- realization of /n/ (<n>) as the velar [ŋ] in syllable-final position (e.g. *canción* [kãŋ'sjõŋ] ‘song’), except when it immediately precedes a stop or an affricate, in which case it is realized as a nasal stop homorganic with the following consonant as in most other varieties of Spanish;
- realization of /f/ (<f>) as the bilabial [ɸ<sup>w</sup>~ɸ] (e.g. *fácil* [¹ɸ<sup>w</sup>asil~¹ɸasil] ‘easy’);
- realization of /x/ (<j, g>) as the velar [x] (e.g. *mujer* [mu'xɛr] ‘woman’);
- frequent merger of /x/ (<j, g>) into /f/, especially before the back vowels /o, u/ (e.g. *mojojoy* [mɔxɔ'xɔj~mɔɸ<sup>w</sup>ɔ'ɸ<sup>w</sup>ɔj] ‘palm weevil’<sup>122</sup>);
- merger of /b, p, d/ (<b, p, d>) into /k, g/ in syllable-final position (e.g. *aptitud* [akti'tukʷ] ‘aptitude’);
- merger of /e/ (<e>) into /i/ when unstressed and immediately preceding a non-front vowel /a, o, u/ (e.g. *planear* [pla'njar] ‘to plan’);
- tendency to debuccalize /s/ (<s, z>) in syllable-final position, realizing it as the glottal fricatives [h, fi] (e.g. *pescar* [pɛs'kar~pɛh'kar] ‘to call’);
- in less educated speakers, tendency for the voiced stops /b, d, g/ (<b, d, g>) not to be spirantized in contexts where they are in other varieties of Spanish (e.g. *en mi vida* [ɛm mi 'βiða ~ ʔɛm mi 'bida] ‘in my life’);
- in less educated speakers, tendency to insert glottal stops [ʔ] in onset position of words lacking a consonant onset (e.g. *un año* [¹ũŋ 'aŋɔ ~ ¹ʔũŋ 'ʔaŋɔ] ‘one year’);
- in less educated speakers, tendency to stress and lengthen the first syllable of stressed words (e.g. *mi papá* [mi pa'pa ~ mi pa:pa] ‘my father’).

### 2.7.3 Toneme imposition

As discussed in SECTION 2.4 above, SMAT displays a high syntagmatic toneme density, with every underlying syllable obligatorily featuring a toneme of its own. When **borrowed into SMAT**, non-native morphemes have to conform to this general

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<sup>122</sup>*Curculionidae* sp.

property of the language. **Each of their syllables is therefore attributed a lexical toneme** in the resulting SMAT loan form, as shown in the following examples:

- (117) a. /ʔo<sup>[33]</sup>da<sup>[3]</sup>we<sup>[1]</sup>/ ‘cockroach’ < O. Om. \*/a<sup>1</sup>rawe/ ‘id.’<sup>123</sup>  
 [ʔo:<sup>33</sup>ra<sup>3</sup>wɛ<sup>1</sup>]  
 b. /di<sup>[33]</sup>~e<sup>[3]</sup>du<sup>[1]</sup>/ ‘money’ < Prt. *dinheiro* ‘id.’<sup>124</sup>  
 [di:<sup>33</sup>ẽ<sup>3</sup>ru<sup>1</sup>]  
 c. /pa<sup>[33]</sup>~de<sup>[4]</sup>da<sup>[1]</sup>/ ‘cooking pot’ < Prt. *panela* ‘id.’<sup>125</sup>  
 [pa:<sup>33</sup>nẽ<sup>4</sup>ra<sup>1</sup>]

In most cases, the attributed tonemes broadly mimic the average pitch pattern of the morpheme in the source language. Note that so far, I have only been able to identify loanwords from non-tonal, stress source languages; the source pitch pattern, and hence the toneme sequence in the resulting SMAT form, is therefore mostly determined by the position of stress in the source morpheme.

Less expectedly, non-native—in practice, Spanish—morphemes **opportunistically inserted within a SMAT utterance via code-mixing** can also be shown to be regularly attributed tonemes most of the time, as is the case in the following example:

- (118) /tɕo<sup>31</sup>-ʔdi<sup>3</sup> fu<sup>[33]</sup>tu<sup>[4]</sup>ro<sup>[1]</sup>-wa<sup>5</sup> = duw<sup>1</sup>/ with Sp. *futuro* ‘future’<sup>126</sup>  
 [tɕo<sup>3</sup>ri<sup>3</sup> ʔ<sup>w</sup>u:<sup>33</sup>tɕu<sup>4</sup>ro<sup>1</sup>wa<sup>5</sup>ru<sup>1</sup>]  
 ‘in my future’<sup>127</sup> [ANO1 63]

The pitch and phonation patterns that such morphemes display in code-mixing contexts are not exactly the same as would be expected in an entirely Spanish-speaking local context and tend to be more stable and less context-dependent.

Interestingly, the patterns of toneme imposition to non-native morphemes **have changed over time** (contrast the toneme sequences of the older borrowings in examples (117a–117b) with the toneme sequence of the more recent borrowing

<sup>123</sup>Compare M. Om. *arawi* ‘cockroach’ (O’Hagan 2011:2).

<sup>124</sup>[d̥i<sup>1</sup>je:ru].

<sup>125</sup>[pɕ<sup>1</sup>ne:ɾɛ]. Possibly through LGA /pa<sup>1</sup>nera/ ‘cooking pot’ (Stradelli 1929:280).

<sup>126</sup>[ʔ<sup>w</sup>u<sup>1</sup>tɕuro].

<sup>127</sup>On the phonological representation of words inserted by code-mixing, see note 119.

in (117c), while all three source words bear stress on their penultimate syllable). SECTION 2.7.3.1 describes two no longer productive patterns attested in loanwords. Today's pattern of toneme imposition, which is attested both in loanwords and in code-mixing, is discussed in SECTION 2.7.3.2.

### 2.7.3.1 Non-productive patterns in older borrowings

(i) **NON-TRUNCATED PATTERN.** Based on the meanings of the words it was applied to and on the fact that it is found in few direct borrowings from the Iberic languages, this pattern of toneme imposition may be tentatively estimated to have been productive until some point in the second half of the 19th century. It is therefore not found in code-mixing. It typically yields **SMAT forms with a toneme sequence**  $/\sigma^{33}(\sigma^3)(\dots)(\sigma^3)\sigma^1/$ , where pre-tonic and stressed source syllables are interpreted as plateauing at the tonal height [<sup>3</sup>] and post-tonic source syllables as lowering to [<sup>1</sup>]. More specifically, according to this pattern, all syllables in the resulting form up to (and including) the one that corresponds to the position of the stress in the source form receive a toneme  $/^{33}/$  (first—*i.e.* stressed—syllable of the resulting form) or  $/^3/$  (non-first—*i.e.* unstressed—syllable of the resulting form). Syllables that follow the one that corresponds to the source stress are attributed a toneme  $/^1/$ . The following examples illustrate this pattern found in several dozens of words:

- (119) a.  $/\text{t}\epsilon\text{o}^{33}\text{ka}^1/$  'sack' < Prt./Sp. *saca* 'id.'<sup>128</sup>  
            $[\text{t}\epsilon\text{o}^{33}\text{ka}^1]$
- b.  $/\text{d}\text{z}\text{u}^{33}\text{da}^1/$  'wooden platform' < O. Om.  $*/\text{jura}/$  'id.'<sup>129</sup>  
            $[\text{d}\text{z}\text{u}^{33}\text{ra}^1]$
- c.  $/\text{t}\epsilon\text{a}^{33}\text{pa}^3\text{tu}^1/$  'shoe' < Prt. *sapato*/Sp. *zapato* 'id.'<sup>130</sup>  
            $[\text{t}\epsilon\text{a}^{33}\text{pa}^3\text{tu}^1]$
- d.  $/\sim\text{bu}^{33}\text{ka}^3\text{wa}^1/$  'rifle' < LGA  $/\text{mu}'\text{kawa}/$  'id.'<sup>131</sup>  
            $[\text{m}\ddot{\text{u}}^{33}\text{ka}^3\text{wa}^1]$

<sup>128</sup>Prt. [*sa:kɛ*], Sp. [*saka*].

<sup>129</sup>Compare M. Om. *yura* 'wooden platform, floor' (O'Hagan 2011:32).

<sup>130</sup>Prt. [*sa'pa:tɔ*], Sp. [*sa'paɾɔ*].

<sup>131</sup>Stradelli (1929:536).

- e. /~bu<sup>33</sup>da<sup>3</sup>pe<sup>3</sup>wa<sup>1</sup>/ ‘plank’ < LGA /mira<sup>1</sup>pewa/ ‘id.’<sup>132</sup>  
 [mũr:<sup>33</sup>ra<sup>3</sup>pe<sup>3</sup>wa<sup>1</sup>]
- f. /ʔo<sup>33</sup>ka<sup>3</sup>ɖur<sup>3</sup>wa<sup>1</sup>/ ‘tree sp.’<sup>133</sup> < O. Om. \*/aka<sup>1</sup>jiwa/ ‘id.’<sup>134</sup>  
 [ʔo:<sup>33</sup>ka<sup>3</sup>ɖur<sup>3</sup>wa<sup>1</sup>]

A single monosyllabic SMAT word seems to belong with this category of loanwords; it displays a toneme /<sup>31</sup>/:

- (120) /pai<sup>31</sup>/ ‘priest’ < Prt. *pai* ‘father’<sup>135</sup> (?)  
 [pa<sup>31</sup>]

For an unknown reason, a handful of SMAT loanwords with this toneme imposition pattern **additionally feature a coda /ʔ/ in their first syllable**, such as those shown in example (121). This /ʔ/ does not seem to have been present in the source form. These words might be among the oldest borrowings belonging to this category.

- (121) a. /kuʔ<sup>33</sup>tɕi<sup>1</sup>/ ‘knife’ < O. Om. \*/kɨji/ ‘id.’<sup>136</sup>  
 [kuʔ<sup>33</sup>tɕi<sup>1</sup>]
- b. /ʔoʔ<sup>33</sup>te<sup>3</sup>de<sup>1</sup>/ ‘zapote fruit’<sup>137</sup> < O. Om. \*/a<sup>1</sup>tere/ ‘id.’<sup>138</sup>  
 [ʔoʔ<sup>33</sup>tɕe<sup>3</sup>re<sup>1</sup>]
- c. /kuʔ<sup>33</sup>~ba<sup>3</sup>ka<sup>1</sup>/ ‘plant yielding a black dye’<sup>139</sup> < O. Om. \*/ku<sup>1</sup>maka/ ‘black dye from *Swietenia macrophylla* bark’<sup>140</sup>  
 [kuʔ<sup>33</sup>mã<sup>3</sup>ka<sup>1</sup>]
- d. /poʔ<sup>33</sup>po<sup>3</sup>ɖu<sup>1</sup>/ ‘papaya’ < Sp. *papayo* ‘id.’<sup>141</sup>

<sup>132</sup>Stradelli (1929:569).

<sup>133</sup>*Cedrela odorata?* Local Spanish *cedro*. Also attested under the form /ʔo<sup>33</sup>ka<sup>3</sup>ɖi<sup>3</sup>wa<sup>1</sup>/ [ʔo:<sup>33</sup>ka<sup>3</sup>ɖi<sup>3</sup>wa<sup>1</sup>].

<sup>134</sup>Compare M. Om. *akayiwa* ‘cedro tree’ (O’Hagan 2011:1).

<sup>135</sup>[pa<sup>31</sup>]. Possibly through LGA /paj/ ‘priest, clergyman, missionary’ (Stradelli 1929:584).

<sup>136</sup>Compare M. Om. *kishi* ‘knife’ (O’Hagan 2011:10).

<sup>137</sup>Unidentified.

<sup>138</sup>Compare M. Om. *atrrɪ* ‘zapote fruit’ (O’Hagan 2011:2).

<sup>139</sup>Unidentified.

<sup>140</sup>Compare Kokama-Kokamilla *kumaka* ‘black dye, preparation obtained from the bark of the tree *Swietenia macrophylla* bark’ (Vallejos Yopán & Amías Murayari 2015:110). Kokama-Kokamilla is a sister language of Omagua (Michael 2014).

<sup>141</sup>[pa<sup>1</sup>paɖo].

[<sup>1</sup>pɔʔ<sup>33</sup>pɔ<sup>3</sup>ɬu<sup>1</sup>]

(ii) **TRUNCATED PATTERN.** A dozen of SMAT loanwords display a **toneme sequence** /σ<sup>33</sup>σ<sup>5</sup>/, such as those shown in example (122). In view of their meanings, these loans appear to be of comparatively old date (beginning of the 19th century at the latest?). In most cases, the source form of these words seems to have had three or more syllables and to have been **truncated to its first two syllables** in the resulting form.

- (122) a. /ʔo<sup>33</sup>ta<sup>5</sup>/ ‘chicken’ < Quechuan /ata<sup>1</sup>wa<sup>1</sup>ɬpa/ ‘id.’<sup>142</sup>  
 [<sup>1</sup>ʔo:<sup>33</sup>ta<sup>5</sup>]  
 b. /ko<sup>33</sup>di<sup>5</sup>/ ‘White person’ < LGA (\*)/ka<sup>1</sup>riwa/ ‘id.’<sup>143</sup>  
 [<sup>1</sup>kɔ:<sup>33</sup>ri<sup>5</sup>]  
 c. /ku<sup>33</sup>pa<sup>5</sup>/ ‘*compadre*’<sup>144</sup> < Prt./Sp. *compadre* ‘id.’<sup>145</sup>  
 [<sup>1</sup>ku:<sup>33</sup>pa<sup>5</sup>]

The three loanwords in (123), however, do not seem to have undergone truncation since their source form already appears to have been disyllabic. The reason why they display the older toneme imposition pattern of truncated loanwords (/σ<sup>33</sup>σ<sup>5</sup>/), rather than that of non-truncated loans (/σ<sup>33</sup>σ<sup>1</sup>/), is unclear.<sup>146</sup>

<sup>142</sup>Possibly through O. Om. \*/ata<sup>1</sup>wari/; compare M. Om. *atawari* (O’Hagan 2011:2). On the Quechuan form /ata<sup>1</sup>wa<sup>1</sup>ɬpa/ ‘chicken’, see Cerrón-Palomino (2017).

<sup>143</sup>See LGA *caryua* (for /ka<sup>1</sup>riwa/, or perhaps /ka<sup>1</sup>riwa/) ‘the White [...]’ (Stradelli 1929:403). The immediate donor language for this form may have been another language with a word related to this LGA item.

<sup>144</sup>*Compadre* (Sp.): male member of a *compadrazgo* relationship, a major social institution of Christian origin that binds a child’s parents and godparents, *i.e.* a father in relation to the godfather or godmother of his child, or a godfather in relation to the father, mother, or godmother of his godchild.

<sup>145</sup>Prt. [kõ<sup>m</sup>pa:<sup>ɾ</sup>ɾɪ], Sp. [kõ<sup>m</sup>pað<sup>r</sup>e].

<sup>146</sup>The tonological pattern of /~ba<sup>33</sup>~ba<sup>5</sup>/ [<sup>1</sup>mã:<sup>33</sup>mã<sup>5</sup>] ‘mum’ and /pa<sup>33</sup>pa<sup>5</sup>/ [<sup>1</sup>pa:<sup>33</sup>pa<sup>5</sup>] ‘dad’ might be unrelated with the truncated toneme imposition pattern discussed here, and be instead analogical of the tonological pattern /σ<sup>x</sup>σ<sup>5</sup>/ found in a number of native kinship terms (in particular, /bu<sup>31</sup>ʔi<sup>5</sup>/ [<sup>1</sup>bu:<sup>31</sup>ʔi<sup>5</sup>] or /bi<sup>31</sup>ʔi<sup>5</sup>/ [<sup>1</sup>bi:<sup>31</sup>ʔi<sup>5</sup>] ‘mother’, /~ʔai<sup>33</sup>ʔe<sup>5</sup>/ [<sup>1</sup>ʔã:<sup>33</sup>ʔe<sup>5</sup>] ‘child (archaic)’, /~bai<sup>43</sup>ʔe<sup>5</sup>/ [<sup>1</sup>mã:<sup>43</sup>ʔe<sup>5</sup>] ‘sibling’, /~do<sup>31</sup>ʔe<sup>5</sup>/ [<sup>1</sup>nõ:<sup>31</sup>ʔe<sup>5</sup>] ‘grandmother, old woman’, and /ʔo<sup>MC</sup>ʔi<sup>5</sup>/ [<sup>1</sup>ʔɔ:<sup>ʔ</sup>ʔi<sup>5</sup>] ‘grandfather, old man’).

- (123) a. /d̥o<sup>33</sup>da<sup>5</sup>/ ‘master, owner’ < O. Om. /<sup>l</sup>jara/ ‘master’<sup>147</sup>  
 [d̥o:<sup>33</sup>ra<sup>5</sup>] or LGA /<sup>l</sup>jara/ ‘master’<sup>148</sup>
- b. /~ba<sup>33</sup>~ba<sup>5</sup>/ ‘mum’<sup>149</sup> < O. Om. \*/<sup>l</sup>mama/ ‘mother’<sup>150</sup>  
 [mã:<sup>33</sup>mã<sup>5</sup>] (or Sp. *mamá* ‘mother’?)<sup>151</sup>
- c. /pa<sup>33</sup>pa<sup>5</sup>/ ‘dad’ < O. Om. /<sup>l</sup>papa/ ‘father’<sup>152</sup>  
 [pa:<sup>33</sup>pa<sup>5</sup>] (or Sp. *papá* ‘father’?)<sup>153</sup>

### 2.7.3.2 Productive pattern in recent borrowings and code-mixing

Based on the meanings of the words it was applied to<sup>154</sup> and on the fact that it is found in few direct borrowings from Língua Geral Amazônica, this toneme imposition pattern may be tentatively estimated to have replaced the older one for non-truncated loans at some point in the second half of the 19th century. It has remained productive to this day. It typically yields **SMAT forms with a toneme sequence /σ<sup>43</sup>σ<sup>1</sup>/ or /σ<sup>33</sup>(σ<sup>3</sup>)(...)σ<sup>4</sup>(σ<sup>1</sup>)/**, where pre-tonic source syllables—if present—are interpreted as corresponding to the tonal height [<sup>3</sup>], stressed source syllables as peaking at [<sup>4</sup>], and post-tonic source syllables—if present—as falling to [<sup>1</sup>]. More specifically, according to this pattern, all syllables—if any—in the resulting form that precede the one that corresponds to the position of the stress in the source form receive a toneme /<sup>33</sup>/ (first—*i.e.* stressed—syllable of the resulting form) or /<sup>3</sup>/ (non-first—*i.e.* unstressed—syllable of the resulting form). The syllable that corresponds to the source stress is attributed a toneme /<sup>43</sup>/ (first syllable of the resulting

<sup>147</sup>See Michael & O’Hagan (2016:*passim*) and compare M. Om. *yara* ‘master; God’ (O’Hagan 2011:30).

<sup>148</sup>Stradelli (1929:459).

<sup>149</sup>Although rare, a word /~ba<sup>33</sup>~ba<sup>1</sup>/ [mã:<sup>33</sup>mã<sup>1</sup>] ‘mommy’, featuring the older toneme imposition pattern of non-truncated loanwords, is also attested in traditional storytelling.

<sup>150</sup>Compare M. Om. *mama* ‘mother’ (O’Hagan 2011:12).

<sup>151</sup>[ma<sup>l</sup>ma].

<sup>152</sup>See Michael & O’Hagan (2016:*passim*) and compare M. Om. *papa* ‘father’ (O’Hagan 2011:15).

<sup>153</sup>[pa<sup>l</sup>pa].

<sup>154</sup>For instance, /wa<sup>33</sup>pu<sup>4</sup>du<sup>1</sup>/ [‘wa:<sup>33</sup>pu<sup>4</sup>ru<sup>1</sup>] ‘larger engine-propelled boat’, from Prt./Sp. *vapor* ‘steamboat’ ([ba<sup>l</sup>pɔr]), possibly through another language. This word was probably borrowed in the first decades of steamboat navigation on the Amazon river, *i.e.* in the second half of the 19th century (Gregório 2009).



form) or /<sup>4</sup>/ (non-first syllable of the resulting form). The remaining syllables—if any—take a toneme /<sup>1</sup>/. The following examples illustrate this pattern found in a few dozens of loanwords:

- (124) a. /po<sup>43</sup>~w<sup>1</sup>/ ‘bread’ < Prt. *pão*/Sp. *pan* ‘id.’<sup>155</sup>  
 [p<sup>43</sup>ɔ̃<sup>1</sup>]  
 b. /ta<sup>33</sup>tɕi<sup>4</sup>wa<sup>1</sup>/ ‘ant’ < LGA /ta<sup>1</sup>ʃiwa/ ‘kind of ant’<sup>156</sup>  
 [t<sup>33</sup>ɕi<sup>4</sup>wa<sup>1</sup>]  
 c. /~bu<sup>33</sup>tu<sup>4</sup>du<sup>1</sup>/ ‘motor (boat)’ < Prt./Sp. *motor* ‘id.’<sup>157</sup>  
 [mũ<sup>33</sup>t<sup>4</sup>ru<sup>1</sup>]  
 d. /pe<sup>33</sup>du<sup>4</sup>/ ‘Peru’ < Prt. *Peru*/Sp. *Perú* ‘id.’<sup>158</sup>  
 [pɛ<sup>33</sup>ru<sup>4</sup>]  
 e. /pu<sup>33</sup>da<sup>3</sup>ku<sup>4</sup>/ ‘to work’ < LGA /pura<sup>1</sup>ki/ ‘id.’<sup>159</sup>  
 [pu<sup>33</sup>ra<sup>3</sup>ku<sup>4</sup>]  
 f. /ʔa<sup>33</sup>da<sup>3</sup>wi<sup>3</sup>di<sup>4</sup>/ ‘fish sp.’<sup>160</sup> < LGA /arawi<sup>1</sup>rĩ/ ‘fish sp.’<sup>161</sup>  
 [ʔa<sup>33</sup>ra<sup>3</sup>wi<sup>3</sup>ri<sup>4</sup>]

This toneme imposition pattern is the one **regularly applied to Spanish words used in code-mixing**, a frequent phenomenon in SMAT even in older speakers, as shown in the following example by a speaker in his seventies (see also (118) above for an example by a younger speaker):

- (125) /tɕa<sup>1</sup> = vein<sup>33</sup>ti<sup>3</sup>cin<sup>4</sup>co<sup>1</sup> a<sup>43</sup>ño<sup>1</sup>-ã<sup>C</sup>-gu<sup>1</sup>/ with Sp. *veinticinco año(s)*  
 [tɕa<sup>1</sup>bɛ̃<sup>33</sup>tɕi<sup>3</sup>sĩŋ<sup>4</sup>ku<sup>1</sup> ʔa<sup>43</sup>nõ<sup>1</sup>ãgu<sup>1</sup>] ‘twenty-five years’<sup>162</sup>

<sup>155</sup>Prt. [p<sup>33</sup>ũ], Sp. [pãŋ].

<sup>156</sup>Stradelli (1929:671).

<sup>157</sup>Prt. [mo<sup>1</sup>tɔ:h], Sp. [mɔ<sup>1</sup>tɔr].

<sup>158</sup>Prt. [pe<sup>1</sup>ru:], Sp. [pɛ<sup>1</sup>ru].

<sup>159</sup>Stradelli (1929:342). The SMAT word meaning ‘to work’ displays a more conservative form /pu<sup>33</sup>da<sup>3</sup>a<sup>3</sup>ku<sup>4</sup>/ [pu<sup>33</sup>ra<sup>3</sup>a<sup>3</sup>ku<sup>4</sup>] in some older speakers (e.g. HGA). The additional syllable exhibited by this form suggests that the word was in fact borrowed from a more conservative LGA form like \*/porai<sup>1</sup>ki/ suggested by mid-19th century records (see <porauquê> ‘to work’ in Dias (1854:575), <porauky> ‘id.’ in Dias (1858:146)).

<sup>160</sup>*Triporthus* sp.? Local Spanish *sardina*.

<sup>161</sup>See *arairi* ‘kind of *sardinha* fish [in the genus] *Chal[c]eus*’ (Stradelli 1929:379).

<sup>162</sup>[bɛ̃<sup>33</sup>tɕi<sup>3</sup>sĩŋko<sup>1</sup> aŋɔ(s)].

‘when I was 25 years old’<sup>163</sup> [HGA 26]

Note that the **morphotonological alternations** that regularly occur in native morphemes (see SECTION 2.6.2 above) equally apply not only in loanwords, but **also—more surprisingly—in morphemes inserted by code-mixing**. Examples (126a–126c), which were uttered by a younger speaker with full Spanish proficiency, all feature the Spanish morpheme *sucede* ‘it happens’ inserted by code-mixing (in place of the native SMAT predicative phrase /ʔu<sup>43</sup>-pe<sup>4</sup>tu<sup>1</sup>/ [ʔu:<sup>43</sup>pe<sup>4</sup>tu<sup>1</sup>] ‘to happen’). This inserted morpheme presents the expected toneme sequence /o<sup>33</sup>o<sup>4</sup>o<sup>1</sup>/ in (126a), in a context where no morphotonological alternation occurs, specifically when the predicative phrase is inflected in the Indicative Inflectional Type. In (126b) and (126c), however, the toneme /<sup>1</sup>/ of its last syllable turns into /<sup>3</sup>/ and /<sup>C</sup>/ when the predicative phrase is inflected in the Subjunctive Inflectional Type ((126b); see also (114) above) and when it is immediately followed by the morpheme /-gu<sup>4/1</sup>/ ‘CIRC’ (126c).

- (126) a. /tɕa<sup>3</sup> = ~da<sup>4</sup> = su<sup>33</sup>ce<sup>4</sup>de<sup>1</sup>/  
 [tɕa<sup>3</sup>nã<sup>4</sup>su:<sup>33</sup>sɛ<sup>4</sup>dɛ<sup>1</sup>]  
 ‘(they) happened to me’ [ANO1 137]
- b. /tɕa<sup>3</sup> = ~da<sup>1</sup> = su<sup>33</sup>ce<sup>4</sup>de<sup>3</sup>-~ʔu<sup>4</sup>/  
 [tɕa<sup>3</sup>nã<sup>1</sup>su:<sup>33</sup>sɛ<sup>4</sup>dɛ<sup>3</sup>ʔu<sup>4</sup>]  
 ‘(at that point it) happened to me’ [ANO1 4]
- c. /al<sup>43</sup>go<sup>1</sup> tɕa<sup>3</sup> = su<sup>33</sup>ce<sup>4</sup>de<sup>C</sup>-gu<sup>4/1</sup> = ta<sup>4</sup> = i<sup>1</sup>/  
 [ʔal<sup>43</sup>go<sup>1</sup> tɕa<sup>3</sup>su:<sup>33</sup>sɛ<sup>4</sup>dɛ<sup>gu</sup>ta<sup>4</sup>i<sup>1</sup>]  
 ‘if something should happen to me’ [ANO1 70]

The occurrence of native SMAT morphotonological processes in Spanish morphemes inserted by code-mixing clearly shows that the latter are usually imposed genuine underlying tonemes as soon as they enter a SMAT frame utterance.

## 2.8 Diachronic notes

This section tentatively sketches and argues for hypotheses regarding the **reconstructable diachrony** of the phonemes /tɕ/ and /dɕ/ (SECTION 2.8.1), the phone

<sup>163</sup>On the phonological representation of words inserted by code-mixing, see note 119.

[ŋ] (SECTION 2.8.2), and certain occurrences of the phoneme /o/ (SECTION 2.8.3). Note that these hypotheses are **necessarily fragile and provisional** due to the limited and ambiguous nature of the data on which they are based (in large part pre-1953 non-linguistically-informed records of Tikuna, on which see SECTION 1.4). In particular, such attempts at reconstructing the phonological diachrony of SMAT will hopefully be awarded more ascertained results as more linguistic work is done to document the various dialects of Tikuna.

### 2.8.1 /tɕ/ < \*/ç/, /dʒ/ < \*/j/

In today's SMAT, the phoneme /dʒ/—usually pronounced [dʒ]—is occasionally realized [j] by some older speakers, and /tɕ/—normally [tɕ]—may exceptionally be realized [ç] by the oldest speakers (see SECTION 2.1.1). The written historical records on Tikuna suggest that these realizations [j] and [ç] are conservative (as opposed to their innovative variants [dʒ] and [tɕ]) and reflect the former regular realizations of their corresponding phonemes.

The likely or explicit realizations of the reflexes of today's SMAT /tɕ/ and /dʒ/ recorded in all the existing pre-linguistic records of Tikuna and in the major linguistic works on Tikuna are plotted in chronological order in FIGURES 19 and 20.<sup>164</sup> The data in these figures lead me to hypothesize that a long-term process

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<sup>164</sup>Each name in FIGURES 19, 20, and 21 below is that of an individual who collected first-hand data on a Tikuna variety. The names are placed at the approximate time of data collection (as opposed to the time of publication of the data; for more on the diagrammatic organization of these figures, see SECTION 1.4). Below each name of individuals who produced linguistically-informed records (*i.e.* after 1953) is a transcription in IPA of the phonetic realization reported or explicitly described by the corresponding individual for a given phoneme. Below each name of individuals who produced non-linguistically-informed records (*i.e.* before 1953) is an approximate transcription in IPA of the phonetic realization(s) that the corresponding individual likely witnessed for a given phoneme. My interpretation of these realizations is based on the transcription habits of each individual, taking into account the orthographic tradition of his native language at the time of data collection as well as his transcription habits for other languages of which he has left written records. As shown in FIGURE 19, for instance, the identifiable reflexes of today's SMAT /tɕ/ occurring in Tikuna words collected between 1817 and 1820 by the German biologist Johann Baptist Ritter von Spix (1781–1826) and published in Martius (1867:159–161, 413–486) can be interpreted as \* [ç] or a coronal fricative phone close to it. In an overwhelming majority of cases, these reflexes are indeed transcribed <s> (up to 37 occurrences) or <sch> (up to 12 occurrences). The grapheme <s> in Spix' use most likely stands for [s] (compare his transcriptions for a Quechuan variety he witnessed in Peruvian Amazonia: <uâsy> 'house' most likely for [ˈwasi], <ghosa> 'husband' for

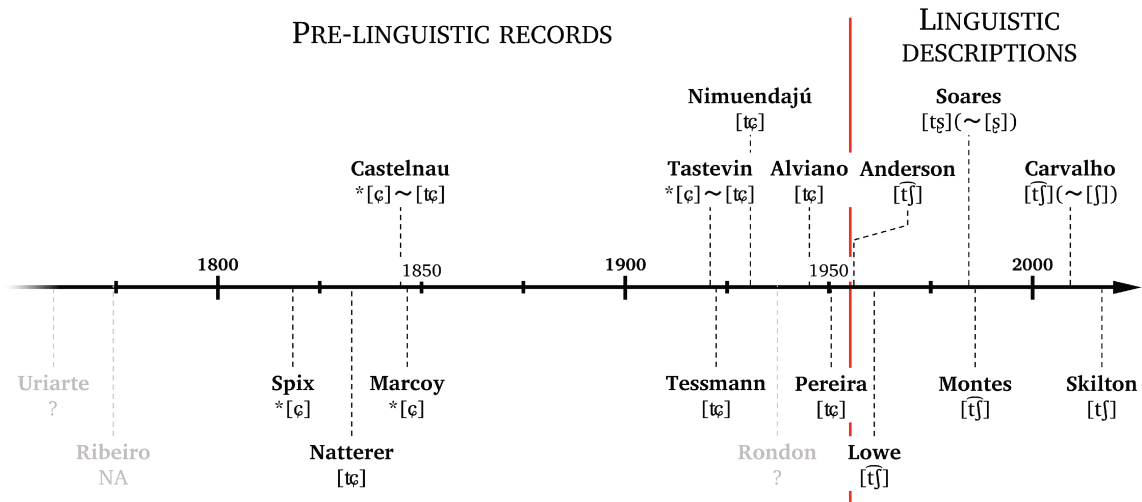


FIGURE 19. Chronological representation of the likely or explicit realizations of the reflexes of SMAT /tɕ/ attested in written records and linguistic descriptions of Tikuna

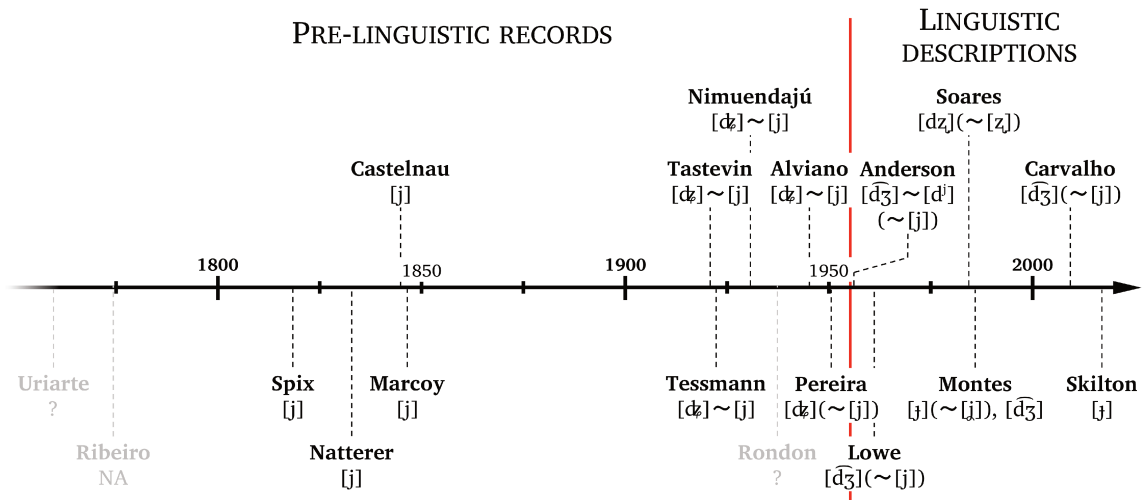


FIGURE 20. Chronological representation of the likely or explicit realizations of the reflexes of SMAT /dʒ/ attested in written records and linguistic descriptions of Tikuna

of strengthening affecting the palatal segments has turned 1) a **former fricative Tikuna phoneme \*/ç/ (or a non-occlusive phoneme close to it) into today's affricate SMAT /tʃ/** over the course of the period 1800–1925, and 2) a **former approximant Tikuna phoneme \*/j/ (or a non-occlusive phoneme close to it) into today's affricate SMAT /dʒ/** over the course of the 20th century (the latter evolution is in fact not fully accomplished yet). The evidence is especially strong for \*/j/ > /dʒ/, since the four authors of 19th century records (Spix, Natterer, Castelnau, and Marcoy) all rather abundantly and unambiguously record non-occlusive realizations for the reflexes of today's SMAT /dʒ/.

### 2.8.2 [ŋ] < \* [Ø] ~ \* [ʰ] ?

There are indications that today's SMAT phone [ŋ] might historically be the product of **sheer epenthesis from [Ø]** or of the **strengthening of a weak articulation** involving the articulators of the back of the mouth.

The reflex (or one of the reflexes) of today's SMAT [ŋ] in certain modern Tikuna dialects, at least preceding certain vowels, is a **weakly articulated voiced phone that I tentatively identify as a weak voiced glottal fricative [ʰ]** (or perhaps as a voiced velar approximant [ɣ]) and whose exact place of articulation varies noticeably in accordance with the frontness-backness of the following vowel (yielding [ʰ]~[ʰ]~[ʰ<sup>w</sup>], or perhaps [ɣ<sup>j</sup>]~[ɣ]~[ɣ<sup>w</sup>]). Such an articulation is reported in

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[ˈqusa] or [ˈkusa], < sinka > ‘nose’ for [ˈsɪŋqa] or [ˈsɪŋka]; Martius 1867:290,292) and <sch> most likely stands for [ʃ] as per a long-standing tradition of German spelling. In a very few cases, Spix transcribes the identifiable reflexes of SMAT /tʃ/ as <z> (3 occurrences; unclear phonetic value) and <tsch> (up to 3 occurrences; this grapheme's most likely phonetic value is [tʃ]), which suggests that the reflex of SMAT /tʃ/ in the Tikuna variety witnessed by Spix could marginally be realized as an affricate). Importantly, note that the non-linguistically informed records obviously do not all contain the same number of attestations of reflexes of a given SMAT phoneme or phone, which implies that the interpretation of the transcriptions they provide is not based on the same number of occurrences from record to record and therefore varies in its degree of certainty. The general picture that this interpretation yields, however, remains of interest. Where two phones appear below a single name in FIGURES 19, 20, and 21, the reflex of the phoneme or phone of today's SMAT under discussion witnessed by the corresponding individual has or seems to have had two realizations, either with approximately equal frequencies (“[X]~[Y]”) or with one of the alternatives being significantly rarer than the other (“[X](~[Y])”). Grayed out names correspond to individuals that either do not mention reflexes of the phone or phoneme under study (“NA”) or whose transcriptions for the phone or phoneme under study are too ambiguous to be usefully interpreted (“?”).

Cushillococha Tikuna, where it is represented by Skilton as [ʎ] (2019, pers. com.).<sup>165</sup> It is probably also the articulation reported by Santos (2005:78–79; see also Montes Rodríguez 2005a:109) in the Tikuna variety of the Pupuña river (Tarapacá, Amazonas, Colombia), which he transcribes as [ŋ<sup>h</sup>] or [ɲ<sup>h</sup>] ([<sup>h</sup>]~[<sup>h</sup>ŋ] in Montes). I have additionally witnessed this articulation in a Brazilian Tikuna consultant (♂, about 40 y.o.) living in Umariacu (Tabatinga, Amazonas, Brazil) but whose dialectal origins I do not know (realizations by this speaker are reported in example (127)), and in second-hand recordings from poorly identified dialects to which I have had access.

- (127) a. /o<sup>22</sup>bu<sup>4</sup>/  
           [<sup>w</sup>ɔ:<sup>22</sup>bu<sup>4</sup>] or [ɣ<sup>w</sup>ɔ:<sup>22</sup>bu<sup>4</sup>]                   (SMAT realization: [ŋɔ:<sup>22</sup>bu<sup>4</sup>])  
           ‘turtle sp.’<sup>166</sup>
- b. /u<sup>22</sup>ga<sup>3</sup>/  
           [<sup>w</sup>u:<sup>22</sup>ga<sup>3</sup>] or [ɣ<sup>w</sup>u:<sup>22</sup>ga<sup>3</sup>]                   (SMAT realization: [ŋu:<sup>22</sup>ga<sup>3</sup>])  
           ‘bird sp.’<sup>167</sup>

Within today’s SMAT, [ŋ] alternates with [Ø] or syllabic breathy-voiced phonation in a handful of stressed words that are usually left unstressed (see end of SECTION 2.1.2). This is shown in the following example:

- (128) /~e<sup>33</sup>ga<sup>4</sup>/                   ([<sup>l</sup>ŋẽ:<sup>33</sup>ga<sup>4</sup>]~)[ẽ:<sup>33</sup>ga<sup>4</sup>]           ‘if’

This synchronic inter-dialectal and intra-dialectal functional equivalence of [ŋ] on the one hand and [Ø] or a weak glottal or velar articulation on the other is likely to have arisen diachronically from a phonologically-conditioned evolution of either [Ø] ~ [ʎ] > [ŋ], or [ŋ] > [Ø] ~ [ʎ]. The former directionality of this

<sup>165</sup>Amalia Skilton kindly invited me in July 2018 to travel and meet her in Cushillococha (Mariscal Ramón Castilla, Loreto, Peru), where she gave me the precious opportunity to take part in person to sustained conversations with Cushillococha Tikuna speakers for a few hours. This brief but attentive direct contact with Cushillococha Tikuna leads me to express doubts about Skilton’s (2019) transcription of the articulation in question as [ʎ], *i.e.* the International Phonetic Alphabet symbol for a voiced palatal lateral approximant, with which I do not identify the realizations of the Cushillococha Tikuna reflex of SMAT [ŋ] that I witnessed on that day (nor those that can be heard in different recordings in Skilton 2015). This is not to claim, however, that my tentative representations of this articulation are necessarily more accurate.

<sup>166</sup>*Geochelone denticulata*.

<sup>167</sup>*Tinamus* sp.

evolution is suggested by at least two borrowings as well as by 18th–19th century written records of Tikuna.

Examples (129a–129b) display two loanwords from Old Omagua whose **resulting form contains an initial [ŋ] in today’s SMAT while the source form lacks an onset altogether**.<sup>168</sup>

- (129) a. /w<sup>33</sup>du<sup>3</sup>ka<sup>3</sup>de<sup>1</sup>/ ‘mosquito net’ < O. Om. \*/iri<sup>1</sup>kari/ ‘id.’<sup>169</sup>  
 [ŋw<sup>33</sup>ru<sup>3</sup>ka<sup>3</sup>rɛ<sup>1</sup>]  
 b. /u<sup>33</sup>du<sup>3</sup>ku<sup>1</sup>/ ‘vulture sp.’<sup>170</sup> < O. Om. \*/u<sup>1</sup>rupu/ ‘black  
 [ŋu<sup>33</sup>ru<sup>3</sup>ku<sup>1</sup>] vulture’<sup>171</sup>

Example (130) similarly displays a loanword from Portuguese or Spanish whose resulting form contains an initial [ŋ] in Cushillococha and Umariacu Tikuna (Anderson & Anderson 2016:156; Lowe 1960b:11) while the source form lacks an onset (note that an exact reflex of this form is not found in SMAT, which uses a form [ʔo:<sup>43</sup>ra<sup>1</sup>] ‘hour, time’ instead).<sup>172</sup>

<sup>168</sup>On the abbreviations and the phonetic transcriptions of Portuguese and Spanish words proposed in this section, see SECTION 2.7.1 above. Other SMAT words that might originate from source forms similarly lacking an onset are /ai<sup>33</sup>te<sup>1</sup>/ [ŋar<sup>33</sup>tɛ<sup>1</sup>] ‘bogeyman’ (perhaps from O. Om. \*/aise/ ‘be evil, ugly’; O’Hagan & Wauters 2012:13), /u<sup>33</sup>tu<sup>3</sup>ma<sup>3</sup>tɛa<sup>1</sup>/ [ŋu<sup>33</sup>tɯ<sup>3</sup>mã<sup>3</sup>tɛa<sup>1</sup>] ‘spinning top’, and the archaic words only found in traditional songs /w<sup>33</sup>~ba<sup>3</sup>~da<sup>3</sup>tɛa<sup>1</sup>/ [ŋw<sup>33</sup>mã<sup>3</sup>nã<sup>3</sup>tɛa<sup>1</sup>] ‘impure and invisible being (?)’ and /u<sup>33</sup>~ba<sup>3</sup>di<sup>3</sup>ɕa<sup>3</sup>~da<sup>1</sup>/ [ŋu<sup>33</sup>mã<sup>3</sup>ri<sup>3</sup>ɕa<sup>3</sup>nã<sup>1</sup>] ‘?’ (the latter word, of unknown meaning, displays a variant with an initial /ʔ/, /ʔu<sup>33</sup>~ba<sup>3</sup>di<sup>3</sup>ɕa<sup>3</sup>~da<sup>1</sup>/ [ʔu<sup>33</sup>mã<sup>3</sup>ri<sup>3</sup>ɕa<sup>3</sup>nã<sup>1</sup>]). The tonological pattern of these words strongly suggests that they are loanwords (see SECTION 2.7.3.1), in which case their source forms are very likely to have lacked an initial [ŋ] (the non-Tikuna languages that are, or used to be, spoken in the surroundings of the Tikuna areas seem to generally lack a word-initial phone [ŋ]). I have not been able to identify sufficiently plausible source forms for them, however. Note, incidentally, that the probably recent “tikunized” form of the Spanish first name *James* [‘xameʃ] similarly displays a [ŋ] of unclear origin (< [x]?): /a<sup>43</sup>~be<sup>1</sup>/ [ŋa:<sup>43</sup>mɛ<sup>1</sup>].

<sup>169</sup>Compare M. Om. *irikari* ‘id.’ (O’Hagan 2011:7).

<sup>170</sup>*Cathartidae* sp.

<sup>171</sup>Compare M. Om. *urupu* ‘black vulture (*Coragyps atratus*)’ (O’Hagan 2011:27). The correspondence between a source \*[p] and a resulting /k/ in this borrowing is unique and unexplained, although the identification of the source form makes little doubt.

<sup>172</sup>Note, incidentally, that the name ‘Jesus’ in Cushillococha Tikuna similarly displays a [ŋ] of unclear origin (< [x]?): <nge<sup>3</sup>chu<sup>2</sup>chu<sup>5</sup>> (for [ŋɛ:<sup>33</sup>tɕu<sup>4</sup>tɕu<sup>1</sup>]) ‘Jesus Our Savior’ (< Sp. *Jesús* [xɛ’sus]; Anderson & Anderson 2016:150).

- (130) a. **Cushillococha Tikuna:**  
 < ngo<sup>23</sup>ra<sup>5</sup> > ‘hour’ < Prt./Sp. *hora* ‘id.’<sup>173</sup>  
 (for [ʰŋɔ:<sup>43</sup>ra<sup>1</sup>])
- b. **Umariayu Tikuna:**  
 < ŋɔ<sup>3</sup>ra<sup>5</sup> > ‘time, hour’ < Prt./Sp. *hora* ‘id.’<sup>173</sup>  
 (for [ʰŋɔ:<sup>33</sup>ra<sup>1</sup>])

These loanwords are relatively likely to have lacked an onset or to have featured a weakly articulated onset at the time of borrowing, and to have developed an initial [ŋ] at a later stage. Note, however, that most loanwords of comparatively old date (e.g. loanwords from Old Omagua) whose source form lacks an initial onset do not display an initial [ŋ] in today’s SMAT, but a /ʔ/ (see, e.g., (117a), (119f), and (121b) above). It remains unclear why some loans from onsetless sources yielded Tikuna forms with an initial phone that would later develop into [ŋ], while others yielded Tikuna forms with an initial /ʔ/.

The likely or explicit **realizations of the reflexes of today’s SMAT [ŋ] recorded in all the existing pre-linguistic records of Tikuna and in the major linguistic works on Tikuna** are plotted in chronological order in FIGURE 21.<sup>174</sup> Note that in this figure [ʰ] stands for its International Phonetic Alphabet value or more broadly for a weak voiced articulation close to it, or possibly even [Ø]. I interpret the data in FIGURE 21 as supporting the [Ø]~[ʰ] > [ŋ] hypothesis. This evolution could have taken place over the course of the first half of the 19th century.

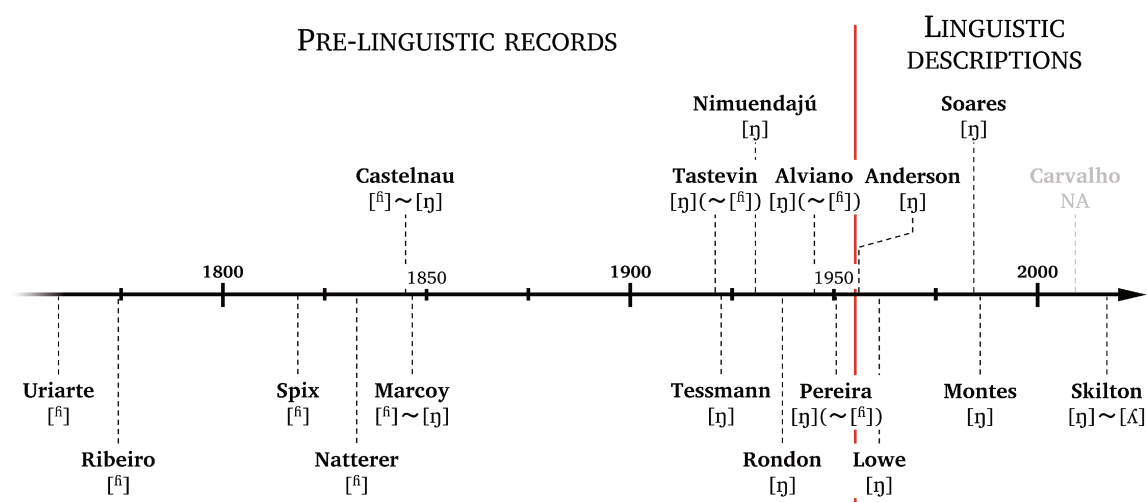
The [Ø]~[ʰ] > [ŋ] hypothesis **might explain why [ŋ] occurs in both non-nasal and nasal syllables in today’s SMAT**, i.e. why its distribution does not pattern like that of the other nasal consonant phones with regard to nasality, but rather like that of /ʔ/ (see SECTION 2.3). This modern distribution would not appear problematic if all cases of [ŋ], whether in non-nasal or nasal syllable, arose independently of nasality from [Ø] or a weak glottal articulation that, like /ʔ/, would probably have been transparent to nasality.

In this [Ø]~[ʰ] > [ŋ] scenario, the rare and optional epenthesis of onset [ŋ]’s in *unstressed* onsetless syllables in today’s SMAT (see end of SECTION 2.1.1) could be interpreted as an optional **overapplication in synchrony of the diachronic process that allowed the initial boundary of stressed syllables with an onset**

<sup>173</sup>Prt. [ˈɔ:ɾe], Sp. [ˈɔra].

<sup>174</sup>On the methodology employed in the making of FIGURE 21, see note 164.





**FIGURE 21.** Chronological representation of the likely or explicit realizations of the reflexes of SMAT [<sup>h</sup>] attested in written records and linguistic descriptions of Tikuna

**[Ø] ~ [<sup>h</sup>] to become more salient phonetically.** The proposed interpretation of [<sup>h</sup>] epenthesis in unstressed syllables seems to fit well with the observation that this process almost only occurs in singing, *i.e.* in a verbal art where salient syllable boundaries may be preferred to hiatuses.

Note that the diachronic scenario [Ø] ~ [<sup>h</sup>] > [<sup>h</sup>] just proposed, although presumably unusual, is not unparalleled cross-linguistically (*e.g.* [Ø] > [<sup>h</sup>] word-initially in the Northern Samoyedic languages, Sammallahti 1988:497 cited by Blust 2009:332; \*[h] > [<sup>h</sup>] syllable-initially in the Bantu language Nyole, Schadeberg 1989; [ɣ] > [<sup>h</sup>] in the Taiyuan dialect of Mandarin, Vuori 2003:368).<sup>175</sup>

<sup>175</sup>Skilton (pers. com.) signals that it is mostly in younger Cushillococha Tikuna speakers (approximately below age 40) that the articulation I tentatively transcribe as [<sup>h</sup>] occurs instead of its variant [<sup>h</sup>]. The latter variant, by contrast, is more frequent in older Cushillococha Tikuna. In other words, the generational distribution of [<sup>h</sup>] (younger speakers) and [<sup>h</sup>] (older speakers) in Cushillococha Tikuna would rather suggest that [<sup>h</sup>] evolved from [<sup>h</sup>] in that variety, and therefore does not fit well with the directionality of the [Ø] ~ [<sup>h</sup>] > [<sup>h</sup>] diachronic scenario that I propose in this section. This question remains open and should yield better-established results as accurate data from more Tikuna dialects become available.

### 2.8.3 Some /o/'s < \*[a]

It makes little doubt that at least **part of the /o/'s occurring in stressed syllables in today's SMAT evolved from former \*[a] 's** (or from a phone very close to [a]). The best evidence for this is found in the numerous borrowings from Old Omagua, Língua Geral Amazônica, Portuguese, and Spanish whose source forms feature an [a] (or occasionally an [ã] and perhaps an [ɐ], in the case of borrowings from Portuguese) in their first syllable, where their resulting SMAT forms feature an /o/. Two such borrowings are displayed in the following example (see ten more cases in TABLE 20 and SECTION 2.7.3.1 above):

- (131) a. /ko<sup>33</sup>~de<sup>3</sup>du<sup>1</sup>/ 'fish sp.'<sup>176</sup> < O. Om. \*/ka<sup>1</sup>neru/ 'fish sp.'<sup>177</sup>  
           [ko:<sup>33</sup>nẽ<sup>3</sup>ru<sup>1</sup>]  
       b. /wo<sup>33</sup>ka<sup>1</sup>/ 'cow' < Prt./Sp. *vaca* 'id.'<sup>178</sup>  
           [wɔ:<sup>33</sup>ka<sup>1</sup>]

This idea that some /o/'s originate from \*[a]'s would probably explain why the **epenthetic vowel** arising after the same-syllable glottal stop of certain monosyllabic stressed morphemes featuring a nucleus /o/ is an expected copy vowel /o/ (morphemes containing an /o/ that I label /o<sub>1</sub>/), while in the case of other monosyllabic stressed morphemes featuring /o/ that epenthetic vowel is /ɯ/, *i.e.* the epenthetic vowel otherwise expected in cases where the morpheme's underlying nucleus is /a/ (morphemes containing an /o/ that I label /o<sub>2</sub>/; see SECTION 2.1.3.1, p.78). The twofold outcome of this process of epenthetic vowel insertion in the case of morphemes containing an /o/ would be understandable synchronically if today's /o/'s in fact originated diachronically from two different sources, one of them being former \*[a]'s.

It is unclear, however, in what kind of phonetic and phonological background this \*[a] > /o/ evolution took place (was the language's vocalic phonological system approximately the same as today's SMAT's, or was there one more vocalic phoneme?), as well as how it did (was the \*[a] that yielded /o/'s a contextual re-

<sup>176</sup>Unidentified. Local Spanish *carnero* [sic].

<sup>177</sup>Compare Kukama-Kukamilla *kaneru* '[local Spanish] *canero*, kind of carnivorous fish of cylindrical body' (Vallejos Yopán & Amías Murayari 2015:93).

<sup>178</sup>Prt. ['va:kɐ], Sp. ['baka]. The immediate source of this borrowing is possibly an intermediary language other than Portuguese or Spanish.

alization of \*/a/, or the realization of a separate phoneme that completely merged into \*/o/?) and when it did. I have not been able so far to develop satisfying hypotheses regarding these questions with the descriptive, dialectal, and historical data currently available.

## 2.9 Practical orthography

In the remainder of this work, SMAT is transcribed using a practical orthography, both for the sake of concision and so as to make the transcriptions as readable as possible (and hence verifiable) to SMAT and other Tikuna speakers themselves. This orthography is **essentially based on the one provisionally agreed upon in the minutes of a meeting of Tikuna education professionals and leaders from Brazil, Peru, and Colombia** that was held on December 16–17, 2010 in the Tikuna community of Macedonia (Amazonas, Colombia; see Santos Angarita 2015).<sup>179</sup> It slightly departs from it, however, by including one borrowing from the “Brazilian orthography” (specifically the use of <’> for /ʔ/; see Leturia Nabaroa 2011:155–158) as well as a few personal adaptations and additions (in particular, the use of <ḡ> for /((Ø))/ [ʔV] and <w̃> for /~w/ [w̃], the use of the hyphen <->, and the systematic use of diacritics to transcribe all tonological information; see below).

Note that I have **primarily devised this practical orthography for descriptive linguistic purposes**. Although I do believe that it might prove suitable for a more general use (see end of this section on the potential viability of using diacritics for tone marking in non-linguistic Tikuna writings), my intention is not to propose here one more Tikuna orthographic system that would add to the several ones already in use. On the multiplicity of transcription systems currently in use to transcribe Tikuna—a non-standardized language spoken in a large territory distributed across three national spaces with two different dominant languages—and on the sensitive question of Tikuna orthography, see Leturia (2010, 2011).

For the most part, the practical orthography used in the present study seeks to **directly and exhaustively reflect the phonological structure** of the language, although in a few cases the graphic form is based on the phonetic form rather than the phonological form. The graphemes used to transcribe segmental information as well as phonological nasality are listed and exemplified in TABLE 21. Those used

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<sup>179</sup>This attempt at a transnational orthographic agreement is in its turn directly derived from the Spanish-based transcription system put forward in Montes (2002:45–52).

TABLE 21. Practical orthography: segmental and nasality-marking graphemes

Graph.	Value	Example
∅ <sup>a</sup>	/ʔ/ [ʔ]	<i>âi'tù</i> 'neotropical otter' <sup>180</sup> /ʔai <sup>31</sup> tu <sup>1</sup> / [ʔai <sup>31</sup> tʰu <sup>1</sup> ]
'	/ʔ/ [ʔ]	<i>nāi'chákú'ü</i> 'tree branch' /~dai <sup>33</sup> tʰa <sup>5</sup> ku <sup>4</sup> ʔ/ [nāi <sup>33</sup> tʰa <sup>5</sup> ku <sup>4</sup> ʔu <sup>3</sup> ]
<i>a</i>	/a/ [a], [ã]	<i>tàwēmàkū</i> 'moon' /ta <sup>21</sup> we <sup>3</sup> ~ba <sup>1</sup> ku <sup>3</sup> / [tʰa <sup>21</sup> wɛ <sup>3</sup> mã <sup>1</sup> ku <sup>3</sup> ]
<i>ã</i>	/~a/	<i>chàuãpü'ü</i> 'my knee' /tʰau <sup>21</sup> ~ã <sup>5</sup> pu <sup>7C</sup> / [tʰau <sup>21</sup> ã <sup>5</sup> pu <sup>7</sup> u <sup>3</sup> ]
<i>ai</i>	/ai/ [ai], [ãi]	<i>ãi'kúmá</i> 'truth' /ʔai <sup>22</sup> ku <sup>4</sup> ~ba <sup>4/1</sup> / [ʔai <sup>22</sup> ku <sup>4</sup> mã <sup>4</sup> ]
<i>ãi</i>	/~ai/	<i>ãi'é</i> 'child (archaic)' /~ʔai <sup>33</sup> ʔe <sup>5</sup> / [ʔãi <sup>33</sup> ʔɛ <sup>5</sup> ]
<i>au</i>	/au/ [au], [ãu]	<i>tāu</i> 'be ash-colored' /tau <sup>33</sup> / [tʰau <sup>33</sup> ]
<i>ãu</i>	/~au/	<i>àu</i> 'be evil' /~ʔau <sup>21</sup> / [ʔãu <sup>21</sup> ]
<i>b</i>	/b/	<i>bó</i> 'be round' /bo <sup>43</sup> / [bɔ <sup>43</sup> ]
<i>ch</i>	/tʰ/	<i>óchágù</i> 'dart' /ʔo <sup>43</sup> tʰa <sup>5</sup> gu <sup>1</sup> / [ʔo <sup>43</sup> tʰa <sup>5</sup> gu <sup>1</sup> ]
<i>d</i>	/d/ [d]	<i>dài</i> 'kill (pl.)' /dai <sup>21</sup> / [dai <sup>21</sup> ]

<sup>a</sup> This symbol stands for the absence of consonant grapheme at the beginning of a stressed syllable.

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Graph.	Value	Example
<i>e</i>	/e/ [ɛ], [ẽ]	<i>pē-fènūē</i> ‘you (pl.) hunt’ /pe <sup>3</sup> = k <sup>w</sup> e <sup>21</sup> ~ dɯ <sup>3</sup> e <sup>3</sup> / [pɛ <sup>3</sup> k <sup>w</sup> ɛ: <sup>21</sup> nũ <sup>3</sup> ẽ <sup>3</sup> ] ~ [pɛ <sup>3</sup> ɸ <sup>w</sup> ɛ: <sup>21</sup> nũ <sup>3</sup> ẽ <sup>3</sup> ]
<i>ẽ</i>	/~e/	<i>ẽnẽ</i> ‘army ant’ <sup>181</sup> /~ɲe <sup>21</sup> ~ de <sup>5</sup> / [‘ɲẽ: <sup>21</sup> nẽ <sup>5</sup> ]
<i>f</i>	/k <sup>w</sup> / [k <sup>w</sup> ~ ɸ <sup>w</sup> ]	<i>fěyú</i> ‘fish sp.’ <sup>182</sup> /k <sup>w</sup> e <sup>36</sup> ɬɯ <sup>4</sup> / [k <sup>w</sup> ɛ: <sup>36</sup> ɬɯ <sup>4</sup> ] ~ [ɸ <sup>w</sup> ɛ: <sup>36</sup> ɬɯ <sup>4</sup> ]
<i>g</i>	/g/	<i>ngē’gùmá</i> ‘at that point’ /~eɲ <sup>33</sup> gu <sup>1</sup> ~ ba <sup>4</sup> / [‘ɲẽɲ <sup>33</sup> gu <sup>1</sup> mã <sup>4</sup> ]
<i>ḡ</i>	/(Ø)/ [‘ɲV]	<i>ḡânè</i> ‘Spix’s night monkey’ <sup>183</sup> /a <sup>34</sup> ~ de <sup>1</sup> / [‘ɲa: <sup>34</sup> nẽ <sup>1</sup> ]
<i>i</i>	/i/ [i], [ĩ]	<i>nâi’chí</i> ‘giant armadillo’ <sup>184</sup> /~dai <sup>31</sup> ɬɛi <sup>4</sup> / [‘nâi <sup>31</sup> ɬɛi <sup>4</sup> ]
<i>ĩ</i>	/~i/	<i>ĩ</i> ‘building’ /~ɲi <sup>43</sup> / [‘ĩ <sup>43</sup> ]
<i>(j)<sup>b</sup></i>	/(f/)	<i>ḡôjòjô</i> ‘nocturnal rat sp.’ /o <sup>31</sup> fi <sup>1</sup> fi <sup>3</sup> / [‘ɲo: <sup>31</sup> fi <sup>1</sup> fi <sup>3</sup> ]
<i>k</i>	/k/	<i>kùmà</i> ‘you (sg.)’ /ku <sup>21</sup> ~ ba <sup>4/1</sup> / [‘ku: <sup>21</sup> mã <sup>1</sup> ]
<i>m</i>	/~b/ [m]	<i>mé</i> ‘be good’ /~be <sup>43</sup> / [‘mẽ <sup>43</sup> ]
<i>n</i>	/~d/ [n]	<i>nâi</i> ‘tree’ /~dai <sup>31</sup> / [‘nâi <sup>31</sup> ]

<sup>b</sup> This grapheme occurs in a single morpheme (see SECTION 2.1.1 above).

Graph.	Value	Example
<i>ñ</i>	/~ɲ/ [ɲ]	<i>ñàà</i> ‘this’ /~ɲa <sup>34</sup> -a <sup>1</sup> / [ <sup>1</sup> ɲã: <sup>34</sup> ã <sup>1</sup> ]
<i>ng</i>	/~(ŋ)/ [ʔ̃V]	<i>ngùù</i> ‘collared peccary’ <sup>185</sup> /~u <sup>21</sup> ~u <sup>1</sup> / [ <sup>1</sup> ŋũ: <sup>21</sup> ŋ <sup>1</sup> ]
<i>o</i>	/o/ [o], [õ]	<i>tōná-ngo</i> ‘it bites us (excl.)’ /to <sup>3</sup> =~da <sup>4</sup> =~o <sup>MC</sup> / [tɔ <sup>3</sup> nã <sup>4</sup> ŋõõ]
<i>õ</i>	/~o/	<i>ónà</i> ‘food (esp. animal flesh)’ /~ʔo <sup>43</sup> ~da <sup>1</sup> / [ <sup>1</sup> ʔõ: <sup>43</sup> nã <sup>1</sup> ]
<i>(ou)<sup>c</sup></i>	(/ou/)	<i>óu</i> ‘Yes?’ /ʔou <sup>43</sup> / [ʔõ <sup>43</sup> ]
<i>p</i>	/p/	<i>pé</i> ‘to sleep’ /pe <sup>43</sup> / [ <sup>1</sup> pɛ <sup>43</sup> ]
<i>r</i>	/d/ [r]	<i>chô’rū</i> ‘my’ /tɔo <sup>31</sup> -ʔdu <sup>3</sup> / [ <sup>1</sup> tɔoʔ <sup>31</sup> ru <sup>3</sup> ]
<i>t</i>	/t/	<i>tǎ’ré</i> ‘two’ /taʔ <sup>22</sup> de <sup>4</sup> / [ <sup>1</sup> tãʔ <sup>22</sup> ɾɛ <sup>4</sup> ]
<i>u</i>	/u/ [u], [ũ]	<i>kū-nū</i> ‘you (sg.) get mad’ /ku <sup>3</sup> =~du <sup>33</sup> / [ku <sup>3</sup> nũ <sup>33</sup> ]
<i>ũ</i>	/~u/	<i>ú</i> ‘go (sg.)’ /~ʔu <sup>43</sup> / [ <sup>1</sup> ʔũ <sup>43</sup> ]
<i>ü</i>	/u/ [u], [ũ]	<i>üwēmù</i> ‘to cook’ /ʔu <sup>22</sup> we <sup>3</sup> ~bu <sup>1</sup> / [ <sup>1</sup> ʔu: <sup>22</sup> wɛ <sup>3</sup> mũ <sup>1</sup> ]

<sup>c</sup> Occurrences of this grapheme are extremely marginal (see SECTION 2.1.2 above).

Graph.	Value	Example
$\tilde{u}$	/~u/	$\hat{u}k\bar{a}$ ‘rat’ /~ʔu <sup>31</sup> ka <sup>3</sup> / [ʔũ: <sup>31</sup> ka <sup>3</sup> ]
w	/w/	wí’á ‘INDF’ /wi <sup>43</sup> ʔa <sup>4</sup> / [wi: <sup>43</sup> ʔa <sup>4</sup> ]
$\tilde{w}$	/~w/ [w̃]	wē’e ‘to swim’ /~weʔ <sup>33</sup> / [w̃e: <sup>33</sup> ʔe <sup>3</sup> ]
y	/ɟ̥/ [ɟ̥~j]	yá’gùã ‘ancestor’ /ɟ̥aʔ <sup>43</sup> gu <sup>1</sup> ~a <sup>c</sup> / [ɟ̥aʔ <sup>43</sup> gu <sup>1</sup> ã]

to transcribe tonological information are listed and exemplified in TABLE 22 (note that in this table the symbol <*x*> stands for any vowel grapheme).

As shown in TABLE 21, the **phoneme** /ʔ/ is left unrepresented at the beginning of stressed syllables. I do not represent it either at the beginning of the frequent quotative enclitic  $\tilde{a}'a$  / = ~ʔaʔ<sup>3</sup> / [...ʔã<sup>3</sup>ʔã<sup>1</sup>] or  $\tilde{u}'\grave{a}$  / = ~ʔu<sup>3</sup>~ʔa<sup>1</sup> / [...ʔũ<sup>3</sup>ʔã<sup>1</sup>]. In all other cases, /ʔ/ is represented by the apostrophe <'>. In cases where a same-syllable coda /ʔ/ triggers the emergence of a non-underlying epenthetic vowel in the surface form, the graphic form represents that surface form and the epenthetic vowel is written (as in < $t\check{a}'u$ > for /tauʔ<sup>22</sup> / [t̥a:<sup>22</sup>ʔu<sup>3</sup>] ‘toucan’ or < $ch\grave{a}ut\acute{a}'a$ > for /t̥au<sup>21</sup>-taʔ<sup>4</sup> / [t̥aũ<sup>21</sup>t̥a<sup>4</sup>ʔa<sup>3</sup>]; see SECTION 2.1.3).

The **phoneme** /d/ is represented as <*d*> in stressed syllables—where it is realized [d̥]—and as <*r*> in unstressed syllables—where it is realized [r].

The **empty consonant onset** /( $\emptyset$ )/, realized [ŋ], is represented as < $\tilde{g}$ > in

<sup>180</sup>*Lontra longicaudis*.

<sup>181</sup>Unidentified. Local Spanish *hormiga cazadora*.

<sup>182</sup>See note 36.

<sup>183</sup>*Aotus vociferans*.

<sup>184</sup>*Priodontes maximus*.

<sup>185</sup>*Pecari tajacu*.

Graph.	In stressed syllable		In unstressed syllable	
	Value	Example	Value	Example
x	—	—	/ <sup>0</sup> / [3], [1]	<i>bǒ'o</i> 'palm weevil' <sup>186</sup> /boʔ <sup>22</sup> / [ <sup>1</sup> bɔ: <sup>22</sup> ʔɔ <sup>3</sup> ]
ẏ	/ <sup>52</sup> /	<i>wũ</i> 'to scratch' /wu <sup>[52]</sup> / [ <sup>1</sup> wu <sup>52</sup> ]	—	—
ǰ	/ <sup>36</sup> /	<i>kǒwà</i> 'cocol heron' <sup>187</sup> /ko <sup>[36]</sup> wa <sup>1</sup> / [ <sup>1</sup> kɔ: <sup>36</sup> wa <sup>1</sup> ]	/ <sup>5</sup> /	<i>wá'wé</i> 'Black person' /wa <sup>743</sup> we <sup>[5]</sup> / [ <sup>1</sup> wa <sup>743</sup> wɛ <sup>5</sup> ]
ǰ	/ <sup>43</sup> /	<i>témā</i> 'moriche palm' <sup>188</sup> /te <sup>[43]</sup> ~ba <sup>3</sup> / [ <sup>1</sup> tɛ: <sup>43</sup> mā <sup>3</sup> ]	/ <sup>4</sup> /	<i>pǒwí</i> 'brown-throated sloth' <sup>189</sup> /po <sup>22</sup> wi <sup>[4]</sup> / [ <sup>1</sup> pɔ: <sup>22</sup> wi <sup>4</sup> ]
			/ <sup>4</sup> / [4]	<i>chàukùtū</i> 'my foot' /tɕau <sup>21</sup> -ku <sup>[4/1]</sup> tur <sup>3</sup> / [ <sup>1</sup> tɕaʊ <sup>21</sup> ku <sup>[4]</sup> tur <sup>3</sup> ]
ǰ	/ <sup>34</sup> /	<i>nāi</i> 'be hot' /~dai <sup>[34]</sup> / [ <sup>1</sup> nāi <sup>34</sup> ]	—	—
ǰ	/ <sup>31</sup> /	<i>ǰê'e</i> 'red howler monkey' <sup>190</sup> /e <sup>[31]</sup> / [ <sup>1</sup> ɲɛ: <sup>31</sup> ʔɛ <sup>3</sup> ]	—	—
ǰ	/ <sup>33</sup> /	<i>tōmà</i> 'we (excl.)' /to <sup>[33]</sup> ~ba <sup>4/1</sup> / [ <sup>1</sup> tɔ: <sup>33</sup> mā <sup>1</sup> ]	/ <sup>3</sup> /	<i>chā-chībù</i> 'I eat' /tɕa <sup>[3]</sup> =tɕi <sup>43</sup> bu <sup>1</sup> / [ <sup>1</sup> tɕa <sup>3</sup> tɕi: <sup>43</sup> bu <sup>1</sup> ]
ǰ	/ <sup>21</sup> /	<i>ǰnè</i> 'day before' /~ɲi <sup>[21]</sup> ~de <sup>1</sup> / [ <sup>1</sup> ɲi: <sup>21</sup> nɛ <sup>1</sup> ]	/ <sup>1</sup> /	<i>yǐ'kù</i> 'later' /ɕi <sup>52</sup> ku <sup>[1]</sup> / [ <sup>1</sup> ɕi <sup>52</sup> ku <sup>1</sup> ]
			/ <sup>4</sup> / [1]	<i>kúkùtū</i> 'your (sg.) foot' /ku <sup>43</sup> -ku <sup>[4/1]</sup> tur <sup>3</sup> / [ <sup>1</sup> ku: <sup>43</sup> ku <sup>[1]</sup> tur <sup>3</sup> ]
ǰ	/ <sup>22</sup> /	<i>ǰ</i> 'mosquito' /~ʔa <sup>[22]</sup> / [ <sup>1</sup> ʔā <sup>22</sup> ]	—	—
ǰ	/ <sup>CM</sup> /	<i>d'ǰwè</i> 'be sick' /da <sup>[CM]</sup> we <sup>1</sup> / [ <sup>1</sup> ɖaawe <sup>1</sup> ]	—	—
ǰ	/ <sup>MC</sup> /	<i>ñumá</i> 'present time' /~ɖu <sup>[MC]</sup> ~ba <sup>4</sup> / [ <sup>1</sup> ɲũmā <sup>4</sup> ]	/ <sup>C</sup> /	<i>chàu'kǰ</i> 'for me' /tɕau <sup>21</sup> -ʔka <sup>[C]</sup> / [ <sup>1</sup> tɕaʊ <sup>21</sup> kǰ]

TABLE 22. Practical orthography: tonological and phonational diacritic graphemes



non-nasal stressed syllables.

**Phonological nasality** is systematically encoded by the first letter of a syllable. Thus, /~b/ [m] is represented as < m >, /~d/ [n] as < n >, /~ɖ/ [ɲ] as < ñ >, and /~w/ [w̃] as < w̃ >. In nasal stressed syllables, the empty consonant onset /((∅))/ is represented as < ng >; this digraph is read [ŋ] just as its analog < ġ > in non-nasal stressed syllables, but it further indicates that the syllable is nasal, *i.e.* that its nucleus is nasalized and that it may trigger surface nasality spreading. In cases where the first letter of a syllable is a vowel, phonological nasality is encoded by the addition of a tilde symbol < x̃ > above it. Surface nasality spreading, a strictly phonetic phenomenon, is left unrepresented (see SECTION 2.1.2).

Note, additionally, the following **non-straightforward segmental graphemes**: < ch > stands for /tʃ/, < f > for /kʷ/ [kʷ~ϕʷ], < j > for /fi/ (which only occurs in a single morpheme; see SECTION 2.1.1 above), < ü > for /ɰ/, and < y > for /ɘ/.

As shown in TABLE 22, half of the **ten diacritic graphemes used to represent tonological information** only occur in stressed syllables with a single value, while the other half occur in both stressed and unstressed syllables with different values. The correct interpretation of the latter half consequently requires to know which syllables are stressed and which are unstressed (see below). The tonological diacritics are written above the first vowel grapheme of syllables. In the graphic representation of the two complex nuclei /ai/ (< ai >) and /au/ (< au >) (and of the marginal complex nucleus /ou/, < ou >; see SECTION 2.1.2), only the letter < a > (or < o >, for < ou >) bears a diacritic.

Vowel graphemes that **lack a tonological diacritic** and immediately follow an apostrophe < ' > represent epenthetic vowels arising after a same-syllable coda /ʔ/. These epenthetic vowels give rise to non-phonological syllables which surface with a default tone [³] (in most cases) or [¹] (immediately after a toneme /³/ in unstressed syllable) outside contexts of tonological alternations.

The **toneme** /⁴¹/ is represented as < x̂ > (which may also stand for /⁴/) in cases where it is realized [⁴] and < ẋ > (which may also stand for /¹/) in cases where it

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<sup>186</sup>See note 122.

<sup>187</sup>See note 38.

<sup>188</sup>*Mauritia flexuosa*.

<sup>189</sup>*Bradypus variegatus*.

<sup>190</sup>*Alouatta seniculus*.

is realized [¹]. Out of context, *i.e.* in the lexical representation of morphemes, the toneme /<sup>4/1</sup>/ is represented as <ǰ>, *i.e.* with a combination of the diacritics <ǰ> and <ǰ̇> (which stand for /<sup>4</sup>/ and /<sup>1</sup>/ respectively; *e.g.* <-’ǰǰ̇> /-ʔgu<sup>4/1</sup>/ ‘CIRC’).

Note that the **toneme** /<sup>CM</sup>/, <ǰ̇>, is represented with a combination of an apostrophe <’> with the diacritic <ǰ̇> that would otherwise stand for /<sup>22</sup>/ (remember that /<sup>CM</sup>/ has merged into /<sup>22</sup>/ in most younger speakers; see SECTION 2.4.1, p.97).

As a rule, syntactic words are separated by spaces. Most clitics, in particular, are thus **detached from their host** (*e.g.* <chòmà rǰ̇> /tɕo<sup>21</sup>-~ba<sup>4/1</sup> = du<sup>1</sup>/ [tɕo:<sup>21</sup>mǎ<sup>1</sup>ru<sup>1</sup>] ‘(as for) me’). However, a **hyphen** <-> is specifically used to signal the boundary between the (string of) proclitics of the predicative phrase (which among themselves are not separated by spaces) and their host (*e.g.* <nǰchā-dǰ̇> /~du<sup>3</sup> = tɕa<sup>3</sup> = dau<sup>22</sup>/ [nǰ<sup>3</sup>tɕa<sup>3</sup>ǰ̇<sup>22</sup>] ‘I see it’).

Apart from the representation of the toneme /<sup>4/1</sup>/ in context—which does not distinguish it from /<sup>4</sup>/ or /<sup>1</sup>/—the only phonological ambiguity of this practical orthography is to do with **stress, which is not systematically represented**. However, stressed syntactic words—which always bear stress on their first graphic syllable—may be detected through an array of graphic clues such as the presence in their first graphic syllable of graphemes occurring only in stressed syllables (<ai, au, āi, āu, d, f, ǰ̇, ng, w̃, ǰ̇, ǰ̇, ǰ̇, ǰ̇, ǰ̇>), or the presence of a hyphen <->, which always immediately precedes a stressed word. In cases where such clues are absent, knowledge of the limited number of unstressed morphemes of the language is usually enough to easily deduce which words are stressed or unstressed. In exceptional cases, a basic understanding of the language’s morphosyntax should easily resolve any remaining ambiguities regarding the presence or absence of stress.

The way the **presence or absence of stress, as well as its position, can be indirectly detected in this practical orthographic transcription** is illustrated in example (132). This example is repeated from (20) with the addition of its orthographic transcription (first line; the word-by-word gloss is not repeated here and the phonetic transcription line represents a careful pronunciation rather than the actual recorded pronunciation of this utterance, which is why it slightly differs from the phonetic line in (20)).

- (132) *Ngēmàǰkù*                      *nǰ-ǰ̇*                      *chā-ǰkúchǰ̇’ǰ̇*  
 /~e<sup>33</sup>-~ba<sup>4/1</sup>-~a<sup>1</sup>ku<sup>1</sup>    ~di<sup>4</sup>i<sup>1</sup> = ~ʔi<sup>34</sup>    tɕa<sup>1</sup> = ʔu<sup>22</sup>-ku<sup>4/1</sup>tɕi<sup>5</sup>ʔu<sup>1</sup>-~ʔu  
 [l̄ŋ̄:<sup>33</sup>mǎ<sup>1</sup>ǎ<sup>1</sup>ku<sup>1</sup>    ni<sup>4</sup>i<sup>1</sup>ʔi<sup>34</sup>    tɕa<sup>1</sup>ʔu:<sup>22</sup>ku<sup>4</sup>tɕi<sup>5</sup>ʔu<sup>1</sup>ʔū<sup>4</sup>

*ì chòmà.*

$i^1 = \text{t}\phi\text{o}^{21} \sim \text{ba}^{4/1} /$

$\tilde{i}^1 [\text{t}\phi\text{o}^{21} \text{mã}^{\tilde{r}^1}]$

‘That’s how I make manioc beer.’ [LAR D329]

The first graphic word in (132) is known to be stressed (on its first syllable, as always) because its first syllable features the grapheme <ng>, which only occurs in stressed syllables. This implies, in passing, that the tonological diacritic < $\bar{x}$ > in <Ngē> is to be interpreted as representing /<sup>33</sup>/ (value of < $\bar{x}$ > in stressed syllables), not /<sup>3</sup>/ (value of < $\bar{x}$ > in unstressed syllables; see TABLE 22). The sequences <nû> and <chà> in the second and third graphic words are known to be unstressed, and more specifically to be proclitics of the predicative head, since they are followed by hyphens <->. These hyphens also indicate that the syntactic words < $\overset{\circ}{i}$ > and < $\check{\text{ú}}\text{kú}\text{ch}\overset{\circ}{\text{r}}\overset{\circ}{\text{ù}}\overset{\circ}{\text{ú}}$ >, which follow them, are stressed (on their first syllable). The tonological diacritics in the first syllables of these two words are unambiguous; because they only occur in stressed syllables, they contribute to indicate that the syllable they belong to is stressed. The second to last graphic word < $\grave{i}$ > stands for the non-salientive inflectional form / $i^1 = /$  of the pervasive linker proclitic, and is therefore unstressed. Although it could in theory represent a (non-existent) stressed morpheme \*/ $\overset{\circ}{i}^{21}$ /, in practice the risk of ambiguity is nil. Finally, no graphic clue signals the stressed nature of the last graphic word <chòmà>. Because the language features no unstressed morpheme with this shape, however, it is easily deduced to be stressed (on its first syllable), which implies that the value of its first tonological diacritic < $\grave{x}$ > is /<sup>21</sup>/ (value of < $\grave{x}$ > in stressed syllables), not /<sup>1</sup>/ (value of < $\grave{x}$ > in unstressed syllables).

Slight non-phonological **intra-dialectal variations**, such as those described in SECTION 2.1 in particular, are not reflected in the practical orthography (e.g. / $k^w$ / is represented as <f> whether realized [ $k^w$ ] or [ $\phi^w$ ]). In cases where a morpheme has two phonological variants and one of them is obviously analyzable as secondarily derived from the other, that morpheme is always represented according to its more conservative variant (e.g. < $\text{f}\check{\text{e}}\text{n}\check{\text{ú}}\check{\text{e}}$ > for both the conservative variant / $k^w\text{e}^{21} \sim \text{d}\check{\text{u}}^3\text{e}^3$ / [ $\phi^w\text{e}^{21} \text{n}\check{\text{u}}^3\check{\text{e}}^3$ ] and the innovative variant / $k^w\text{e}^{21} \sim \text{d}\text{e}^3\text{e}^3$ / [ $\phi^w\text{e}^{21} \text{n}\check{\text{e}}^3\check{\text{e}}^3$ ], both meaning ‘to hunt’). When no obvious derivation relationship is detectable between two phonological variants of a morpheme, the two variants are faithfully represented (e.g. < $\check{\text{a}}^{\sim}\text{a}$ > for / $= \sim \text{?a}^{\text{?3}}$ / [... $\text{?}\check{\text{a}}^{\text{?3}}\text{?}\check{\text{a}}^1$ ] but < $\check{\text{u}}^{\sim}\text{à}$ > for / $= \sim \text{?u}^3 \sim \text{?a}^1$ / [... $\text{?}\check{\text{u}}^3\text{?}\check{\text{a}}^1$ ], both being variants of the quotative enclitic).

**Spanish words** inserted in a SMAT utterance by code-mixing are written in italics and following Spanish standards (in particular, the tonemes that such words are

attributed are not represented; see SECTION 2.7.3).

**A NOTE ON TONOLOGICAL DIACRITICS.** The system of diacritics displayed in TABLE 22 allowing for the systematic and unambiguous notation of SMAT tonemes is my major addition to the orthography of the 2010 Macedonia meeting (see first paragraph of this section).

In **non-metalinguistic Tikuna texts**—including in educational materials—**most tonological information is usually omitted altogether** (Leturia Nabaroa 2011; Gruber 1992, for instance, presents an extreme case by virtually featuring no tonological information at all). Only the tonemes with phonation-related contrastive properties (mostly /<sup>MC</sup>/ and /<sup>C</sup>/, sometimes also /<sup>CM</sup>/) are often transcribed in a relatively consistent and systematic way, typically by means of <*x̣*>, <*ẋ*>, or <*x'*> (see *e.g.* Pinheiro et al. 2014). Some texts published in Colombia feature a few diacritics for other tonemes, but it is unclear exactly what these diacritics represent and why they are used on certain syllables only (see *e.g.* Teachers of the Tikuna community 2014). The orthographic system devised by D. and L. Anderson (2016:8), besides systematically transcribing the phonation-related tonemes, only makes use of tonological diacritics to distinguish highly ambiguous tonological minimal pairs, specifically by assigning an acute accent <*x̂*> to the member with the higher tone of the pair (as in *e.g.* <*torü*> corresponding to SMAT /to<sup>31</sup>-ʔdur<sup>3</sup>/ [ʔ<sup>31</sup>ru<sup>3</sup>] ‘our (excl.)’ vs <*tórü*> corresponding to SMAT /to<sup>52</sup>-ʔdur<sup>3</sup>/ [ʔ<sup>52</sup>ru<sup>3</sup>] ‘our (incl.)’; see *e.g.* Anderson & Anderson 2008). Montes’ orthographic system is the only one to have attempted a systematic notation of all tonological information, but it is unfortunately unclear how the many surface tones of Tikuna are to be derived from the three diacritics it employs for this purpose (<*x̂*>, <*ẋ*>, and <*x̣*>; see *e.g.* Montes Rodríguez 2002). Although suitable to varying degrees for ordinary literacy purposes, none of these orthographic systems offered a satisfactory solution for fully and unambiguously transcribing SMAT’s tonemes as was required for the linguistic purposes of this study.

In **meta-linguistic works**, three major types of systems have been used for systematically transcribing Tikuna tonal features. Anderson & Anderson (*e.g.* 2016), Lowe (*e.g.* 1960b), and Skilton (*e.g.* 2019) use **tone numbers** variously placed under, above, or more frequently to the upper right of the syllable whose tone they represent (as is done throughout this chapter), together with the hook diacritic <*x̂*> (Lowe) or the diacritics <*x̣*> (Anderson & Anderson) or <*ẋ*> (Skilton) to represent creaky-voiced phonation. Soares (*e.g.* 1986, 1992a) uses reversed **Chao tone letters** (*e.g.* <‡, †, ‡>, etc.) located above the syllable whose tone they

represent, together with the diacritic <̣> for creaky-voiced phonation. Finally, Montes (e.g. 2004) mostly employs **accent marks** placed above vowel graphemes, again together with the diacritic <̣> for creaky-voiced phonation. The first two systems (tone numbers and Chao tone letters) are certainly suited for strictly linguistic purposes and have the advantage of immediate decipherability to most professional linguists, but I found them to have the practical disadvantage of being very space-consuming. In-line or superscript characters (as in e.g. <cho/ma/ > or <cho<sup>21</sup>ma<sup>1</sup> > for /tɕo<sup>21</sup>~ba<sup>4/1</sup>/ [tɕo:<sup>21</sup>mã<sup>1</sup>] ‘I’), because they tend to interrupt the reading flow, further make it considerably harder for Tikuna speakers to read text. Prioritizing concision and accessibility to Tikuna speakers over immediate decipherability by linguists, I have therefore opted for an adapted and augmented version of Montes’ system of diacritics to transcribe tonemes in the sections of the present study dealing with SMAT morphosyntax, where the exact identity of tonemes is of less descriptive importance.

By devising and illustrating the use of a complete system of diacritics allowing to unambiguously transcribe SMAT tonemes, I also wanted to suggest that **such a system could be considered as a viable solution including in Tikuna writings with non-metalinguistic purposes**. Roberts (2011:87–88) notes that cross-linguistically “superscript accents still remain the classic solution for marking tone phonographically” in practical orthographies, while other notation systems, such as those involving superscript numbers, are of comparatively rare use. Indeed, diacritics are already used in Colombia in certain Tikuna publications for transcribing tonological information, although with unclear values (see above). The kind of system of tonological diacritics that I propose, which includes 10 items, is certainly large. Although this would undoubtedly raise issues for uses on today’s digital devices, it might not raise such serious issues for acquisition, passive use, and handwritten active use. The success of the Vietnamese Latin-script-based *quốc ngữ* script (Francis 1977), which features an inventory of five tonological diacritics (<̣, ́, ̂, ̃, ̄>),<sup>191</sup> strongly suggests that large inventories of diacritics—as well as diacritic stacking, which is frequent in *quốc ngữ*—may not represent serious obstacles for literacy. Furthermore, although in this linguistic study my use of tonological diacritics is comprehensive, for non-linguistic purposes it might be more advised to only write them occasionally in cases where their need is felt, e.g. in pedagogical texts or to prevent specific cases of ambiguity (Bird 1998). In any case, the system

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<sup>191</sup>Besides up to four non-tonological diacritics (<̂, ̃, ̄, ̅>), depending on one’s criteria for what a diacritic is.

of diacritic marking that I propose here should be discussed and tested with SMAT speakers to assess the viability of such a system for wider uses.



# Chapter 3

## The nominal phrase

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This chapter first provides a general **introduction to the morphosyntax of the nominal phrase** (NP) in SMAT (SECTION 3.1), and proceeds to explore at more length four areas of interest within this domain, specifically the distinction between **independent nouns and bound nouns** (SECTION 3.2), the **pronominal system** (SECTION 3.3), the system of **non-locative demonstratives** (SECTION 3.4), and the morphosyntax of the unique **linker** morpheme of the language (SECTION 3.5). The chapter closes with a brief **introduction to the encoding of the syntactic functions** of NPs (SECTION 3.6).

## 3.1 Introduction to the morphosyntax of the SMAT nominal phrase

### 3.1.1 Major types of morphemes and constituents involved

The major elements involved in the internal morphosyntax of the NP in SMAT are the following:

1. **independent nouns**, *i.e.* free form nouns (*e.g.* *nâi* ‘tree’, *ǒí* ‘grandfather, old man’, *tômáèpǐ* ‘three’, *chúttākù* ‘night time’);
2. **bound nouns**, *i.e.* bound form nouns (*e.g.* /-té/ ‘husband’, /-kùtù/ ‘bank (*e.g.* of a river)’, /-wēmù/ ‘food’, /-pǔ’ü/ ‘spherical shape’);
3. **pronominal roots** (*e.g.* /kú-BOUND.NOUN/ ‘your (sg.) ...’) and **independent pronominal words** derived from them (*e.g.* /kù-mà/ [2SG-ANAPH] ‘you (sg.)’, /kú-má’a/ [2SG-COM] ‘with you (sg.)’, /kú-rũ/ [2SG-GEN] ‘your, yours (sg.)’);
4. **non-locative demonstrative roots** (*e.g.* /ngē-/ ‘MED.NS’) and **independent non-locative demonstrative words** derived from them (*e.g.* /ngē-à/ [MED.NS-EXO] ‘that (exophoric)’, /ngē-mà/ [MED.NS-ANAPH] ‘that (anaphoric)’, /ngē’gùmá/ [ANAPH.CIRC] ‘at that point’);
5. **locative demonstrative roots** (*e.g.* /ngě/ [MED.ALOC] ‘all around there (ALOC)’) and **independent locative demonstrative words** derived from them (*e.g.* /ngě-à/ [MED.ALOC-EXO] ‘there (exophoric, ALOC)’, /ngě-mà/ [MED.ALOC-ANAPH] ‘there (anaphoric, ALOC)’);
6. **zero-derived nominalizations**, *i.e.* predicative phrases occurring as nominal constituents without any morphological modification (*e.g.* *tâiyà* ‘be hungry > hunger’, *yâtù* ‘be a male > man’, *chíbù* ‘to eat > meal’, *ngo* ‘to bite, to eat > biting, eating’, /ǔ-chí’ü/ [make-home] ‘to build a house > house-building’);
7. a handful of unfrequent **derivational morphemes** specialized for syntactically simplex nominal constituents (*e.g.* /-tá/ ‘COLL’, which derives collectives in the salientive nominal class, such as /tikùnà-tá/ [Tikuna-COLL] ‘the

Tikunas' or /gẽ-'rj'ü-tá/ [not.have-anus-COLL] 'the anusless';<sup>192</sup> or /-'àkù/ 'APPROX', which attaches to circumstantial independent nouns referring to temporal or spatial positions and makes them referentially vaguer, as in /mô'ü-'àkù/ [following.day-APPROX] 'some day later' or /gẽ'tà-'àkù/ [where?.PLOC-APPROX] 'about where? (PLOC)');

8. **relative clauses**, formed by means of the relativizer suffix, and **subordinate clauses in /-'ü/ 'SUB'**, *i.e.* clauses occurring as nominal constituents referring to participants or processes (*e.g.* /ĩrā-'è/ [be.small\SBJV-REL.S] 'small (lit. 'that is small)'), /dũ-'ü/ [be.a.human\SBJV-REL.NS] 'human being (lit. 'that is a human)'), /ná-gù chà = rü = ñnù-'ü/ [3N/NS-PLOC 1SG.SBJ\SBJV = PCrũ = think\SBJV-REL.NS] 'what I think about', /nú-à chà = gũ-'ü/ [PROX.ALOC-EXO 1SG.SBJ\SBJV = reach\SBJV-SUB] 'my arriving here');
9. the **indefinite determiner wí'á 'INDF'**<sup>193</sup> (*e.g.* /wí'á (yà = )nâi/ [INDF LK.N/S = tree] 'a tree', /wí'á gá = yâtù/ [INDF LK.F/M/NS.PST = be.a.male] 'a man (in a past context)', /wí'á (ì = )dũ-'ü/ [INDF LK.NS = be.a.human\SBJV-REL.NS] 'a human being'; on why certain morphemes are enclosed in parentheses in these examples, see below);
10. and the **linker**, whose prototypical function is to explicitly mark the syntactic relation of constituency which holds between nominal constituents that stand in a modifier-head relation with one another and make up a single complex NP (*e.g.* /nâ-ē'ü ì = üñē-'ü/ [3N/NS-animal LK.NS = be.supernatural\SBJV-REL.NS] 'a supernatural animal', /tōmãèpü yá = tàunēkü/ [three LK.M/S = year] 'three years', /oí gá = Gũ'tàpã/ [old.man LK.F/M/S/NS.PST = Ngutapa] 'the old man Ngutapa (a mythical figure)').

Note, regarding the syntactic distribution of the linker, that **certain types of modifiers almost always directly precede the NP they modify**, *i.e.* with no intervening linker. These are, most importantly, the **non-locative demonstrative words** (*e.g.* /ngē-mà dùü-'ü/ [MED.NS-ANAPH be.a.human\SBJV-REL.NS] 'that person') as well as **genitive phrases**, *i.e.* NPs attached with the genitive case-marking suffix /-ârü/ 'GEN' (*e.g.* /bû-'è-ârü māmá/ [be.young\SBJV-REL.S-GEN mum] '(the) child's mum'). **Wí'á 'INDF'** exhibits intergenerational variation as to whether or

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<sup>192</sup>The anusless are a class of human-like beings in Tikuna cosmology (see Santos Angarita 2010).

<sup>193</sup>This morpheme has two rare subdialectal variants *wí'í* and *wú'í* that very occasionally occur, in free variation with the form *wí'á* itself, in the speeches of TVJ and JGS, respectively.

not it requires the presence of the linker between it and the NP it determines. Older speakers (e.g. IGS, GRA) typically always use the linker after *wí'á* (e.g. /wí'á yà = nâi/ 'a tree', /wí'á gá = yầtù/ 'a man (in a past context)'), while younger speakers (e.g. JSG, JGS) typically omit the linker after *wí'á*, except in past contexts (e.g. /wí'á nâi/ 'a tree', /wí'á gá = yầtù/ 'a man (in a past context)').

The elements 1.–4. and 9. in the list above are dealt with at length in SECTIONS 3.2–3.5. The elements 5.–8. are not explored in detail in this grammatical description. Instances of them frequently occur in examples throughout this study, however.

### 3.1.2 Introduction to the inflectional category of nominal class

Two major grammatical categories are expressed in the inflectional paradigms of several of the elements of the NP listed above, specifically nominal class and nominal tense. The category of **nominal class** comprises five different values, which I call the **feminine (F)**, the **masculine (M)**, the **neuter (N)**, the **salientive (S)**, and the **non-salientive (NS)** nominal classes, respectively. **Agreement for nominal class is obligatory** at the clausal level, *i.e.* any morpheme within a NP that can inflect for nominal class obligatorily occurs in its inflectional form corresponding to the nominal class of the participant referred to by the NP. Morphemes that inflect for nominal class (*i.e.* targets of agreement for nominal class) essentially include a **few independent nouns** (*tò* 'other', *âkú* 'what? who?', *âkú'ú* 'thingy (filler word)', *gè'ú* 'which?', mentioned here—by convention—in their non-salientive form), the **third person pronominal roots**, the **non-locative demonstrative roots**, the **relativizer suffix**, and the **linker**. The inflectional paradigms of most of these morphemes are described at length in the remainder of this chapter. The forms of *tò*, *âkú*, *âkú'ú*, *gè'ú*, and the relativizer, which are not discussed in this grammatical description, are displayed in TABLE 23 for reference (the neuter allomorph of the relativizer has a default shape /-'nè/, but takes the disyllabic shape /-'ú̀nè/ when attached to a monosyllabic verb root). Note that the morphological shape of independent nouns and bound nouns, for their part, does not bear—in most cases—any relation with the nominal class to which participants expressed by means of these nouns are assigned in discourse. **Third person indexes on the predicative phrase** also obligatorily agree for nominal class with the participant they represent. These indexes are described in CHAPTER 5.

	‘other’	‘what? who?’	‘thingy’	‘which?’	REL
F	<i>nài</i>	<i>tè’è</i>	NA	<i>gè’kū</i>	<i>-kū</i>
M	<i>nài</i>	<i>tè’è</i>	<i>ákúkū</i>	<i>gè’kū</i>	<i>-kū</i>
N	<i>náí</i>	NA	<i>ákúnè</i>	<i>gè’nè</i>	<i>-(ú)nè</i>
NS	<i>tò</i>	<i>ákú</i>	<i>ákú’ú</i>	<i>gè’ú</i>	<i>-’ú</i>
S	<i>tògū’è</i>	<i>tè’è</i>	<i>ákú’è</i>	<i>gè’è</i>	<i>-’è</i>

TABLE 23. *Inflectional forms of tò ‘other’, ákú ‘what? who?’, ákú’ú ‘thingy’, gè’ú ‘which?’, and the relativizer suffix*

The following example shows how a third person pronominal root (/nú-/ ‘3N/NS’), the linker (/î=/ ‘LK.NS’), a non-locative demonstrative root (/ngē-/ ‘MED.NS’), and a subject index (/nî=/ ‘3M/N/NS.SBJ.PCĪ’) all agree for nominal class with the participant they refer to, in this case a deer that is being assigned to the **non-salientive (NS) nominal class**:

(133) [...] *nûmà ì ngēmà kōwú rù tûmàkq nî-úkù.*

*nû-mà*            *ì = ngē-mà*            *kōwú = rù*    *tû-mà-kq*  
 3N/NS-ANAPH    LK.NS = MED.NS-ANAPH    deer = TOP    3S-ANAPH-CAUSE

*nî = ú-kù*  
 3M/N/NS.SBJ.PCĪ = be.there.SG-in.PL

‘[...] the deer, as for it, would go in to see her.’ [IGS 164]

Example (134) displays a case of agreement of a number of morphemes (highlighted in bold) in the **salientive (S) nominal class**. This utterance is syntactically more complex than the one in (133). It involves a cleft construction that focalizes *yî’è-mágú* ‘them and people like them’.<sup>194</sup> The end of the utterance (*chô’rū pāpǎ ... yá nû’mágú’è* ‘my father ... who live here’) contains three coordinated nominal constituents that elaborate on the identity of the referent of *yî’è-mágú* ‘them and people like them’.

(134) *Yî’è-mágú tû-î gá tû’rā nūá gūgú’è [...], chô’rū pāpǎ, chô’rū māmǎ [...], nūáchí tògū’ègú yá duú’è yá nû’mágú’è.*

<sup>194</sup>The phrase ‘and people like them’ in this translation reflects the associative plural value taken by the plural marker /-gú/ in the utterance in example (134) (on the notion of associative plural, see e.g. Corbett 2000:101–111). Occurrences of /-gú/ ‘PL’ with this value are rare in my data.

*yí'è-má-gú*      *tî = í*      *gá = tî-írà*      *nú-à*  
 MED.S-ANAPH-PL    3S.SBJ.PCì = be    LK.PST = 3S-first    PROX.ALOC-EXO  
*gū-gú-'è*      *chô-'rū*    *pāpǎ*    *chô-'rū*    *māmá*    *ñyáchí*    *tògū'è-gú*  
 reach-PL\SBJV-REL.S    1SG-GEN dad    1SG-GEN mum    and    other.S-PL  
*yá = dùú-'è*      *yá = nū'-má-gú-'è*  
 LK.M/N/S = be.a.human\SBJV-REL.S    LK.M/N/S = PROX.PLOC-ANAPH-PL\SBJV-REL.S

‘[About his parents:] It’s them and people like them who came here first [...], my father, my mother [...], and other people who live here.’ [IGV 32–37]

Although three of the labels I use to refer to the nominal classes of SMAT (‘feminine, masculine, neuter’) are borrowed from the terminology of the grammatical category of gender (as it is attested in e.g. Romance or Germanic languages), it is important to note that SMAT’s nominal classes **differ significantly from what is traditionally labeled genders** in that the assignment of participants to nominal classes in SMAT is comparatively much more flexible. This **assignment relies not only on lexical properties of nouns, but also, to a large extent, on semantic and pragmatic criteria**. In example (133) above, for instance, the deer is assigned to the non-salientive nominal class despite the fact that the independent noun *kōwú* ‘deer’ shows a lexical “preference” for the masculine nominal class. This assignment of the deer to the non-salientive nominal class occurs for pragmatic reasons. In the context of the utterance, the deer appears as a despicable being who is having a bad influence on a woman. In accordance with the **evaluative perspective** of the speaker, the deer is “demoted” from its lexical nominal class to the non-salientive nominal class. This marked assignment (since it does not match the noun’s preferred nominal class) activates the evaluative value of the non-salientive nominal class, which connotes that the referent does not deserve particular respect.<sup>195</sup>

On the **complex principles that govern nominal class assignment** in SMAT, which are not covered in this grammatical description, see Bertet (to appear).

<sup>195</sup>This kind of pragmatic effect of nominal class assignment in SMAT related to notions such as familiarity or respect vs lack thereof is remotely comparable to the effect, in English, that arises from referring to a boat with a feminine pronoun vs with a neuter pronoun, or to an animal with an animate pronoun vs with a neuter pronoun.

### 3.1.3 Introduction to the inflectional category of nominal tense

Nominal tense is a grammatical category that is expressed in the inflectional paradigms of the **non-locative and locative endophoric demonstrative words** (see SECTIONS 3.4.1 and 3.4.3), the ***ngē-/yě-* words** (a small class of words that are historically derived from the non-locative demonstrative roots; see SECTION 3.4.8), and the **linker** (see SECTION 3.5.1). The category of nominal tense in SMAT has two values, which can be labeled as **[-past/unspecified]** and **[+past]**, respectively. A distinction has to be made between older and younger speakers as to how these two values are put to use.

In the speech of most **older speakers** (e.g. GRA, LAR), these two values are essentially—although not always strictly—**mutually exclusive ([±past] system)**. Within clauses which refer to processes that took place in a pre-hodiernal past (i.e. at a time that precedes the day of utterance time), the [+past] forms of the endophoric demonstratives, the *ngē-/yě-* words, and the linker are regularly used. By contrast, within clauses which refer to processes that did *not* take place in a pre-hodiernal past (e.g. processes that occurred earlier today or that are presently occurring, prospective or future processes, generic processes, etc.), the [-past] forms are used instead.

Contrast example (135), which refers to non-pre-hodiernal events, with (136), an excerpt from a traditional story that refers to pre-hodiernal past events (in this case, events situated in the remote past of traditional narratives). Both were uttered by the same speaker, whose speech is representative of that of older speakers.

(135) “[...] *ērú chò'nà pēnà-pù* <ì...> <yà...> *yá yí'è-má ìyà-ìyàaa!*”

*ērú*                      *chò-'nà*    *pē = nà = pù*    <ì = ... >  
 because(. [-PST])    1SG-DAT    2PL.SBJ = PCnà.3M/N/NS.OBJ = rob    LK.NS(. [-PST]) =  
 <yà = ... >    *yá = yí'è-má*    *ìyà.ìyà*  
 LK.N(. [-PST]) =    LK.M/S(. [-PST]) = MED.S(. [-PST]) - ANAPH    plantain.variety

‘[When the mythical figure Iya-Iya realized that the Tikunas had just stolen his bag with all of his crop plants in it, including a plantain variety named after him, he shouted to them from a distance: “You plant them now,] since you’ve robbed me of that iya-iya plantain!”] [LAR E206–207]

(136) [...] *yérú yěmà nî-î gá tūnà-wòù'ù ā'a gá gú'è-má ò'ù'étū'è.*

*yě-rú*                      *yě-mà*                                      *nî = î*  
 because.PST    DIST.ALLOC. ([ + PST] )-ANAPH    3M/N/NS.SBJ.PCì = be

*gá = tî = nà = wò-î-’î = ã’a*  
 LK.F/M/S/NS.PST = 3S.ACC = 3M/N/NS.SBJ\SBJV = drop.PL-off.PL\SBJV-SUB = QUOT

*gá = gû’è-má*    *ò-’î-’étî-’è*  
 LK.F/M/S/NS.PST = DIST.S. ([ + PST] )-ANAPH    fit?-out.PL-eye\SBJV-REL.S

‘[An evil spirit warned a group of people that he would soon harm them if they did not protect themselves. When the moment came, he gouged out the eyes of those who had not followed his advice, and threw those people into a river until they drowned. He named that river *Ònátî*] because it was there that he had thrown off [into the river; SMAT *ò-’î-’étî* ‘to gouge out someone’s eyes’ sounds approximately like *Ònátî*] the ones who had had their eyes gouged out.’ [LAR A74]

In the clause in (135), the *ngē-/yě-* word meaning ‘because’ occurs in its [-past] form (*ē-rú*), while it takes its [+past] form (*yě-rú*) in (136). Likewise, the linker in (135) occurs in [-past] forms, including in its two occurrences in false starts where the speaker inflects it in the wrong nominal class (<ì...> <yà...> *yá*). In (136), by contrast, the linker occurs in [+past] forms (*gá*, twice). Finally, the non-locative endophoric in (135) occurs in its [-past] form (*yî’émá*), while the locative endophoric (*yěmà*) and the non-locative endophoric (*gû’émá*) that occur in (136) feature [+past] forms (note that the [+past] forms of endophorics are based on the distal demonstrative roots, by contrast with their [-past] forms, which are based on the medial demonstrative roots; on the analogy between distance in space and distance in time that operates in the use of the demonstrative roots, see SECTION 3.4.1).

**Younger speakers** (e.g. JGS, JSG), for their part, have **generalized the use of the [-past] forms of the endophoric demonstratives and the *ngē-/yě-* words** in all contexts, whether non-pre-hodiernal past or pre-hodiernal past. In the grammatical system that underlies their speech, the [-past] forms of these words can be said to be in practice unspecified for nominal tense, rather than [-past]. These speakers interpret the **[+past] forms of these words**, which they almost never use themselves, as mere optional variants of the [-past] forms available in specifically pre-hodiernal past contexts ([unspecified] vs [+past] system). However, younger speakers do maintain a use of the forms of the linker that relatively consistently expresses explicitly [-past] vs [+past] values. That is, although the category of nominal tense has become **obsolete in the endophoric demonstratives and the *ngē-/yě-* words as used by these speakers**, that category remains **essentially valid in their use of the linker**.



Contrast example (137) with (136) above. The utterance in (137), an excerpt from a story told in the pre-hodiernal past, was produced by JSG, whose speech is representative of that of younger speakers.

(137) [...] *ērú tá-tâiyà gá yî'émá*.

*ērú*                      *tá = tâiyà*                      *gá = yî'è-má*  
because(. [-PST]) 3S.SBJ = be.hungry LK.PST = MED.S(. [-PST]) -ANAPH

‘[Somebody brought them ripe plantains for them to cook for the monkey] because it was hungry.’ [JSG C115]

Although the events being referred to are (fictitiously) situated in a pre-hodiernal past, the speaker uses the [-past] (*i.e.*, in practice for him, the [unspecified]) form of the *ngē-/yê-* word meaning ‘because’ (*ērú*) and a [-past] form of the endophoric demonstrative (*yî'émá*). In accordance with the temporal setting of the events, the speaker does employ, however, a [+past] form of the linker (*gá*).

Nominal tense often gives rise to **agreement-like phenomena** (as in (135–136), for instance, where entire clauses, and in particular entire NPs, feature only [-past] or only [+past] forms). Although it is by nature expressed within the NP,<sup>196</sup> nominal tense **does not seem to be, however, a feature of NPs but a feature of clauses**. In this respect, it is not comparable with nominal class, in particular (on which see the preceding section).

I have not delved into the semantics of nominal tense for this research. Note, in any case, that it makes no doubt that nominal tense in SMAT is **not an aspectual category** (*i.e.* one that involves the encoding of a temporal relation that holds between an event time and a reference time) but a tense category (*i.e.* one that involves the encoding of a temporal relation that holds between a reference time and utterance time). The [+past] forms of the words that inflect for nominal tense in SMAT can never be used in contexts that refer to future events (*i.e.* that are posterior to utterance time), for instance. If nominal tense in SMAT were an aspectual category, *i.e.* one that in principle bears no direct relation to utterance time, this restriction would not be expected.

The grammatical category of tense in SMAT, apart from operating within NPs through nominal tense, can also be encoded at the clausal level by means of the

<sup>196</sup>Except, arguably, in the case of the *ngē-/yê-* words. Although all of them can be hypothesized to have originated diachronically from nominal words, some of them, such as the discourse connector *ērú/yêrú* ‘because’, are no longer nominal in today’s SMAT.

(pre-hodiernal) past enclitic / = gá/ ‘PST’ or the future enclitic / = tá/. The morphology of the predicative phrase, by contrast, does not provide any means for the encoding of tense.

### 3.2 Independent nouns and bound nouns

Prototypically, **independent nouns** are morphemes that simultaneously display the following two morphosyntactic properties:

- they may constitute a **complete, well-formed NP** on their own;
- they **cannot constitute a complete, well-formed predicative phrase** on their own.

The first property entails that independent nouns may constitute a well-formed phonological word on their own, which in its turn implies that they are **stressed morphemes** (see SECTION 2.2). This distinguishes them, in particular, from bound nouns (on which see below).

The second property above implies that independent nouns **cannot receive inflectional morphology of the predicative phrase as they stand**. NPs made of a single morpheme that may be directly (*i.e.* without any morphological modification) inflected as a predicative phrase are cases of zero-derived nominalization of a verb root. Thus, the morpheme *pǒrá*, which may constitute on its own a well-formed NP meaning ‘strength’, can be shown to be, in fact, a verb root by the fact that it can be directly inflected as a predicative phrase, as in *e.g.* *ná = pǒrá* (3M/N/NS.SBJ = be.strong) ‘he is strong’.

The following are typical instances of independent nouns:

- (138)
- |    |                  |                                 |
|----|------------------|---------------------------------|
| a. | <i>chũ̀r̀à</i>   | ‘lady’                          |
| b. | <i>âirú</i>      | ‘dog’                           |
| c. | <i>é</i>         | ‘genipap tree’                  |
| d. | <i>gũ̀ê</i>      | ‘canoe’                         |
| e. | <i>pétà</i>      | ‘celebration’                   |
| f. | <i>tàunēkũ̀</i>  | ‘low-water season; year’        |
| g. | <i>Ĝũ̀t̀ap̀a</i> | ‘Ngutapa (mythological figure)’ |
| h. | <i>Ěwārè</i>     | ‘Eware (place name)’            |
| i. | <i>pāpá</i>      | ‘dad’                           |

### 3. THE NOMINAL PHRASE

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- j. *tûè*            ‘stomach (organ)’  
k. *ñà'tû̄*        ‘lower part’

Prototypically, **bound nouns** are morphemes that simultaneously display the following two morphosyntactic and phonological properties:

- they can constitute the **head of an NP**;
- they cannot occur on their own in discourse but **require a phonologically independent host** with which to occur (a well-formed NP, a pronominal root, or a well-formed predicative phrase).

The second property is related to the fact that bound nouns are **unstressed morphemes**, and may consequently not constitute a well-formed phonological word on their own.

The following are typical instances of bound nouns:

- (139) a. *-nátû̄*        ‘father’  
      b. *-chámētû̄*    ‘face’  
      c. *-kà*            ‘liver’  
      d. *-égà*          ‘name’  
      e. *-'chírù*        ‘clothes’  
      f. *-gùnè*         ‘dart’  
      g. *-étû̄*          ‘above’  
      h. *-chìgà*        ‘story, meaning’  
      i. *-pÿ'û̄*         ‘spherical shape’  
      j. *-ē'û̄*          ‘animal’  
      k. *-tû̄*            ‘river’

Although the meaning of nouns does not directly account for their belonging to the morphological class of independent nouns or to that of bound nouns, there are a few obvious **semantic domains that are typically represented by bound nouns**. Most **part names** (for parts of any kind of entity, such as body parts, but also generic part names, *e.g.* top, bottom, front, back, inside, side, vertical dimension, etc.) are bound nouns. I also consider as part names, in a broad sense, the names of natural byproducts of living beings or other entities (*e.g.* egg, seed, semen, urine, feces, footprint, track, leftovers, etc.) and the immaterial “parts” or properties of living beings or other entities (*e.g.* thought, soul, name, voice/language, clan,

custom, smell, taste, etc.), which are typically represented by bound nouns in SMAT. Unexpectedly, however, **most names for internal organs are independent nouns** (except for /-nēkà/ ‘stomach (organ)’, /-kà/ ‘liver’, and /-ūnūtā/ ‘bowels’ ).

Most words referring to types of **natural (as opposed to man-made) places** (e.g. lake, river, riverbank, river mouth, slope, hill, jungle area that abounds with a given plant, etc.) are bound nouns, presumably because they are conceived of as parts of the landscape.

**Participants in biological and social relations** are also typically named by bound nouns, with a few notable exceptions such as *pāpǎ* ‘dad’ (a synonym for the bound noun /-nátū/ ‘father’), *māmǎ* ‘mum’ (a synonym for the bound noun /-é/ ‘mother’), or *yōrǎ* ‘master’, which are relatively recent loanwords (on the origins of these words, see example (123)), but also apparently native SMAT words such as *ǒ* ‘grandfather, old man’ or *yá’gũā* ‘ancestor, old person’.

Finally, generic (as opposed to more specific) **texture, shape, and function names** are also regularly bound nouns (e.g. liquid, paste, round shape, cup shape, motif, container, place where something belongs, home, raw food, prepared food, alcoholic drink, etc.; but not water, ball, canoe, basket, manioc beer, etc.).

Some bound nouns, however, **do not quite fit in any of these wide categories**. These are names for certain wearable or portable items (e.g. garment, hammock, fabric, rope, weapon, paddle, seat—but not top garment, harpoon, stone axe, storage basket, among others), names for parasitic entities (e.g. parasite, louse/flea, weed, filth), and miscellaneous nouns meaning ‘animal (in general)’, ‘domestic animal’, ‘time’ (as in ‘three times’), ‘compensation’, ‘topic’, etc.

Detectable borrowed nouns are **consistently borrowed as independent nouns** regardless of their meaning.

### 3.3 Pronouns

This section deals with the pronominal roots and the different types of nominal words in the formation of which they may enter. All of the **pronominal roots are monosyllabic morphemes** (except for one allomorph of one of them, /yì’è-/ ‘4’; see below). None of them may occur on its own in discourse, but they are among the few **dependent morphemes to belong to the category of stressed morphemes** (see SECTION 2.2; note, however, that the pronominal roots are in many cases optionally left unstressed). Being stressed morphemes, they always

occur as the first syllable of independent words.

SECTION 3.3.1 introduces the **general morphological organization** of the SMAT pronominal system and shows, in particular, that the pronominal roots exist under **four major series of morphologically-conditioned allomorphs** (labeled Allomorph 1 to Allomorph 4).

The next four sections successively present the types of morphological formations that involve each of these four series of allomorphs. SECTION 3.3.2 discusses the morphological formations in which a pronominal root is immediately attached with a **bound noun** (yielding a pronominally possessed bound noun) **or a relational noun** (independent pronoun in the syntactic function encoded by the corresponding relational noun; on the relational nouns, which are one of the two types of morphemes—along with case-marking suffixes—that contribute encoding of syntactic functions, see SECTION 3.6.2). In these two cases, the Allomorph 1 series of the pronominal roots is employed. SECTION 3.3.3 discusses the cases where a pronominal root is suffixed with /-**mǎ**/ ‘**ANAPH**’ (independent pronoun in the zero-case), /-**gù**/ ‘**REFL**’ (reflexive independent pronoun in the zero-case), **or one of the “focal” suffixes**, which select for the Allomorph 2 series (on the notion of zero-case form of nominal constituents, *i.e.* the default form of nominal constituents when they are unmarked for syntactic function, see SECTION 3.6.1). SECTION 3.3.4 discusses the cases where a pronominal root is suffixed with /-’**ũ**/ ‘**ACC**’, /-’**nà**/ ‘**DAT**’, **and** /-’**ũ**/ ‘**BEN**’ (independent pronoun in the accusative, dative, or benefactive respectively), which select for the Allomorph 3 series. Finally, SECTION 3.3.5 discusses the case where a pronominal root is suffixed with /-’**rũ** ~ -’**rī**/ ‘**GEN**’ (independent pronoun in the genitive), which is the only morpheme that selects for the Allomorph 4 series (on the accusative, dative, benefactive, and genitive case-marking suffixes, see SECTION 3.6.2).

Finally, SECTION 3.3.6 focuses on **specific semantic aspects** of the language’s pronominal system. It discusses, in particular, the semantics of the SMAT “fourth person”, a value of the language’s paradigm of grammatical persons that may either function as a first person plural inclusive, refer to a vaguely-defined social group with which the speaker identifies, or represent a generic, non-referential human participant.

Note that the morphology of the subject, (core) object, accusative, benefactive, and partitive object pronominal indexes belonging to the inflectional morphology of the predicative phrase are dealt with separately in CHAPTER 5. What is said of the semantic organization of the SMAT pronominal system in the present section,

however, equally applies to the pronominal roots and to the pronominal indexes.

### 3.3.1 Morphological organization of the pronominal system

TABLE 24 provides a general overview of the morphology of the pronominal roots. As can be seen in this table, the three parameters that define the semantic structure of the SMAT pronominal system are **person (with four values: ‘1’, ‘2’, ‘3’, and ‘4’)**, **number (with two values: ‘SG’ and ‘PL’)**, and **nominal class (with five values: ‘F’, ‘M’, ‘N/NS’, and ‘S’)**. Not all the possible combinations of these parameters occur: the parameter of number only applies in the first and second persons, and that of nominal class only applies in the third person. The resulting nine categories are ‘1SG’, ‘2SG’, ‘1PL’, ‘2PL’, ‘3F’, ‘3M’, ‘3N/NS’, ‘3S’, and ‘4’. They are arranged vertically in all the tables in this section.

Each of the pronominal roots features from two to four morphologically-conditioned allomorphs, *i.e.* allomorphs whose selection strictly depends on the morphological combination in which the pronominal root occurs. **Four morphological contexts of occurrence of the pronominal roots need to be distinguished**, which respectively select for Allomorph 1, Allomorph 2, Allomorph 3, or Allomorph 4 of the pronominal roots. Thus, for instance, the second person singular pronominal root (second row in TABLE 24) takes the form /kú-/ when attached with a bound noun (as in /kú-nátũ/ [2SG-father] ‘your father’), the form /kù-/ when attached with /-mǎ/ ‘ANAPH’ (yielding /kù-mà/ ‘you’), and the form /kû-/ when attached with the accusative case suffix /-’ũ/ ‘ACC’ (yielding /kû-’ũ/ ‘you (ACC)’) or with the form /-’rũ/ of the genitive case suffix (yielding /kû-’rũ/ ‘your’).

Additionally, some of the Allomorphs 1 to 4 of certain pronominal roots feature some **phonologically-conditioned “sub-allomorphy”** (/chàu-/chò-/chà-/ ‘1SG’, Allomorph 1), some **subdialectal variation** (*e.g.* /chô- ~ châ-/ ‘1SG’, Allomorph 3), or some **“sub-allomorphy” conditioned by the nature of trigger or non-trigger of Pattern 2 morphotological alternations** of the bound morpheme with which they are attached (*e.g.* /kú-/kû-/ ‘2SG’).

The morphological contexts of use of each of Allomorphs 1 to 4 of the pronominal roots are described in the following sections. The variation (“sub-allomorphies” and subdialectal variation) that occurs within each of Allomorphs 1 to 4 of a given pronominal root is discussed in these sections.

	Allomorph 1 default	Allomorph 2 zero-case pron.	Allomorph 3 w/ case suff.	Allomorph 4 w/ GEN suff.
1SG	chàu-/chò-/chà-		chô- ~ châ-	chô- ~ chā-
2SG	kú-/kû-	kù-	kû-	
1PL	tō-		tô-	
2PL	pē- ~ pĕ-	pē-	pê-	
3F	ngí-/ngî-	ngî-		
3M	nǎ-	nû-		nò- ~ nǎ-
3N/NS	ná-/nâ-			
3S	(tû-mà)	tû-		(tû-mà)
4	tǎ-	yì'è-/yì'- ~ yì-	tò- ~ tǎ-	

TABLE 24. SMAT pronominal roots with their various allomorphs

### 3.3.2 Pronominal roots attached with bound nouns and relational nouns (Allomorph 1)

**Bound nouns and relational nouns (including predicative relational nouns)**, when they are immediately attached to a pronominal root, select for Allomorph 1 of that pronominal root. When attached with a bound noun, the pronominal roots fulfill a **possessive function** relative to that bound noun (e.g. the Allomorph 1 of the first person singular pronominal root, when combined with the bound noun /-chí'ù/ 'home', yields the form /chàu-chí'ù/ meaning 'my home'). Combinations of pronominal roots with bound nouns are displayed in TABLE 25. Note, importantly, that the **third person neuter/non-salientive pronominal root can be used as an expletive pronominal form** allowing bound nouns to occur in discourse without reference to a possessor. A form such as /ná-kùtû/ '3N/NS', for instance, may either refer to the foot of a contextually-available neuter or non-salientive participant ('his foot'), or refer to a foot absolutely, *i.e.* without reference to a possessor ('(a/the) foot').

Combinations of pronominal roots with a relational noun yield **independent pronouns standing for participants in the syntactic function encoded by that relational noun** (e.g. the Allomorph 1 of the first person singular pronominal root, when combined with the areal locative relational noun /-wǎ/, yields the indepen-

	<b>-chí'ù</b> 'home'	<b>-mùkū [ + tr.]</b> 'companion'	<b>-kútū</b> 'foot'
<b>1SG</b>	<i>chàu-chí'ù</i>	<b>chò-mùkū</b> (~ <i>chàu-mùkū</i> )	<i>chàu-kútū</i> (~ <b>chà-kútū</b> )
<b>2SG</b>	<i>kú-chí'ù</i>	<b>kū-mùkū</b>	<i>kú-kútū</i>
<b>1PL</b>	<i>tō-chí'ù</i>	<b>tō-mùkū</b>	<i>tō-kútū</i>
<b>2PL</b>	<i>pē-chí'ù</i>	<b>pē-mùkū</b>	<i>pē-kútū</i>
<b>3F</b>	<i>ngí-chí'ù</i>	<b>ngī-mùkū</b>	<i>ngí-kútū</i>
<b>3M</b>	<i>nǎ-chí'ù</i>	<b>nǎ-mùkū</b>	<i>nǎ-kútū</i>
<b>3N/NS</b>	<i>ná-chí'ù</i>	<b>nâ-mùkū</b>	<i>ná-kútū</i>
<b>3S</b>	<i>(tû-mà-chí'ù)</i>	<i>(tû-mà-mùkū)</i>	<i>(tû-mà-kútū)</i>
<b>4</b>	<i>tǎ-chí'ù</i>	<b>tǎ-mùkū</b>	<i>tǎ-kútū</i>

TABLE 25. Examples of pronominal roots (Allomorph 1) in possessive function attached with bound nouns

	<b>-'kq</b> 'CAUSE'	<b>-'chì [ + tr.]</b> 'with.hate.toward'	<b>-wǎ</b> 'ALOC'	<b>-gǔ</b> 'PLOC'
<b>1SG</b>	<i>chàu-'kq</i>	<i>chàu-'chì</i>	<b>chò-wǎ</b>	<b>chà-gù</b>
<b>2SG</b>	<i>kú-'kq</i>	<b>kū-'chì</b>	<i>kú-wǎ</i>	<i>kú-gù</i>
<b>1PL</b>	<i>tō-'kq</i>	<b>tō-'chì</b>	<i>tō-wǎ</i>	<i>tō-gù</i>
<b>2PL</b>	<i>pē-'kq</i>	<b>pē-'chì</b>	<i>pē-wǎ</i> ~ <b>pě-wǎ</b>	<i>pē-gù</i>
<b>3F</b>	<i>ngí-'kq</i>	<b>ngī-'chì</b>	<i>ngí-wǎ</i>	<i>ngí-gù</i>
<b>3M</b>	<i>nǎ-'kq</i>	<b>nǎ-'chì</b>	<i>nǎ-wǎ</i>	<i>nǎ-gù</i>
<b>3N/NS</b>	<i>ná-'kq</i>	<b>nâ-'chì</b>	<i>ná-wǎ</i>	<i>ná-gù</i>
<b>3S</b>	<i>(tû-mà-kq)</i>	<i>(tû-mà-chì)</i>	<i>(tû-mà-wǎ)</i>	<i>(tû-mà-gù)</i>
<b>4</b>	<i>tǎ-'kq</i>	<b>tǎ-'chì</b>	<i>tǎ-wǎ</i>	<i>tǎ-gù</i>

TABLE 26. Examples of pronominal roots (Allomorph 1) suffixed with relational nouns



dent first person singular pronoun in the areal locative /chò-wǎ́/, roughly translatable as ‘at me’). Examples of such combinations are provided in TABLE 26. Combinations of pronominal roots with a predicative relational noun yield a **non-verbal predicative phrase within which the pronominal root serves as an index** for various sorts of complements (e.g. the Allomorph 1 of the third person neuter/non-salientive pronominal root, when combined with the volitive predicative relational noun /-’chà’ù̀/, yields the non-verbal predicative phrase /nâ-’chà’ù̀/ meaning ‘to want it’).

Non default sub-allomorphs of Allomorphs 1 of pronominal roots are highlighted in bold in TABLES 25–26.

Allomorph 1 of the **first person singular pronominal root features three phonologically conditioned sub-allomorphs**. It takes the form /chàu-/ by default. In cases where the first segmental phoneme of the morpheme with which it is attached is a bilabial or a labialized bilabial consonant (*i.e.*, in practice, /p/, /b/ (including when they occur as their nasal allophone [m]), or /w/), it takes the form /chò-/. Finally, in front of a velar consonant (*i.e.*, in practice, /k/ or /g/), it takes the form /chà-/. The non-default sub-allomorphs /chò-/ and /chà-/ are optional (and rare in the case of /chà-/) when the Allomorph 1 of the first person singular pronominal root is attached with a bound noun, but obligatory when attached with a relational noun (combinations of pronominal roots with bound nouns being comparatively less lexicalized than their combinations with relational nouns).

The Allomorphs 1 of the **second person singular, third person feminine, and third person neuter/non-salientive pronominal roots feature two sub-allomorphs each**. They take the forms /kú-/ , /ngí-/ , and /ná-/ , respectively, by default. In cases where the bound noun or the relational noun with which they are attached belongs to the lexical class of triggers of Pattern 2 morphotonological alternations (a property signaled by [+tr.] in TABLES 25–26), they take the forms /kû-/ , /ngî-/ , and /nâ-/ instead (on Pattern 2 morphotonological alternations, see SECTION 2.6.2.2).

Allomorph 1 of the **second person plural pronominal root features two sub-allomorphs /pē-/ and /pě-/**. Their distribution is unclear. I hypothesize them to stand in free variation (or possibly to be two subdialectal variants), with the form /pě-/ being generally rarer than /pē-/.

Note, finally, that the form that functions as the **Allomorph 1 of the third person salientive pronominal root** (/tû-mà/) is, in practice, the third person salientive independent pronoun in the zero-case, *i.e.* a morphologically complex

form that includes the morpheme /-mǎ/ ‘ANAPH’ (see next section). This form does not formally align, consequently, with the Allomorphs 1 of the other pronominal roots, which are morphologically simplex forms. The independent pronouns in the zero-case corresponding to other person-number-nominal class combinations than the third person salientive cannot function as Allomorphs 1, *i.e.* cannot be attached with a bound noun or a relational noun (*e.g.* \*/chò-mà-mùkū/ ‘1SG-ANAPH-companion’ is not a grammatical alternative for /chò-mùkū/ ‘my friend’), while bound nouns or relational nouns are otherwise regularly attached to the zero-case form of non-pronominal NPs. This formal misalignment of the third person salientive pronominal root can be interpreted as showing that it **lacks, in fact, an Allomorph 1 proper** (which is why it is enclosed in parentheses in TABLES 25–26). Its corresponding zero-case independent pronoun is used to fill this lack by analogy with ordinary NPs, which can, in their zero-case form, be attached with a bound noun or a relational noun.

### 3.3.3 Pronominal roots (Allomorph 2) suffixed with /-mǎ/ ‘ANAPH’, /-gù/ ‘REFL’, and the “focal” suffixes

The **suffixes** /-mǎ/ ‘ANAPH’ and /-gù/ ‘REFL’, as well as the “focal” suffixes (*e.g.* /-’íkǎ/ ‘only’, /-’í/ ‘in.one’s.turn’, or /-’írà/ ‘first’), when they are immediately attached to a pronominal root,<sup>197</sup> select for Allomorph 2 of that pronominal root. Combinations of the pronominal roots with /-mǎ/, /-gù/, and one “focal” suffix are displayed in TABLE 27.

Combinations of pronominal roots with /-mǎ/ ‘ANAPH’ yield **independent pronouns standing for participants in the zero-case** (*e.g.* the Allomorph 2 of the second person singular pronominal root, when combined with /-mǎ/, yields the independent second person singular pronoun in the zero-case /kù-mà/, meaning ‘you’). Combinations of pronominal roots with /-gù/ ‘REFL’ yield **reflexive independent pronouns standing for participants in the zero-case** (*e.g.* the Allomorph 2 of the second person singular pronominal root, when combined with /-gù/, yields the reflexive independent second person singular pronoun in the zero-case /kù-gù/, meaning ‘yourself’). Combinations of pronominal roots with the “focal”

<sup>197</sup>In practice, the reflexive suffix /-gù/ can only occur in combination with the pronominal roots.

	<b>-mǎ</b> 'ANAPH'	<b>-gù</b> 'REFL'	<b>-'íkǎ</b> 'only'
<b>1SG</b>	<i>chò-mà</i>	<i>chà-gù</i>	<i>chà-'íkǎ</i>
<b>2SG</b>	<i>kù-mà</i>	<i>kù-gù</i>	<i>kù-'íkǎ</i>
<b>1PL</b>	<i>tō-mà</i>	<i>tō-gù</i>	<i>tō-'íkǎ</i>
<b>2PL</b>	<i>pē-mà</i>	<i>pē-gù</i>	<i>pē-'íkǎ</i>
<b>3F</b>	<i>ngî-mà</i>	<i>ngî-gù</i>	<i>ngî-'íkǎ</i>
<b>3M</b> } <b>3N/NS</b> }	<i>nû-mà</i>	<i>nû-gù</i>	<i>nû-'íkǎ</i>
<b>3S</b>	<i>tû-mà</i>	<i>tû-gù</i>	<i>tû-'íkǎ</i>
<b>4</b>	<i>yì'è-má ~ yì'mà ~ yìmà</i>	<i>yì'gù ~ yìgù</i>	<i>yì-'íkǎ</i>

**TABLE 27.** *Pronominal roots (Allomorph 2) suffixed with /-mǎ/ 'ANAPH', /-gù/ 'REFL', and the "focal" suffix /-'íkǎ/ 'only'*

suffixes yield **independent pronouns standing for participants in the zero-case that fall under the scope of the corresponding "focal" suffix** (e.g. the Allomorph 2 of the second person singular pronominal root, when combined with the focal suffix /-'íkǎ/ 'only', yields /kù-'íkǎ/ 'only you', *i.e.* an independent second person singular pronoun in the zero-case restricted by /-'íkǎ/).

Allomorph 2 of the first person singular pronominal root features the **same three phonologically-conditioned sub-allomorphs as its Allomorph 1** (on their distribution, see the preceding section). The non-default sub-allomorphs /chò-/ and /chà-/ of Allomorph 2 of the first person singular pronominal root are obligatory (combinations of pronominal roots with /-mǎ/, /-gù/, and the "focal" suffixes being completely lexicalized). It is unclear why the "focal" suffixes /-'íkǎ/ 'only', /-'í/ 'in.one's.turn', and /-'írà/ 'first' select for the sub-allomorph /chà-/ (instead of /chàu-/), yielding the forms /chà-'íkǎ/ 'only I', /chà'í/ 'I in my turn', and /chà'írà/ 'I first', respectively), since their first segmental phoneme is not velar.

Allomorph 2 of the **fourth person pronominal root features two sub-dialectal variants** /yì'-/ (e.g. in JGS's speech) and /yì-/ (e.g. in JSG's speech). In combination with /-mǎ/ 'ANAPH' specifically, it features an allomorph /yì'è-/ in free variation with /yì'- ~ yì-/. The **combination /yì'è-má/** seems to be, in practice, more frequent than /yì'-mà ~ yì-mà/.

The use of the reflexive independent pronouns in the zero-case in combination with the comitative relational noun /-má'a/, apart from its compositional meaning

(‘with myself/yourself/etc.’), may feature a **lexicalized meaning ‘alone’**. This lexicalized meaning is illustrated in the following example (see also example (498)):

(140) “*Chàgù-má’a tàā chī-ú!*”

*chà-gù-má’a* = *tàā* *chī* = *ú*

1SG-REFL-COM = itself 1SG.SBJ.PCĪ.SBJV = go.SG

“[Mother, what do you want to leave home for? – Stop bothering me!] I’m leaving alone!” [IGS 81]

### 3.3.4 Pronominal roots suffixed with /-’ $\bar{u}$ / ‘ACC’, /-’ $\bar{n}\grave{a}$ / ‘DAT’, and /-’ $\bar{u}$ / ‘BEN’ (Allomorph 3)

The **case-marking suffixes** /-’ $\bar{u}$ / ‘ACC’, /-’ $\bar{n}\grave{a}$ / ‘DAT’, and /-’ $\bar{u}$ / ‘BEN’, when they are immediately attached to a pronominal root, select for Allomorph 3 of that pronominal root. The resulting combinations are displayed in TABLE 28.

Allomorph 3 of the **first person singular pronominal root** features two **sub-dialectal variants** /*châ-*/ (e.g. in JSG, JGS, and LAR’s speeches) and /*chô-*/ (e.g. in IGV’s speech). Note that these variants are not phonologically-conditioned, by contrast with the sub-allomorphs of Allomorphs 1 and 2 of the first person singular pronominal root (see the preceding two sections).

The Allomorphs 3 of the **third person feminine and salientive pronominal roots** (but not those of any other pronominal root) additionally occur in combination with the **rare partitive object case-marking suffix** /-’ $\bar{n}\grave{e}$ /. On the function of the resulting combinations /*ngî-’ $\bar{n}\grave{e}$* / and /*tû-’ $\bar{n}\grave{e}$* /, see SECTION 5.7.2.2, p.468.

The combinations of the Allomorphs 3 of pronominal roots with /-’ $\bar{u}$ / ‘ACC’ and /-’ $\bar{u}$ / ‘BEN’, *i.e.* the independent pronouns in the accusative and the benefactive(-malefactive), are the **historical source (by phonological reduction) of the indexes for accusative and benefactive(-malefactive) participants** that occur in slots 2 and 1 of the inflectional template of the finite predicative phrase, respectively (on these indexes, see SECTION 5.7.1).

	-’ $\ddot{u}$ ‘ACC’	-’ $n\grave{a}$ ‘DAT’	-’ $\ddot{u}$ ‘BEN’
1SG	$ch\hat{a}-’\ddot{u} \sim ch\hat{o}-’\ddot{u}$	$ch\hat{a}-’n\grave{a} \sim ch\hat{o}-’n\grave{a}$	$ch\hat{a}-’\ddot{u} \sim ch\hat{o}-’\ddot{u}$
2SG	$k\hat{u}-’\ddot{u}$	$k\hat{u}-’n\grave{a}$	$k\hat{u}-’\ddot{u}$
1PL	$t\hat{o}-’\ddot{u}$	$t\hat{o}-’n\grave{a}$	$t\hat{o}-’\ddot{u}$
2PL	$p\hat{e}-’\ddot{u}$	$p\hat{e}-’n\grave{a}$	$p\hat{e}-’\ddot{u}$
3F	$ng\hat{t}-’\ddot{u}$	$ng\hat{t}-’n\grave{a}$	$ng\hat{t}-’\ddot{u}$
3M } 3N/NS }	$n\hat{u}-’\ddot{u}$	$n\hat{u}-’n\grave{a}$	$n\hat{u}-’\ddot{u}$
3S } 4 }	$t\hat{u}-’\ddot{u}$	$t\hat{u}-’n\grave{a}$	$t\hat{u}-’\ddot{u}$

TABLE 28. *Pronominal roots (Allomorph 3) suffixed with /-’ $\ddot{u}$ / ‘ACC’, /-’ $n\grave{a}$ / ‘DAT’, and /-’ $\ddot{u}$ / ‘BEN’*

### 3.3.5 Pronominal roots suffixed with /-’ $r\ddot{u}$ ~ -’ $r\bar{i}$ / ‘GEN’ (Allomorph 4)

The genitive case-marking suffix /-’ $\grave{a}r\bar{u}$ /, when it is immediately attached to a pronominal root, obligatorily occurs in an **irregular form /-’ $r\ddot{u}$ / or /-’ $r\bar{i}$ /**. The distribution of the two irregular forms of /-’ $\grave{a}r\bar{u}$ / in this context is essentially sub-dialectal (with *e.g.* LAR using the form /-’ $r\ddot{u}$ / and JSG using, optionally, the form /-’ $r\bar{i}$ /). The genitive case-marking suffix selects for Allomorph 4 of the pronominal roots. The paradigm of the resulting independent pronouns in the genitive is displayed in TABLE 29 in its **three attested subdialectal variants**.

The Allomorphs 4 of the **first person singular, third person masculine/neuter/non-salientive, and fourth person pronominal roots feature two subdialectal variants each**, characterized by either a vowel /o/ or a vowel /a/. Only the /o/-variants are attested in combination with the variant /-’ $r\bar{i}$ / of the genitive suffix (column Variant 3 in TABLE 29, attested in *e.g.* JSG’s speech). In combination with the variant /-’ $r\ddot{u}$ / of the genitive suffix, by contrast, both the /o/-variants (column Variant 1 in TABLE 29, attested in *e.g.* LAR and IGV’s speeches) and the /a/-variants (column Variant 2 in TABLE 29, attested in *e.g.* IGS’s speech) are attested. Note that the forms in the column Variant 2 in TABLE 29 are **always unstressed** (which is why they do not feature the coda glottal stop and the toneme /<sup>52</sup>/ found

		-’rũ ~ -’rĩ ‘GEN’		
		Variant 1	Variant 2	Variant 3
1SG		<i>chô-’rũ</i>	~ <i>chā-rũ</i>	~ <i>chô-’rĩ</i>
2SG			<i>kû-’rũ</i>	~ <i>kû-’rĩ</i>
1PL			<i>tô-’rũ</i>	~ <i>tô-’rĩ</i>
2PL			<i>pê-’rũ</i>	~ <i>(pê-’rĩ)</i>
3F			<i>ngî-’rũ</i>	~ <i>(ngî-’rĩ)</i>
3M	}	<i>nð-’rũ</i>	~ <i>nǎ-rũ</i>	~ <i>nð-’rĩ</i>
3N/NS				
3S			<i>(tû-mà-àrũ)</i>	
4		<i>tò-’rũ</i>	~ <i>tǎ-rũ</i>	~ <i>tò-’rĩ</i>

TABLE 29. *Pronominal roots (Allomorph 4) suffixed with /-’rũ ~ -’rĩ/ ‘GEN’ (including subdialectal variants)*

in their Variant 1 or Variant 3 equivalents, as such phonemes cannot occur in unstressed syllables in the language; on the phonological effects of exceptional loss of stress in stressed function words, see SECTION 2.5.1, p.121). In practice, the forms in the other two columns in TABLE 29 are **also frequently—but not always—left unstressed**. Only their stressed phonological forms are provided in this table.

Note, finally, that the form that functions as the **Allomorph 4 of the third person salientive pronominal root** (/tû-mà/) is, in practice, the third person salientive independent pronoun in the zero-case, *i.e.* a morphologically complex form that includes the morpheme /-mǎ/ ‘ANAPH’ (see SECTION 3.3.3). This form does not formally align, consequently, with the Allomorphs 4 of the other pronominal roots, which are morphologically simplex forms. The independent pronouns in the zero-case corresponding to other person-number-nominal class combinations than the third person salientive cannot function as Allomorphs 4, *i.e.* cannot be attached with the genitive suffix (*e.g.* \*/chò-mà-àrũ/ ‘1SG-ANAPH-GEN’ is not a grammatical alternative for *e.g.* /chô-’rũ/ ‘my, mine’), while the genitive suffix is otherwise regularly attached to the zero-case form of non-pronominal NPs. This formal misalignment of the third person salientive pronominal root can be interpreted as showing that it **lacks, in fact, an Allomorph 4 proper**. Its corresponding zero-case independent pronoun is used to fill this lack by analogy with ordinary NPs, which can, in their zero-case form, be attached with the genitive suffix (for an exactly parallel discussion regarding the Allomorph 1 of the third person salientive pronominal root, see SECTION 3.3.2 above).

Combinations of the pronominal roots with the genitive suffix provide independent pronouns in the genitive, which encode **pronominal possessors of NPs** (by contrast with pronominal possessors of bound nouns, on the encoding of which see SECTION 3.3.2 above). This frequently occurring use of the independent pronouns in the genitive is shown in the following example:

- (141) “[...] *chāyā-yâ’u yá kû’rũ óchǎgù* [...].”  
*chā = yā = yâ’u*                      *yá = kû-’rũ óchǎgù*  
 1SG.SBJ = PCĪ.3M/N/NS.OBJ = seize    LK.M/N/S = 2SG-GEN dart  
 “[...] I’ve caught your dart [...].” [JSG B226]

Note that a NP possessed by an independent pronoun in the genitive is **not necessarily definite**, as shown in (142), or even specific (see also example (196)):

- (142) [...] *ērũ... wí’á nò’rũ... cuñau’ũ<sup>198</sup> nî-mq.*  
*ērũ*     *wí’á nò-’rũ*    *cuñau-’ũ*     *nî = mq*  
 because    INDF    3M-GEN    brother.in.law-ACC    3M/N/NS.SBJ.PCĪ = kill.SG  
 ‘[...] because... he had killed one of his... brothers-in-law.’ [AMB 15–16]

The independent pronouns in the genitive may also occur—although rarely—in **head position**, *i.e.* without the NP they relate to, as in the following example:

- (143) *Ñù’ ñââkù tá-nũ yá kû’rũ?*  
*ñù’*                      *ñââkù*              *tá = nũ*              *yá = kû-’rũ*  
 what.activity?    in.this.manner    3S.SBJ = put.PL    LK.M/S = 2SG-GEN  
 ‘[Oh, it seems my cups are not in the same position as yours, while they should.] How are yours put?’ [JCA D80]

### 3.3.6 Aspects of the semantics of SMAT’s pronominal system

In most cases, first, second, and third person ordinarily correspond to speaker, hearer, and any participant that is neither speaker nor hearer, respectively. Second

<sup>198</sup>The form *cuñau* here stands for Sp. *cuñado* ‘brother-in-law’ (on the phonological reduction of the Spanish syllable *-ado* when it is inserted into a SMAT utterance by code-mixing, see SECTION 2.7.2.2).

person singular morphemes, however, are occasionally used without reference to the hearer. Example (144) illustrates the **generic, non-referential human use of the second person singular**. This use is relatively frequent in discourse, although it largely overlaps with the generic use of the fourth person (compare (155–156) below).

(144) *Wóó chíre kūyà-pó'wōē, wóó kū-ā̀nè, tǎ'úwǎ̀ kù-pūrākúgù rù, kú tǎ'úrú'ù̀ tǎ nû-î̀ ì ngēmà.*

*wóó = chíre*      *kū = yà = pó'wō-ē*      *wóó*  
 admittedly = APRF    2SG.SBJ = AM = fishhook-EVENT.PRED    admittedly  
*kū = ā̀-ànè*      *tǎ'ú-wǎ̀*      *kù = pūrākú-gù = rù*  
 2SG.SBJ = have-space    be.absent\SBJV?-ALOC    2SG.SBJ\SBJV = work-CIRC = TOP  
*kú*      *tǎ'ú-rú'ù̀ = tǎ*      *nû = î̀*      *ì = ngē-mà*  
 I.mean    be.absent\SBJV?-PURP = ADD    3M/N/NS.SBJ.PCì = be    LK.NS = MED.NS-ANAPH

‘[You need money to feed a family.] You may go fishing, you may have a swidden, if you don’t have a job somewhere, I mean, even that is useless.’  
 [JGS 599–601]

In (145–146), a second person singular refers to **precisely identifiable referents distinct from the hearer**. Such uses, by contrast with the generic use of the second person singular just mentioned, are exceptional and **highly marked pragmatically or stylistically**. The second person singular in (145) is used as the semantic equivalent of a first person plural, but invites particular attention on the part of the hearer (the first sentence of the example could be essentially paraphrased as ‘nobody could provide us with identity documents, you know!/can you believe that?’).

(145) [...] *tè'ě gá... kù'rū̀ pōpērà kú-yǎ'ú'è...? Tā-gēnátūē.*

*tè'ě*      *gá = kù-'rū̀*      *pōpērà*      *kú = yǎ'ú-'è*  
 what?.S    LK.F/M/NS.PST = 2SG-GEN    paper      2SG.BEN = take\SBJV-REL.S  
*tā = gē-nátū-ē*  
 1PL.SBJ = not.have-father-INTR.PL

‘[Although there was a school, we couldn’t attend it, because] who would... obtain identity documents for you [*i.e.* for us]...? We were fatherless.<sup>199</sup>’

<sup>199</sup>EAR, with whom I transcribed and translated the recording from which this example was extracted, interpreted this utterance as meaning that the speaker was not able to attend school when she was young because she had no official identity documents, which were needed for that purpose. Back then, only men had enough practice of the non-indigenous society to know how to obtain such documents, but because the speaker’s father was dead, she could not get ones in the first place.



[GRA 160–161]

The second person singular in (146) is used as the semantic equivalent of a third person (see also (345) and (T102)). This rare stylistic device seems to be specific to narrative discourse and to indicate that the process being referred to is sudden or unexpected.

(146) *Yě'gúmá ā'a kū-chi ā'a gá <tè'è mé'e... > nǎkū!*

*yě'gúmá = ā'a*                      *kū = chi = ā'a*                      *gá = <tè'è = mé'e... >*                      *nǎkū*  
 ANAPH.CIRC.PST = QUOT    2SG.SBJ = stand = QUOT    LK.F/M/S/NS.PST = what?.M    tapir

'[The mythical brothers Yoi and Ipi had all the animals stand in line and were reviewing them one by one.] And then, here stands the, uh... the tapir!' [LAR C401–403]

The category I refer to as the **first person plural is exclusive**: it refers to a group that is composed of the speaker and one or several third person participants, but does not normally include the hearer. The enacted speakers in the following example can therefore only refer to themselves as a first person plural when inviting a man to follow them (*i.e.* the speakers to the explicit exclusion of the hearer) to go fishing.<sup>200</sup>

(147) *“Kú tōwé rǔ-ú!” nǎtàngǔ'ú ā'a.*

*kú = tō-wé*                      *rǔ = ú*  
 come.on = 1PL-following    PCrǔ = go.SG

*nǎ-tà-gǔ-gǔ-'ú = ā'a*  
 do.thus-3S.SBJ\SBJV-do.thus-PL\SBJV-SUB = QUOT

“[We're going poison-fishing.] Come on, come with us!” they said.' [LAR E133]

What I label the **fourth person** corresponds either 1) to a well-defined **inclusive first person plural** (*i.e.* referring to a group composed of both speaker and hearer, and possibly one or several third person participants), 2) to a **vaguely identified but referential social group of which the speaker considers themselves as a**

<sup>200</sup>A different linguistic perspective on the exact same process could of course have allowed using a fourth person in its first person plural inclusive meaning in example (600), as in *e.g. Let's go (poison-fishing) together [you and us]!*.

member but that does not necessarily include the hearer, or 3) to a **generic, usually singular non-referential human participant** (compare the English generic pronoun *one* in *e.g. One should respect one's parents at all times*).<sup>201</sup> It is to underline its broad semantic range that I have opted for calling this category of the language's persons system “fourth person”, instead of *e.g. “first person plural inclusive”*, which would have been misleading.<sup>202</sup>

Examples (148–149) provide occurrences of a **fourth person with a first person plural inclusive meaning** (see also (T127–T128), which may be contrasted with (T137–T138) where the exact same referents are referred to as a first person plural (exclusive)). Note that the plural marking of fourth person participants (*e.g. by means of /-gǔ́/ ‘PL’* suffixed to an intransitive verb with a fourth person subject in (148)) is in most cases optional and does not relate to the actual number of individuals subsumed within such participants, which may be two, as in (148), or more than two, as in (149).

(148) “*Kú ǎ̀rũ-gà rù yì-gù-má'a tǐ-dé'à-gǔ́!*” *ǎ̀'ũ.*

*kú* = *ǎ̀* = *rũ* = *gà*                                      *rù*    *yì-gù-má'a*    *tǐ* = *dé'à-gǔ́*  
 come.on = 3ALOC = PCRũ = get.down    and    4-REFL-COM    4SBJ.PCI = speak-PL

*ǎ̀'ũ*  
 do.thus.3M/N/NS.SBJ.SBJV-SUB

‘[A supernatural being to a hunter hidden in a tree:] “Come on, come down and let's talk [lit. ‘... and you and I speak with ourselves!']!” he said.’ [JSG B46]

(149) “*Mārũ ñyā-ũ í tǎé! [...]* *Ngì'ā rù ngí'kq tá-dǎu!*”

<sup>201</sup>For elements for a typology of non-referential or non-specific uses of prototypically or originally referential pronouns or pronominal indexes, see Siewierska (2011), who refers to such uses as occurrences of “pronominal R-impersonals”, *i.e.* cases of implementation of semantic impersonality allowed “by a reduction in referentiality” of pronominal morphemes. Note, however, that Siewierska does not explicitly consider or explore the possibility of pronominal morphemes functioning both as a marker of first person plural inclusive and as a “pronominal R-impersonal”.

<sup>202</sup>The phrase “fourth person”, however, has been used in reference to a variety of at best distantly related person categories in linguistic literature (see 2008:281–284), and therefore has the serious disadvantage of ambiguity for cross-linguistic comparison. The SMAT fourth person covers functionally both the category (*Av*) (“unspecified human (impersonal)”) and the category (*B*) (“[i]nclusive first-person plural, when distinct formally from the first-person singular/exclusive plural”) of the categories listed by Fleck as occurring with the label “fourth person” in linguistic literature (2008:281). Interestingly, the SMAT fourth person therefore “bridges” two functional categories deemed by Fleck to be “semantically completely unrelated” (2008:282).

*mārū īyā = ū́ í = tǎ-é*  
 PRF 3F.SBJ.PCĪ = go.SG LK.F = 4-mother

‘[A group of siblings between themselves:] “Our mother is gone! [...] Let’s look for her!” [IGS 263–269]

Instances of uses of the **fourth person in vague reference to the speaker’s in-groups** are given in examples (150–153). As these examples show, **social groups referred to in this way may vary widely in size and type**. The ordinary way to refer to the Tikuna language, specifically as /tǎ-gà(-wǎ)/ ‘(in) our [4th person] language’,<sup>203</sup> is illustrated in (150–370). In this case, the referents identified as the speaker’s in-groups are in practice the Tikuna people (as opposed to any other ethnic group).

(150) [...] *ñyáchĩ nũ{m}à chà-mǎ’ú’ú́, dâà ìànè ì náégà ì Nâpàtúwǎ ì tǎgàwǎ kq kōrígàwǎ ì San Martín de Amacayacu [...].*

*ñyáchĩ nũ{-m}à chà = mǎ’ú’ú́ dâ-à*  
 and PROX.ALOC-ANAPH 1SG.SBJ\SBJV = live\SBJV-SUB PROX.N-EXO  
*ì-ànè ì = ná-égà = ì Nâ-pà-tú-wǎ*  
 building-space LK.NS = 3N/NS-name = CONTR.TOP? 3N/NS-hammock-river-ALOC  
*ì = tǎ-gà-wǎ kq kōrígà-wǎ = ì*  
 LK.NS = 4-language-ALOC and White.person-language-ALOC = CONTR.TOP  
 San Martín de Amacayacu.  
 San Martín de Amacayacu

‘[...] and I live here, in this community called “Nâpàtú” in Tikuna, and in Spanish “San Martín de Amacayacu” [lit. ‘... in this community [that] its name [is] “Nâpàtú” in our (4th person) language, and in the language of the White “San Martín de Amacayacu”.’] [...].’ [IGV 7–8]

(151) *Námá’a ná-gú’chà gá ná’a tǎgàwǎ yà-dé’àngú’ú́ gá nũ{mà}.*

*ná-má’a ná = gú’chà gá = ná’a tǎ-gà-wǎ*  
 3N/NS-COM 3M/N/NS.SBJ = be.difficult LK.PST = CONJ 4-language-ALOC  
*yà = dé’àngú’ú́ gá = nũ{-mà}*  
 PCĪ.3M/N/NS.SBJ\SBJV = speak-PL\SBJV-SUB LK.PST = 3N/NS-ANAPH

<sup>203</sup>Language names are virtually only attested in co-occurrence with the suffix /-wǎ/ ‘ALOC’. SMAT speakers very occasionally refer to Tikuna as /tō-gà(-wǎ)/ ‘(in) our (excl.) language’ when talking to me, a second-language learner of it.

‘They had trouble speaking our [4th person] language [although they were Tikunas too].’ [IGV 366]

In (152), the referents identified as the speaker’s in-groups are all Indigenous South Americans (as opposed to the White). To correctly interpret the gloss of this example, as well as those of (153) and (155–156), recall that predicative phrases in the Subjunctive Inflectional Type that lack an overt subject index, unless preceded by an NP that acts as their third person subject, are to be interpreted as featuring a covert fourth person subject<sup>204</sup> (so that *e.g.* /ì = ú-gú-’ú/ [PCØ.SBJV = be.there.SG-PL\SBJV-SUB], which features no overt subject marking, is to be interpreted as ‘(that) we (4th person) find ourselves’; see SECTION 5.5, p.445).

(152) *Ngēmàkq nî-î ì yì’emá ì, <ì... > nî-î ñô-má nâ-à-nè-wá ì-ú-gú-’ú ì, América del Surwá ì-ú-gú-’ú ì, <nâ-... > <nâ-... > ì-bajo conocimiento-á-’ú [...].*

*ngē-mà-kq*                      *nî = î*                      *ì = yì’è-má = ì*  
 MED.NS-ANAPH-CAUSE    3M/N/NS.SBJ.PCì = be    LK.NS = 4-ANAPH = CONTR.TOP

*<ì = >*    *nî.î*    *ñô-má*                      *nâ-à-nè-wá*  
 LK.NS =    CONJ    PROX.NS-ANAPH    3N/NS-space-ALOC

*ì = ú-gú-’ú = ì*    *América del Sur-wá*  
 PCØ.SBJV = be.there.SG-PL\SBJV-SUB = CONTR.TOP    South America-ALOC

*ì = ú-gú-’ú = ì*    *<nâ = ... >*    *<nâ = ... >*  
 PCØ.SBJV = be.there.SG-PL\SBJV-SUB = CONTR.TOP    ?                      ?

*ì = bajo conocimiento-á-’ú*  
 PCØ.SBJV = low knowledge-POSS\SBJV-SUB

‘[The wise mythical brother Yoi ended up in North America, while the mischievous one Ipi ended up in South America.] That’s why we [4th person], who... who find ourselves in this region, [who] find ourselves in South America, are... are... are underdeveloped.’ [LAR D87–90]

The exact social group referred to as a fourth person participant in (153) is unclear but possibly corresponds to the human species as a whole (as opposed to the other animal species).

(153) *Tû’ú nūná-ôq ì ngēmà tò’rū ì yì’emá ì-ngó’ú.*

<sup>204</sup>With any of the three semantic uses of the fourth person.

### 3. THE NOMINAL PHRASE

*tû-'û* *nû = ná = ô-o* *ì = ngē-mà*  
 3S-BEN 3M/N/NS.ACC = 3M/N/NS.SBJ = be.unwilling-mouth? LK.NS = MED.NS-ANAPH

*tò-'rû* *ì = yì'è-má* *ì = ngó-'û*  
 4-GEN LK.NS = 4-ANAPH PCØ.SBJV = bite\SBJV-SUB

‘[The deer would feed the woman with deer food.] He didn’t allow her [to eat food] of the kind that *we* eat [lit. ‘He denied her ours (4th person) that *we* (4th person) eat.’].’ [IGS 178]

As is to be expected, an example such as (154) shows that **not just any social group with which the speaker identifies may be referred to as a fourth person participant**, but only culturally highly relevant ones, *i.e.* ones that best define one’s identity, and in particular ethnicity and race as in the preceding examples. In this example and the stretches of discourse that precede and follow it, the speaker is comparing the working conditions of tourist guides, being one himself, with those of other members of the community who work at a construction site. The two social groups thus defined by the speaker are certainly not relevant and stable enough for him to refer to the one he belongs to as an in-groups fourth person participant (contrast (154) with (152) above, where in comparing two ethnic or racial groups the speaker refers to the one she identifies with as a fourth person participant).

(154) *Gû'û* *ì gùnē'û* *ná-pūrākú-ànè* *tà* *ì tō'kq*.

*gû-'û* *ì = gùnē-'û* *ná = pūrākú-ànè = tà*  
 finish\SBJV-REL.NS LK.NS = get.light\SBJV-REL.NS 3M/N/NS.SBJ = work-space = ADD

*ì = tō-'kq*  
 LK.NS = 1PL-CAUSE

‘[They have a stable job, while we guides never know which days we’re going to work. But at the end of the year, many tourists come.] There’s work for us every day too.’ [JGS 492]

Importantly, I was the only hearer present when (150–152) were uttered. The fact that I am neither a Tikuna nor an Indigenous South American shows that the **in-groups fourth person does not have to include the hearer among its referents**, which makes it significantly distinct semantically from first person plural inclusive uses of the fourth person. Note also that in examples (150) through (153), uses of the **fourth person, however vague, are referential** inasmuch as they do point to identifiable individuals in the real world. This, in its turn, makes the in-groups use of the fourth person significantly distinct semantically from its generic use exemplified next.

Examples (155–156) illustrate the **generic use of the fourth person** (see also (T116–T119)). This use largely overlaps functionally with the generic use of the second person singular (compare (144) above). Note that in the free English translations provided for these examples, the fourth person, which could be more literally translated as ‘one’, is rendered as a second person singular (‘you’).

- (155) De pronto *yìgùmá'a* <nà-...> *nà-pù'gù rù tũnũ-tò'ù* o *tãu ná-bien yá* <tò'rĩ...> *tãch'ũ ěgá ngēmà* *nà-ũ'gú*.

de pronto *yì-gũ-má'a* <nà = ...>  
maybe 4-REFL-COM 3M/N/NS.OBJ\SBJV =

*nà = pù-'gù = rù* *tũ = nũ = tò'ù* O  
3M/N/NS.OBJ\SBJV = plant-CIRC = TOP 4BEN = 3M/N/NS.SBJ.PCĩ = be.twisted or

*tãu ná = bien* *yá = <tò-'rĩ...>* *tã-ch'ũ ěgá ngē-mà*  
NEG 3M/N/NS.SBJ = well LK.M/N/S = 4-GEN 4-home if MED.NS-ANAPH

*nà = ũ-'gú*  
3M/N/NS.OBJ\SBJV = make\CIRC-CIRC

‘[To build a house, you need a professional.] If you... you place the stilts by yourself [lit. ‘If one... one plants it by oneself, ...’], your house may be crooked or it may not be good, if you do that.’ [JSG B722–725]

- (156) *Tò'rũ pé rù tánā-ũtànũ. Ğè'tá ì-ũ'gù rù gũ'ũ tá-ũtànũ.*

*tò-'rũ pé = rù* *tá = nā = ũ-tànũ* *ğè'tá*  
4-GEN sleep = TOP 4SBJ = 3M/N/NS.OBJ = make-compensation where?.ALOC

*ì = ũ-'gù = rù* *gũ-'ũ* *tá = ũ-tànũ*  
PCØ.SBJV = go.SG-CIRC = TOP finish\SBJV-REL.NS 4SBJ = make-compensation

‘[Everything works with money in the city.] Your sleep you [have to] pay for. Wherever you go, you [have to] pay for everything.’ [IGV 78–79]

## 3.4 Non-locative demonstratives

### 3.4.1 Introduction to the demonstratives in SMAT

SMAT features two major classes of nominal demonstratives, which I call **non-locative demonstratives** and **locative demonstratives**, respectively (the roots on which these are based are displayed in TABLES 30 and 31 and commented upon below).

### 3. THE NOMINAL PHRASE

	F	M	N	S	(S.PL)	NS
<b>PROX</b>	<i>ñá-/ñó-</i>	<i>dǎ-/dǎ-</i>	<i>dâ-/dô-</i>	<i>dâ'è(/dô'è-)</i>	<i>(dǎǎ-/NA)</i>	<i>ñǎ-/ñǎ-</i>
<b>MED</b>	<i>ngé-</i>	<i>yǐ-</i>	<i>yî-</i>	<i>yî'è</i>	<i>(yǐǎ-/yǐǎ-)</i>	<i>ngē-</i>
<b>DIST</b>	<i>yé-</i>	<i>gǔ-</i>	<i>gû-</i>	<i>gû'è</i>	<i>(gǔǎ-/gǔǎ-)</i>	<i>yě-</i>

TABLE 30. *SMAT non-locative demonstrative roots*

	ALOC	PLOC
<b>PROX</b>	<i>nú</i>	<i>nǔ'</i>
<b>MED</b>	<i>ngě</i>	<i>ngě'</i>
<b>DIST</b>	<i>yě</i>	<i>yě'</i>

TABLE 31. *SMAT locative demonstrative roots*

The locative demonstratives (as they are called by Skilton 2019) can be broadly characterized as equivalents of English *here* and *there*. They essentially correspond to Diessel's (1999:74–78) “locational deictics” or “demonstrative adverbs”, although I do not analyze the SMAT forms in question as adverbs but as nominal words. They prototypically constitute (or take part in the formation of) an NP **whose referent fulfills a spatial semantic role** (whether location, source, or goal), *i.e.* a semantic role that corresponds to one of those conveyed by the locative relational nouns /-wǎ/ ‘ALOC’ and /-gǔ/ ‘PLOC’. Note, however, that they are not—and cannot be—marked with one of these two relational nouns when they occur with a spatial semantic role. The following two examples provide cases of locative demonstratives:

(157) *Núà chò'rī pōpēràwǎ tá nūchā-dǎu.*

*nú-à*                      *chò-'rī*    *pōpērà-wǎ = tá*    *nū = chā = dǎu*  
 PROX.ALLOC-EXO    1SG-GEN    book-ALOC = FUT    3M/N/NS.ACC = 1SG.SBJ = see

‘I’ll check it in my notebook here.’ [JSG A210]

(158) [...] *rù yěmà tǎu tá-wòègù. Yě'má mā tá-ǎchí'ũē.*

*rù yě-mà*                      *tǎu*    *tá = wò-ègù*                      *yě'-má = mā*  
 and DIST.ALLOC-ANAPH    NEG    3S.SBJ = drop.PL-INV    DIST.PLOC-ANAPH = precisely

*tá = ǎ-chí'ũ-ē*  
 3S.SBJ = have-home-INTR.PL

‘[They crossed to Peru to join their boss] and they didn’t return from there. They settled there.’ [GRA 97–98]

The non-locative demonstratives (called “nominal demonstratives” in Skilton 2019) are broadly equivalent to English *this* and *that*, but also—occasionally—to the English definite determiner *the*. In Diessel’s (1999:59–74) terminology, their function mostly corresponds to that of “pronominal” and “adnominal demonstratives”. By contrast with the locative demonstratives, the non-locative demonstratives constitute (or contribute to the formation of) **NPs whose referents may fulfill any semantic role**. This includes a spatial semantic role, provided they feature specific morphological marking corresponding to that semantic role (by contrast with the locative demonstratives, which do not receive any specific marking when they occur with a spatial semantic role). The following three examples include occurrences of the non-locative demonstratives (note that the phrase *dâà comunidad* ‘this community’ in example (159) has the exact same semantic role as the locative demonstrative *nûà* ‘here’, specifically a spatial one):

(159) [...] *yá nûà má’ēgǔ’è, dâà comunidadwá* [...]

*yá = nû-à*                                      *má’-ē-gǔ-’è*                                      *dâ-à*  
 LK.M/N/S = PROX.ALOC-EXO    live-INTR.PL-PL\SBJV-REL.S    PROX.N-EXO  
*comunidad-wá*  
 community-ALOC

‘[...] those who live here, in this [with a pointing gesture] community [...]’  
 [JSG B700]

(160) “*Ñáà í pákū í chà-ngî’wē’ēkū* [...]!”

*ñá-à*                      *í = pá-kū*                                      *í = chà = ngî-’wē’ē-kū*  
 PROX.F-EXO    LK.F = be.nubile-REL.F    LK.F = 1SG.SBJ\SBJV = 3F-APPREC\SBJV-REL.F

“‘Here [is] [lit. ‘This [is] ...’] the woman I love [...]!’” [JSG B234]

(161) *Témānátū nû-î ì ngēmà Dāiyā’è.*

*témā-nátū*                      *nû = î*                                      *ì = ngē-mà*                                      *Dāiyā’è*  
 moriche.palm-father    3M/N/NS.SBJ.PCì = be    LK.NS = MED.NS-ANAPH    Daiyae

“Daiyae [lit. ‘This Daiyae ...’, *i.e.* previously referred to] is the master of the moriche palms.” [JSG B86]



The non-locative demonstrative roots are displayed in TABLE 30 with all of their basic inflectional forms (where two allomorphs are listed, the second one occurs specifically when suffixed with /-mǎ/ ‘ANAPH’; items in parentheses are only marginally attested). The two series of locative demonstrative roots are listed in TABLE 31 for reference. The morphology, syntax, semantics, and pragmatics of the words that may be derived from the non-locative demonstrative roots are discussed individually in the following sections. Note that the uses of the locative demonstrative roots and the words that may be derived from them are not covered in this grammatical description. The following paragraphs introduce a few preliminary observations as to the **general organization of the system of SMAT demonstratives**.

As suggested in TABLES 30 and 31, the demonstratives, whether non-locative or locative, are organized along an axis of **three grammatical degrees of “distance”** that I label “proximal” (PROX), “medial” (MED), and “distal” (DIST). Both the non-locative and the locative demonstrative roots may enter in the formation of demonstrative words with exophoric as well as endophoric reference. Endophoric demonstratives essentially refer to elements that are part of the linguistic context of a speech act (as in examples (158) and (161) above), while exophoric demonstratives refer to elements that are part of the non-linguistic context, *e.g.* real-world entities that are part of the physical environment where the speech act occurs (as in (157) and (159) above). In cases where the demonstrative roots are employed for **exophoric reference** (*i.e.*, in most cases, when they are suffixed with /-à/ ‘EXO’), the three degrees of distance generally correspond, rather straightforwardly, to **three ranges of physical distance**. They are specifically used to convey—broadly speaking—that the referent is within reach (PROX; *this* and *here*), out of reach but at a short distance (MED; *that* and *there*), or out of reach and at a longer distance (DIST; *that over there* and *over there*) relative to the deictic center (which, in a majority of cases, corresponds to the speaker).

The respective functions of the three degrees of distance are less straightforward in cases where the demonstrative roots are employed for **endophoric reference** (*i.e.*, in most cases, when they are suffixed with /-mǎ/ ‘EXO’). Briefly, the **medial demonstratives can be characterized as the default forms for anaphoric (and possibly cataphoric) reference**, whether the referent is a participant or a propositional content. For anaphoric reference in pre-hodiernal past contexts (*i.e.* contexts referring to a past that precedes today), older speakers usually—but not obligatorily—use the distal demonstratives instead of the medial demonstratives. Younger speakers, however, tend to generalize the medial demonstratives regard-

less of the temporal setting (pre-hodiernal past or non-pre-hodiernal-past) of the processes referred to. In most of their occurrences, the proximal demonstrative roots, when used in the same morphosyntactic contexts where the medial and distal demonstrative roots fulfill endophoric functions, do not involve endophoric reference strictly speaking, but point symbolically at temporal or spatial referents that partially coincide with the temporal or spatial setting of the utterance act itself (in phrases with meanings such as ‘this year [in which you and me are talking]’, ‘this house [where you and me are right now]’, or ‘here [where you and me are right now]’). Occurrences of the proximal demonstrative roots in such contexts are in practice rare in spontaneous speech. The widely diverging semantic and pragmatic uses of the three-fold distance dimension of the paradigms of demonstrative roots, depending on whether they are employed for exophoric or endophoric reference, are discussed and exemplified in the following sections.

Note, additionally, that the **non-locative demonstrative roots are among the forms that inflect for nominal class** (simultaneously involving within a single paradigm cases of tonological inflection, as in /yî-/ ‘MED.N’ vs /yĩ-/ ‘MED.M’, suppletive inflection, as in /yî-/ ‘MED.N’ vs /ngē-/ ‘MED.NS’, and inflection through the addition of segmental material, as in /yî-/ ‘MED.N’ vs /yî̀̀/ ‘MED.S’<sup>205</sup>). They obligatorily agree with the participant they relate to, whether the latter is syntactically present (as a head in cases where a demonstrative is used as a modifier; see example (159)) or not (cases where a demonstrative constitutes a complete NP on its own and the participant it relates to is to be understood contextually; see (160)). Interestingly, alongside a default salientive form unspecified for number (column s in TABLE 30), the non-locative demonstratives feature an (infrequently occurring) specific inflectional form employed to refer to explicitly plural referents assigned to the salientive nominal class (column S.PL). Such specifically plural non-salientive forms are almost unattested in the paradigms of other forms inflecting for nominal class in the language. Most forms of the non-locative demonstrative roots (with the exception of the default salientive forms) cannot stand on their own in discourse and only occur with additional morphology.

<sup>205</sup>The syllables /-`è/ and /-ã/ or /-ã̀/ in the default salientive and specifically plural salientive forms of the non-locative demonstrative roots (columns s and S.PL in TABLE 30) are most likely cognate with the homonymous default salientive and specifically plural salientive forms of the relativizer. Although best considered as unanalyzable from a synchronic perspective, the salientive forms of the demonstrative roots, by contrast to their other inflectional forms, thus seem to be relatively easily analyzable from a diachronic perspective as the agglutinative association of a demonstrative morpheme with a morpheme encoding (perhaps alongside other features) nominal class.

The **locative demonstratives, for their part, exist in two series.** These mostly correspond to forms that may directly commute (*i.e.* without additional marking) with a NP bearing the areal locative relational noun /-wǎ/ on the one hand (such as the first demonstrative in example (158)), and forms that may commute with a NP bearing the punctual locative relational noun /-gǔ/ on the other (such as the second demonstrative in (158)). On the functions of the relational nouns /-wǎ/ ‘ALOC’ and /-gǔ/ ‘PLOC’, see SECTION 3.6.2.

The **non-locative demonstratives** and a few other forms morphologically related to them are discussed and exemplified at length in the following sections. Note that SMAT additionally features a **demonstrative verb**, the irregular bipartite verb /ñǎ-/ñâ- + -((rǔ)gù)/ ‘do thus’, whose first morphological component /ñǎ-/ñâ-/ is likely cognate with the non-salientive and feminine allomorphs (/ñǎ-/ and /ñǎ-/ respectively) of the proximal demonstrative root. The demonstrative verb is dealt with separately in CHAPTER 6.

For a **fine-grained semantic and pragmatic study** of the non-locative and locative demonstratives in the Cushillococha variety of Tikuna, and of the exact values of the three grammatical degrees of distance mentioned above in particular, see Skilton (2019).

### 3.4.2 Exophorics in /-à/ ‘EXO’

As shown in TABLE 32, the exophoric non-locative demonstratives are generally obtained by adding the **suffix /-à/ ‘EXO’ to the demonstrative roots** listed in TABLE 30 above. The salientive forms, however, do not take this suffix. The default salientive forms (column S) consist of the demonstrative root alone (*dâ’è, yí’è, gú’è*), while the specifically plural salientive forms (column S.PL) consist of the root plus, obligatorily, the collective suffix /-tá/ (/dǎǎ-tá, yǎǎ-tá, gǎǎ-tá/).

In most of its occurrences, the proximal exophoric demonstrative is used in reference to an item at least partially located **within the immediate reach of the speaker**, or an item they are holding. In example (162), the NP *ñâà libro* ‘this booklet’ refers to a booklet that the speaker is holding with one hand at utterance time and at which he is simultaneously pointing with the other hand.

(162) *Yí’kù’ámá tá ì kùnā-chǎ’ú... ì ñâà libro.*

*yí’kù’ámá = tá = ì                      kù = nā = chǎ-’ú*  
 later-DIR = FUT = CONTR.TOP    2SG.SBJ\SBJV = 3M/N/NS.OBJ = paint\SBJV-SUB

	F	M	N	S	(S.PL)	NS
PROX	<i>ñá-à</i>	<i>dǎ-à</i>	<i>dâ-à</i>	<i>dâ'è</i>	<i>(dǎǎ-tá)</i>	<i>ñǎ-à</i>
MED	<i>ngé-à</i>	<i>yǐ-à</i>	<i>yî-à</i>	<i>yî'è</i>	<i>(yǐǎ-tá)</i>	<i>ngē-à</i>
DIST	<i>yé-à</i>	<i>gǔ-à</i>	<i>gû-à</i>	<i>gû'è</i>	<i>(gǔǎ-tá)</i>	<i>yê-à</i>

TABLE 32. *SMAT exophoric non-locative demonstratives*

ì = *ñǎ-à*                      libro

LK.NS = PROX.NS-EXO    book

‘Later on you’ll color it... this booklet [that I’m holding in my hand].’ [JSG C2]

In (160) above, the woman referred to with the feminine proximal exophoric /*ñá-à*/ is implied (the example stems from a narrative) to be standing right next to the speaker. In (159) above, when referring to *dââ comunidad* ‘this community’, with the neuter proximal exophoric /*dâ-à*/, the speaker is pointing all around him with a circular gesture outlining a space that includes the spot where he sits.

The medial exophoric demonstrative is typically used in reference to an element located **relatively close to the speaker, without being within their immediate reach**. Note that the medial demonstratives generally do not seem to specify distance relative to the hearer, *i.e.* their referent may be located at a certain distance from both speaker and hearer and is not necessarily located close to the hearer. Finally, the distal exophoric demonstrative typically indicates that the referent is located **far from the speaker but within their eyesight**. In example (163), the speaker first refers to a man located a dozen of meters away from her (/gǔ-à/ ‘DIST.M-EXO’), and then to a woman located a few meters away from both her and the hearer (/ngé-à/ ‘MED.F-EXO’). In both cases, the speaker simultaneously points at the referent with one hand.

(163) *Gǔǎǎmá rù tǎ áru. Ngéà rù tǎ áru.*

*gǔ-à-ǎmá = rù = tǎ*                      *áru*                      *ngé-à = rù = tǎ*                      *áru*  
 DIST.M-EXO-DIR = TOP = ADD    plant.sp    MED.F-EXO = TOP = ADD    plant.sp

‘[I’m of the clan of the *cascabel*<sup>206</sup> plant.] That one over there too, he[’s] *cascabel*. That one too, she[’s] *cascabel*.’ [IGS 433–434]

<sup>206</sup>*Cascabela* or *Thevetia* sp.

### 3. THE NOMINAL PHRASE

The non-salientive form of the proximal exophoric demonstrative is also occasionally used for endophoric reference, specifically for **discourse deixis** as defined by Diessel (1999:100–105), *i.e.* in reference to “aspects of meaning [...] expressed by a clause, a sentence, a paragraph, or an entire story”. In example (164), the speaker is concluding a story and the NP *ñàà ũgúàné ì ìrā’ú* ‘this little story’ refers to the contents of the relatively long speech act that he is putting an end to.

- (164) *Ngě’má yà-gú’ú ì <ñàà... > ñàà ũgúàné ì ìrā’ú.*
- ngě’-má*                      *yà = gú-’ú*    *ì = <ñà-à... >*  
 MED.PLOC-ANAPH      AM.3F/M/N/NS.SBJ.SBJV = finish\SBJV-SUB      LK.NS = PROX.NS-EXO
- ñà-à*                      *ũgúàné ì = ìrā-’ú*  
 PROX.NS-EXO      story      LK.NS = be.small\SBJV-REL.NS
- ‘There ends this... this little story.’ [JSG C165]

Similarly, in (165), the speaker is commenting on a misadventure that happened to his family recently and that he has just finished telling. The NP *ñàà caso* ‘this case’ refers to the series of events just narrated.

- (165) [...] *mārū mù’è yá dùú’è’ú ná-úpétù ì ñàà caso.*
- mārū*      *mù-’è*    *yá = dùú-’è-’ú*  
 PRF      be.several\SBJV-REL.S      LK.M/N/S = be.a.human\SBJV-REL.S-ACC
- ná = ú-pétù*    *ì = ñà-à*    *caso*  
 3M/N/NS.SBJ = be.there.SG-across      LK.NS = PROX.NS-EXO      case
- ‘[...] this thing has happened to several people.’ [JSG B530]

Note that this kind of discourse deixis function is more usually fulfilled by the non-salientive form of the medial endophoric demonstrative (compare example (175) below).

The specifically plural salientive forms of the exophoric demonstratives (column S.PL in TABLE 32) are used in marginal cases where the speaker wants to **make explicit that they are referring to a plural, not singular, referent** assigned to the salientive nominal class. Their use is illustrated in the elicited utterance in example (166). The default salientive forms (column S) can indiscriminately be used in reference to both singular or plural referents.

- (166) *Dǎǎtá tî-î yá chàu-’ākùǎ!*
- dǎǎ-tá*                      *tî = î*    *yá = chàu-’ākùǎ*  
 PROX.S-COLL      3S.SBJ.PCì = be      LK.M/S = 1SG-children

‘Here [lit. ‘These ...’] are my children!’ [EAR elic.]

Note that the exophoric demonstratives **do not inflect for nominal tense**, contrary to the endophoric demonstratives (see next section).

On the use of the exophoric non-locative demonstratives in the presentational construction, see SECTION 3.4.5.

### 3.4.3 Endophorics in /-mǎ/ ‘ANAPH’

As shown in TABLE 33, the endophoric non-locative demonstratives are obtained by adding the suffix *-mǎ* ‘ANAPH’ to the demonstrative roots listed in TABLE 30 above. The forms in TABLE 33 appear with the tone with which their second syllable, which contains the toneme /<sup>4/1</sup>/, is obligatorily realized (specifically the tones [⁴] or [¹], yielding the orthographic forms *-má* or *-mâ* respectively; on the surface realization of the toneme /<sup>4/1</sup>/, see SECTION 2.4.3). Note that when the various inflectional forms of the proximal non-locative demonstrative root are suffixed with *-mǎ*, their vowel /a/ turns into /o/ (yielding e.g. the non-salientive form *ñómá*, not \**ñámá*). The feminine and default salientive forms of the proximal endophoric non-locative demonstrative (*ñómâ* and *dô’êmá*) were obtained in elicitation and are otherwise unattested in my corpus.<sup>207</sup> Its specifically plural salientive form is unattested altogether. The specifically plural salientive forms of the medial and distal non-locative endophoric demonstratives, like their exophoric analogs (see beginning of the preceding section), obligatorily occur with the collective suffix /-tá/.

The **medial endophoric demonstrative is the default form used for participant anaphoric reference**, i.e. for reference to previously mentioned participants,

<sup>207</sup>In Cushillococha Tikuna, the proximal endophoric non-locative demonstrative is defective in that it lacks a feminine and a salientive inflectional form (Skilton 2019:16). The SMAT forms *ñómâ* and *dô’êmá*, although unattested in my corpus of spontaneous texts, do not appear to be elicitation artifacts, however. A reflex of the SMAT salientive form *dô’êmá* is minimally attested in the Tikuna variety spoken in Santa Rosa de Lima (Mariscal Ramón Castilla, Loreto, Peru, on the upper Loretoyacu river). See the phrase <doema dũã> ‘these people’ (whose likely SMAT reflex would be *dô’êmá dũã*) in the speech of the traditional storyteller Chetanükü (Gómez-Pulgarín 2012:139–140). Gómez adds that the word <doema> is ‘in another [unidentified] dialect *daemá*’ and translates to ‘these people’ (Sp. *esta gente, estas personas*; Gómez-Pulgarín 2012:140, note 147). That being said, it makes no doubt that *ñómâ* and *dô’êmá* are at best marginal forms in the system of SMAT demonstratives.

	F	M	N	S	(S.PL)	NS
PROX	( <i>ñó-mà</i> )	<i>dǒ-má</i>	<i>dô-mà</i>	( <i>dô'è-má</i> )	NA	<i>ñò-má</i>
MED	<i>ngé-mà</i>	<i>yǐ-má</i>	<i>yî-mà</i>	<i>yî'è-má</i>	( <i>yǎ-mà-tá</i> )	<i>ngē-mà</i>
DIST	<i>yé-mà</i>	<i>gǔ-má</i>	<i>gû-mà</i>	<i>gû'è-má</i>	( <i>gǔ-à-mà-tá</i> )	<i>yě-má</i>

TABLE 33. SMAT endophoric non-locative demonstratives

regardless of the temporal setting (non-pre-hodiernal-past or pre-hodiernal-past) of the processes referred to. Examples (167–168) illustrate the participant anaphoric use of the medial endophoric demonstrative in modifier syntactic position. Examples (169–170) illustrate its anaphoric use in head syntactic position.

(167) “*Nǎ nǎmá’a táyà-chǎgúēgú yá yǐmá dùù!*”

*nǎ*      *nǎ-má’a*    *tá=yà=chǎgúē-gú*      *yá=yǐ-má*  
 ASSERT?    3M-COM    4SBJ = AM = fish.with.poison-PL    LK.M/S = MED.M-ANAPH  
*dùù*  
 be.a.human

“Let’s go poison-fishing with that man [*i.e.* the one we’ve been talking about]!” [LAR D127]

(168) *Nūchànā-wě’ú ì gú’ú ì panorama ì yîmà ì ànè-àrū.*

*nū* = *chà* = *nā* = *wě-’ú*      *ì* = *gú-’ú*  
 3M/N/NS.ACC = 1SG.SBJ = 3M/N/NS.OBJ = show\SBJV-SUB    LK.NS = finish\SBJV-REL.NS  
*ì* = panorama    *ì* = *yî-mà*      *ì-ànè-àrū*  
 LK.NS = panorama    LK.NS = MED.N-ANAPH    building-space-GEN

‘[As a guide, I take tourists to the watchtower of Puerto Nariño.] I show them the whole panorama of that community.’ [JGS 99–100]

(169) *Nūkù-fǎ’ú yà ùtā? Yîmámá’a tánā-ǔ’ǔ.*

*nū* = *kù* = *fǎ-’ú*      *yà* = *ùtā*  
 3M/N/NS.ACC = 2SG.SBJ\SBJV = know\SBJV-SUB    LK.N/S = annatto.tree  
*yî-mà-má’a*      *tá* = *nā* = *ǔ-’ǔ*  
 MED.N-ANAPH-COM    3S.SBJ = 3M/N/NS.OBJ = make-mixture

‘Do you know annatto<sup>208</sup>? They mixed it [*i.e.* the poison they were preparing] with that [*i.e.* annatto].’ [IGS 342–343]

(170) *Ārīānà rù wí’á ġêkū ÿì-ĩ gá ngémà. Ī-ũũnè gá ngémà.*

*Ārīānà* = *rù* *wí’á* *ġê-kū* *ÿì=ĩ* *gá* = *ngé-mà*  
Ariana = TOP INDF be.a.woman-REL.F 3F.SBJ.PCì = be LK.PST = MED.F-ANAPH

*ĩ* = *ũũnè* *gá* = *ngé-mà*  
3F.SBJ = be.supernatural LK.PST = MED.F-ANAPH

‘[What is Ariana’s story?] – Ariana, she [lit. ‘that one’] was a woman. She [lit. ‘that one’] was supernatural.’ [IGV 284]

When the processes being referred to are located in the **pre-hodiernal past**, some speakers, older ones in particular, have a strong tendency to use the **distal endophoric demonstratives** instead to make it explicit, as shown in examples (171–172):

(171) [...] *tànā-yá’ú’ũ ā’a gá ġumà tũmààrũ ā’a quena* [...].

*tà* = *nā* = *yá’ú-’ũ* = *ā’a* *gà* = *ġú-mà*  
3S.SBJ\SBJV = 3M/N/NS.OBJ = take\SBJV-SUB = QUOT LK.N.PST = DIST.N-ANAPH

*tũ-mà-àrũ* = *ā’a* *quena*  
3S-ANAPH-GEN = QUOT flute

‘[...] he took his flute [lit. ‘that flute of his’, previously mentioned] [...].’ [LAR D158]

(172) *Ġú’è-má wâ’í tî-ĩ gá náwá pūrāākú’è* [...].

*ġú’è-má* *wâ’í* *tî=ĩ* *gá* = *ná-wá* *pūrāākú’è*  
DIST.S-ANAPH CONTR 3S.SBJ.PCì = be LK.N/S.PST = 3N/NS-ALOC work\SBJV-REL.S

‘[After referring to his father several times:] It was him [lit. ‘that one’] who worked there [...].’ [HGA 80]

This is not systematic, however, as these speakers **may use the medial endophoric demonstratives in the same contexts**. Example (173) was uttered by the same speaker, and stems from the same text, as (171) above. Although both utterances equally refer to pre-hodiernal past processes, participant anaphoric reference in (173) operates with a medial endophoric demonstrative (*yĩmá*), instead of a distal one as in (171) above (*ġumà*):

<sup>208</sup>*Bixa orellana*.



(173) *Táũ á'a pā'à ínàrũ-gàgũ'ũ gá <yí'èm...> yímá ómé á'a gá nú-gúchà'ũ'úchikũ.*

*táũ = á'a pā'à í = nà = rũ = gà-gũ-'ũ*  
 NEG = QUOT be.quick 3ALOC = 3M/N/NS.SBJ\SBJV = PCrũ = get.down-PL\SBJV-SUB

*gá = <yí'è-m...> yí-má ómé = á'a*  
 LK.F/M/S/NS.PST = MED.S- MED.M-ANAPH brown.woolly.monkey = QUOT

*gá = nú = gúchà'ũ-'úchikũ*  
 LK.F/M/S/NS.PST = 3M/N/NS.BEN = arouse.desire-genuinely\SBJV-REL.M

'These... these woolly monkeys he so wanted to hunt would not go down quickly.' [LAR D126]

Younger speakers regularly use the medial endophoric demonstratives for participant anaphoric reference in pre-hodiernal past contexts, as in (170) above. One of them (JSG) told me that the distal endophoric demonstratives sounded old-fashioned to him and were characteristic of the speech of the elders.

The participant anaphoric use of the medial and distal endophoric demonstratives in head position is often **semantically and pragmatically very similar to the use of the third person stressed pronouns**. This is indeed made indirectly perceptible by the non-literal translations of examples (170) and (172) above, where the SMAT endophoric demonstratives are rendered by pronominal English forms. The endophoric demonstratives are preferred—but not obligatory—for referring with an independent form to a previously established topic in cases where that topic is currently the most activated one (*i.e.* the last Given Topic activated, following Dik's (1997:309–338) terminology). This is the case in (170) and (172) above. In cases where that topic is no longer the most activated one, by contrast (*i.e.* for resuming a Given Topic after another Given Topic has been activated, in Dik's terminology), the stressed pronouns are regularly used instead. Thus, at the end of (305), a stressed pronoun (*tîmà*), rather than an endophoric demonstrative (*yí'émá* or *gú'émá*), is employed to reactivate the hunter as the main topic after the jaguar has been the main topic for a few seconds:

(174) [...] *yé'gúmá á'a tīyà-gē'ũ rù á'a tī-yú'gàchī'ũ á'a gá tîmà á'a.*

*yé'gúmá = á'a tī = yà = gē-'ũ*  
 ANAPH.CIRC.PST = QUOT 3S.ACC = PCī.3M/N/NS.SBJ\SBJV = drop\SBJV-SUB

*rù = á'a tī = yú'gàchī-'ũ = á'a*  
 and = QUOT 3S.SBJ.PCī\SBJV = jump-away\SBJV-SUB = QUOT

*gá = tî-mà = á'a*  
 LK.F/M/S/NS.PST = 3S-ANAPH = QUOT

‘[The jaguar fainted and] at that moment it released him [*i.e.* the man] and he [*i.e.* the man] jumped away.’ [LAR D162]

The non-salientive forms of the medial and distal endophoric demonstratives are also frequently used for **discourse deixis**, in reference to whole clauses or units of higher linguistic levels. Again, the medial endophoric can be used with that function in any context, while the distal one is specifically used in pre-hodiernal past contexts. The speaker enacted in (175) uses it to refer to a song that has just been sung by the addressee:

(175) “Ngēmà rù tǎu dōrā nî-î ì ngēmà wiyāē ì nágù kù-wiyāē’ú!”

*ngē-mà* = rù                      tǎu dōrā    nî = î                                      ì = *ngē-mà*  
 MED.NS-ANAPH = TOP    NEG    tell.lies    3M/N/NS.SBJ.PCì = be    LK.NS = MED.NS-ANAPH  
*wiyāē*    ì = nágù                      kù = wiyāē-’ú  
 sing            LK.NS = 3N/NS-PLOC    2SG.SBJ\SBJV = sing\SBJV-REL.NS

“‘[That story you’ve just sung actually happened to me.] This is not made-up, this song you’ve sung!’” [IGV 719]

In (176), the speaker refers to a way of making manioc beer that she has just described. Because that way of making manioc is attributed to a pre-hodiernal past temporal setting, she specifically employs the distal form *yēmá*.

(176) [...] *yēmáākù* nî-î < *gá...* > *gá nû’kúmákūmā*.

*yē-má-ākù*                      nî = î                                      < *gá* = ... >  
 DIST.NS-ANAPH-MAN    3M/N/NS.SBJ.PCì = be    LK.F/M/S/NS.PST =  
*gá* = nû’kúmá-kūmā  
 LK.F/M/S/NS.PST = past.time-custom

‘[Our ancestors chewed the manioc with which they made beer, because] such was the custom in ancient times.’ [LAR D343–344]

The same discourse deixis function is occasionally fulfilled by the non-salientive form of the proximal exophoric demonstrative (compare example (164) above).

The medial endophoric demonstrative is likely to additionally occur in uses that essentially correspond to the **recognitional use of demonstratives** discussed by *e.g.* Diessel, whereby the occurrence of a demonstrative “do[es] not have a referent in the preceding discourse or the surrounding situation”, but rather “indicate[s] that the hearer is able to **identify the referent based on specific shared knowledge**” (Diessel 1999:93, 105–109; boldface is mine). Such uses, which are attested

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in Cushillococha Tikuna (Skilton 2019:226–228), are not easily identified with certainty in actual contexts, however. Example (177), extracted from (T137), probably features a medial endophoric used in recognitional reference. A grandmother has challenged her two grandchildren to go to her swidden and cut down a specific tree of particularly large size, in the belief that she would get rid of them for some time. Hours (or days?) later, the two supernatural boys come back in triumph and tell their grandmother, who was certainly not expecting it, that they have succeeded in cutting down the tree. By referring to the tree by *ngēmà kúnētū*, lit. ‘that tree of yours’, including the medial endophoric /ngē-mà/ ‘MED.NS-ANAPH’, the boys are probably seeking to indicate to the addressee that she should be able to identify the tree in question (among all the referents that may be identified as her trees) based on some specific experience they share (in this case, based on the fact that she previously asked them to cut down a certain tree for her).

(177) *“Mārū nū-i̇, pà nô’é, tǒyà-wǎ-’ú̇ ì ngēmà kúnētū!”*

*mārū nū=i̇ pà=nô’é*  
PRF 3M/N/NS.SBJ.PCì = be VOC = old.woman

*tǒ=yà=wǎ-’ú̇ ì = [ngē-mà kú-nētū]*  
1PL.BEN = PCì.3F/M/N/NS.SBJ.SBJV = tip.over\SBJV-SUB LK.NS = MED.NS-ANAPH

2SG-plant

“That’s it, grandmother, we’ve had your tree [lit. ‘... that tree of yours ...’] fall down to the ground!” [LAR T137]

Possibly related to such recognitional uses are two uses of the medial endophoric where its exact semantic or pragmatic function is unclear, although it might still be vaguely deictic. Firstly, the medial endophoric often occurs as a **modifier of the filler words** *ákú* ‘what?.NS’ or its extended variant /ákú-’ú̇/ (what?.NS\SBJV-REL.NS) ‘what?’ (and their respective inflectional forms), as in the following example:

(178) *Ñyáchí, yîmà ákúnè-má’a... dǎ-tù-’ú̇-má’a nū-i̇ ì tānā-dǎ-é-’ú̇ [...].*

*ñyáchí [yî-mà ákú-nè-má’a] dǎ-tù-’ú̇-má’a*  
and MED.N-ANAPH what?.NS\SBJV-REL.N-COM whisk-COM

*nū=i̇ ì = tā = nā = dǎ-é-’ú̇*  
3M/N/NS.SBJ.PCì = be LK.NS = 1PL.SBJ = 3M/N/NS.OBJ = whip\SBJV-SUB

‘Then, we whip it with this thing, you know... [the speaker makes a gesture as though she were spinning a whisk between her hands and stops to think for a few seconds] with a whisk [...].’ [TVJ B475–477]

Such occurrences of the medial endophoric are likely derived from its recognitional uses in that they suggest that the speaker, who is having trouble recalling a word she wants to use, *wishes* the hearer were able to identify the referent themselves, although she is aware that they are not and keeps thinking until she finds the word she was trying to recall.<sup>209</sup>

Secondly and in a way that is similarly reminiscent of its recognitional uses, the medial endophoric is occasionally used to apparently indicate that a referent is previously known to the hearer, not by virtue of specific shared knowledge, but by virtue of “**general cultural information** shared by all members of the speech community” (Diessel 1999:106; emphasis is retained from the original text, boldface is mine). The medial endophoric may then modify an NP whose referent is already perfectly identifiable on its own, such as a noun referring to an animal species, as in the following example:

(179) *Ná-mũ wâè ì gǔ'úrú'ù'ú: ngùũ, ngēmà nǎkũ, kǒwú [...].*

*ná = mũ = wâè*

3M/N/NS.SBJ = be.several = from.the.outset

*ì = gǔ-úrú'ù-ú*

LK.NS = finish\SBJV-REL.NS-sort\SBJV-REL.NS

*ngùũ*

collared.peccary

[*ngē-mà*

MED.NS-ANAPH

*nǎkũ] kǒwú*

tapir deer

‘There had always been everything [in the jungle in ancient times]: collared peccaries, tapirs [lit. ‘that/the tapir’],<sup>210</sup> deers [...].’ [IGS 573–574]

Finally, the medial and distal non-locative endophoric demonstratives are also frequently used as what Diessel labels “**determinatives**” (1999:135–137). When used in this function, the endophorics do not “indicate a referent in the preceding discourse [*i.e.* endophoric reference] or speech situation [*i.e.* exophoric reference], nor [are they] used to activate private hearer old knowledge [*i.e.* recognitional reference]”; their function may be broadly defined instead as that of “mark[ing] the nominal head of a [restrictive] relative clause” (Diessel 1999:135; see *e.g.* English

<sup>209</sup>This use of the SMAT medial endophoric demonstrative is broadly comparable to the use of the Spanish masculine singular form of the proximal demonstrative *este* as a filler (Martín Zorraquino & Portolés Lázaro 1999:4199). Note, however, that the SMAT medial endophoric regularly inflects for nominal class in this function, while the fully grammaticalized Spanish filler *este* never does.

<sup>210</sup>Specifically *Tapirus terrestris*.

those in a phrase such as *those (citizens) who voted against the measure*). In this particular use, the endophorics **no longer have any deictic content but rather serve as a particular type of definite determiner**.<sup>211</sup> The endophorics may determine in this way both a relative clause that does not feature a head noun, as shown in examples (180–181), or one that does feature a head noun, as in (182). Just like in the other functions of the endophorics, the medial one is the default form while the distal one may be optionally used to explicitly signal that the utterance refers to pre-hodiernal past processes.

(180) *Ngěmà nūchàyà-wě'ú yá yímá renacomá'a nà-ūgúkū [...].*

*ngě-mà*                      *nū = chà = yà = wě-'ú*  
MED.ALOC-ANAPH    3M/N/NS.ACC = 1SG.SBJ\SBJV = AM = show\SBJV-SUB

*yá = [yí-má                      renaco-má'a    nà = ū-gú-kū]*  
LK.M = MED.M-ANAPH    tree.sp-COM            3M/N/NS.SBJ\SBJV = say-PL\SBJV-REL.M

‘And then I take them [*i.e.* tourists] to see what they call *renaco*<sup>212</sup> [*i.e.* a tree sp.] [...].’ [JGS 107–108]

(181) *Āmm, posillomàwá, wá'í yí'émá ñà'tūgú dāwēnù'è!*

*ām̄m*    *posillo-mà-wá*    *wá'í*    [*yí'è-má*    *ñà'tū-gú*    *dāwēnù-'è*]  
yeah    cup-cavity-ALOC    CONTR    MED.S-ANAPH    lower.part-PLOC    watch\SBJV-REL.S

‘[And then you’re going to put a red rubber band in it. – The cup?] – Yeah, in the cup, but the one that’s mouth down [*i.e.* not the other cup, which is mouth up].’ [RCA B18–19]

(182) *Ka yí'émá posillo ì dāu'nàgú dāwēnù'è ì mā tà-cauchito rosadoá'ú?*

*ka*    [*yí'è-má*    *posillo*    *ì = dāu'nà-gú*  
and    MED.S-ANAPH    cup            LK.NS = upper.part-PLOC

*dāwēnù-'è*] = ì                      *mā = tà = cauchito*                      *rosadoá-'ú*  
watch\SBJV-REL.S = CONTR.TOP    PRF = 3S.SBJ\SBJV = rubber.band    pink-POSS\SBJV-SUB

<sup>211</sup>A fine-grained analysis of the exact syntactic or semantic contribution of the SMAT endophorics in cases where they function as definite determiners is beyond the scope of this study. For analyses of the specific function of the so-called ‘pre-nominal definite determiner’ or ‘preadjectival article’ of standard Swedish (non-neuter *den*, neuter *det*, plural *de*), whose distribution appears to be very similar to that of the SMAT determinative endophorics, see Santelmann (1993) and Lohrmann (2011).

<sup>212</sup>In local Spanish. *Ficus sp.*?

‘And the cup that’s mouth up [*i.e.* not the other cup, which is mouth down], does it have a pink rubber band [in it] already?’ [RCA B45]

Note that the non-locative endophorics are **not obligatory in this function**. In the following example, where four different generic categories of criminals are mentioned and distinguished from one another by means of relative clauses, only the NPs referring to the first (*ngēmà máètā’ú* ‘the one who has committed a murder’) and the third (*ngēmà chí’ē’ú úgú’ú* ‘those who have done a wrong’) categories involve the use of a determinative endophoric demonstrative.

- (183) *Ngēmàkq nû-í <tà-re... > tûgùímá’a tī-dé’àngú’ú ná’a ñù’àkù ngēmà máètā’ú, ná’a ñù’àkù nà-pò’kú’ú ngítq’á’ú, ná’a ñù’àkù nà-pò’kú’ú... eh... ngēmà chí’ē’ú úgú’ú, ná’a ñù’àkù <nà-... > nà-pò’kú’ú āgākū yá diērùkq ngíkū [...].*

*ngē-mà-kq*                      *nû=í*                      < *tà= re... >*                      *tû-gù-má’a*  
MED.NS-ANAPH-CAUSE    3M/N/NS.SBJ.PCì = be    3S.SBJ\SBJV =                      3S-REFL-COM

*tī= dé’-àngú’-ú*    *ná’a ñù’àkù*                      [*ngē-mà*  
3S.SBJ.PCì\SBJV = speak-PL\SBJV-SUB    CONJ    how?                      MED.NS-ANAPH

*má-ètā-’ú*]    *ná’a ñù’àkù nà= pò’kú’-ú*  
kill.SG-ANTIPL\SBJV-REL.NS    CONJ    how?                      3M/N/NS.SBJ\SBJV = punish\SBJV-SUB

*ngít-tq’á-’ú*    *ná’a ñù’àkù*  
steal-with.a.tendency\SBJV-REL.NS    CONJ    how?

*nà= pò’kú-’ú*    [*ngē-mà*                      *chí’ē-’ú*  
3M/N/NS.SBJ\SBJV = punish\SBJV-SUB    MED.NS-ANAPH    be.bad\SBJV-REL.NS

*ú-gú’-ú*]    *ná’a ñù’àkù <nà= ... >*  
make-PL\SBJV-REL.NS    CONJ    how?                      3M/N/NS.SBJ\SBJV =

*nà= pò’kú-è-’ú*    *āgākū yá= diērù-kq*  
3M/N/NS.SBJ\SBJV = punish-INTR.PL?\SBJV-SUB    leader                      LK.M/N/S = money-CAUSE

*ngíkū*    [...].  
steal\SBJV-REL.M

‘That’s why they mee... they discuss how the one who has committed a murder, how a thief should be punished, how... uh... those who have done a wrong should be punished, how [community] leaders who have stolen money should be punished [...].’ [IGV 210–215]

Interestingly, the use of the SMAT endophorics as definite determiners is not limited to NPs modified by a relative clause, but may also **extend to NPs modified by other modifiers** such as the numerals, as in example (184), or the modifier independent noun ‘other’, as in (185).

(184) *M̂mm, yí'è-má tǎ're dāu'nàgùámá tá-dǎwēnū.*

*m̂mm yí'è-má tǎ're dāu'nà-gù-ámá tá = dǎwēnū*  
 yeah MED.S-ANAPH two upper.part-PLOC-DIR 3S.SBJ = watch

‘[Are they mouth up?] – Yeah, both [lit. ‘... the two ...’] are mouth up.’  
 [RCA C43]

(185) *Ngēmà tòwǎ ì tò ì azul'ú, tògū'è posillowǎ!*

*ngē-mà tò-wǎ = ì tò ì = azul-'ú tògū'è*  
 MED.NS-ANAPH other.NS-ALOC = CONTR.TOP other.NS LK.NS = blue-REL.NS other.S  
*posillo-wǎ*  
 cup-ALOC

‘[Put one black rubber band inside the cup that’s mouth up! – Okay!] –  
 And in the other one, [put] the other blue one [*i.e.* rubber band], in the  
 other cup!’ [JCA E61–62]

The proximal endophoric demonstrative is rare and mostly used by older speakers. In most of its occurrences, it modifies an NP whose referent is a **spatial or temporal frame in which the utterance situation is implied to be included**, yielding phrases with meanings such as ‘this year’, ‘this week’, or ‘this house [in which we currently are]’. It is especially frequent in collocation with the bound noun /-àné/ ‘space’ (as /ñò-má nâ-àné/ ‘PROX.NS-ANAPH3N/NS-space’, or more rarely /ñò-má-àné/ ‘PROX.NS-ANAPH-space’), with which it typically means ‘this world’ or ‘this land’, as in example (186).

(186) [...] *mārū chà-veinticinco añoǵgù mé'e gá ñómáànéwǎ chà-ú'ú.*

*mārū chà = veinticinco año-ǵ-gù = mé'e*  
 PRF 1SG.SBJ\SBJV = twenty.five year-POSS-CIRC = DUB  
*gá = ñò-má-àné-wǎ chà = ú-'ú*  
 LK.F/M/NS.PST = PROX.NS-ANAPH-space-ALOC 1SG.SBJ\SBJV = go.SG\SBJV-SUB

‘[...] I came to this land [with an imprecise gesture towards himself with his whole hand] when I was twenty-five, I guess.’ [HGA 26]

This use of the SMAT proximal endophoric demonstrative essentially corresponds to what Fillmore (1975:259–260) has called the “**symbolic use**” of the demonstratives (a subtype of their *exophoric* use, according to Diessel), which only “involves activating knowledge about the communicative situation” itself, and in particular about the concrete, spatio-temporal aspects of that situation, for the correct identification of the referent (Diessel 1999:94–95). The combination of the proximal

endophoric *ñòmá* with the suffix (or bound noun?) /-ùkú'ù/ 'time', yielding the form *ñòmáùkú'ù* 'these days', relates to this function of the proximal endophoric demonstrative. See also examples (T15), (T17), and (T85) for uses of *ñòmá* in head syntactic position in association with the relational noun /-'ù/ 'STATE', yielding the meaning 'in this state [in which one of us is while we're talking]'.

In this function, however, the proximal endophoric demonstrative is in most cases **replaced by the proximal exophoric in younger speakers**, as in the following example, where the proximal exophoric *ñòmá* would have been equally correct and would have conveyed the same meaning (see also (159) above, where the proximal exophoric *dòmà* could probably have been used instead of the proximal exophoric *dàà*):

(187) [...] *ñumá* ì *ñàà* mundowá *chā*-sufre ì *chòmà*.

*ñumá* = ì                      *ñà-à*                      mundo-wá      *chā* = sufre  
present.time = CONTR.TOP   PROX.NS-EXO   world-ALOC   1SG.SBJ = suffer

ì = *chò-mà*  
LK.NS = 1SG-ANAPH

'[...] today I'm suffering in this world [with an imprecise gesture towards himself with his whole hand].' [ANO1 166]

Certain occurrences of the proximal endophoric demonstrative **do not appear to quite correspond to this "symbolic use", however**, as in examples (188–189). It is unclear what its exact semantic and pragmatic value is in these rare occurrences. The discourse contexts of (188) and (189) would rather have led to expect a medial or distal endophoric demonstrative with an ordinary anaphoric function, instead of a proximal endophoric, since the referents in question have been previously established as topics.

(188) [...] *yemáàkù* *tūnáyāē'é'e*, *ná'a* *tāu* *ñómawá* ì-*chībū'ú* [...].

*yē-má-àkù*                      *tū* = *ná* = *yā-ē-é'e*                      *ná'a*      *tāu*  
DIST.NS-ANAPH-MAN   4ACC = 3M/N/NS.SBJ = grow-INTR.PL-CAUS   CONJ   NEG

*ñò-má-wá*                      ì = *chībū-ú*  
PROX.NS-ANAPH-ALOC   PCØ.SBJV = eat\SBJV-SUB

'[...] that's what [Yoi, who created us,] taught us to do [lit. 'he brought us up like that'], not to eat in this thing [*i.e.* in plates] [...].' [IGS 553–554]

(189) [...] *nū-í* *gá* *ñù'ākù* *yì-ì'ú* *gá* *nà-gú'ú* *gá* *ñòmá* *dù'ú'ú* *gá* *nú'kú'má'ú'ú*.



### 3. THE NOMINAL PHRASE

*nû.ĩ* *gá = nû'ākù* *yì = ì-ũ*  
 CONJ LK.F/M/S/NS.PST = how? PCì.3F/M/N/NS.SBJ.SBJV = be\SBJV-SUB

*gá = nà = gú-ũ*  
 LK.F/M/S/NS.PST = 3M/N/NS.SBJ\SBJV = finish\SBJV-SUB

*gá = ñô-má* *dùũ-ũ*  
 LK.F/M/S/NS.PST = PROX.NS-ANAPH be.a.human\SBJV-REL.NS

*gá = nú'kú-má-ũ-ũ*  
 LK.F/M/S/NS.PST = past.time-TEMP.PRED\SBJV-REL.NS

‘[This is the version we know of the story of] how these ancient people went extinct.’ [LAR D86]

On a **non-demonstrative grammaticalized use** of the proximal endophoric *ñômá* as a near-preposition meaning ‘like’, see SECTIONS 3.6.3 (*ñômá* may also occasionally function as a near-conjunction meaning ‘while, as long as’).

Like their exophoric analogs discussed at the end of the preceding section, the specifically plural salientive forms of the endophoric demonstratives (column S.PL in TABLE 33) are used in marginal cases where the speaker wants to **make explicit that they are referring to a plural, not singular, referent** assigned to the salientive nominal class. The default salientive forms (column S) can indiscriminately be used in reference to both singular or plural referents. An occurrence of the specifically plural salientive distal endophoric is provided in example (190). Because at this particular moment of the conversation, both the speaker’s mother (a singular referent assigned to the salientive nominal class) and her brothers (a plural referent equally assigned to salientive) are highly activated topics, she uses a specifically plural salientive form (specifically, in this pre-hodiernal past context, the distal *gũàmátá*) to make clear that she is referring to the latter. In such a context, the corresponding default salientive form (*gú'émá*) could have been misinterpreted as referring to her mother (although in this particular case, the plurality of the referent is redundantly encoded by the plural marker /-gú/).

(190) *Núàkijĩgú chĩre tũ-ĩ gá gũàmátá, núà Putumayokijĩgú.*

*nú-à-kijĩ-gú = chĩre* *tũ = ì* *gá = gũ-à-mà-tá*  
 PROX.ALOC-EXO-origin-PL = APRF 3S.SBJ.PCì = be LK.N/S.PST = PROX.S-ANAPH-COLL

*nú-à* *Putumayo-kijĩ-gú*  
 PROX.ALOC-EXO Putumayo-origin-PL

‘They were from this area over there originally, from the Putumayo, in this direction [while roughly pointing to the north].’ [GRA 133–134]

See (T95) for another occurrence of the same form *gũàmàtá*, where it is similarly employed to unambiguously refer, among two highly activated participant topics equally assigned to salientive (Ngutapa’s children and Ngutapa’s mother), to the one that is plural.<sup>213</sup>

### 3.4.4 Non-locative medial and distal endophorics in /-mǎ/ ‘ANAPH’ used as existential predicative phrases

As shown in the preceding section, in most of their occurrences in discourse, the endophoric non-locative demonstratives are found within NPs, in either modifier or head syntactic position, which makes them appear to be rather nominal in nature. However, they additionally display the intriguing property of being **able to be directly inflected just like a predicative phrase** (specifically a PCØ one) without the addition of any morphological material, a morphosyntactic property that is not shared by most nominal words or phrases. The resulting intransitive construction is employed for existential predication, and more specifically for what Czinglar labels “**pure existential**” predication, as opposed to “locative existential” predication (2002). By contrast with “locative existential” constructions (as *e.g.* English *There is a wolf at the door*), “pure existential” constructions, such as the German construction *es gibt X*, “cannot denote accidental and temporary presence at a certain location” (Czinglar 2002:86). They are used instead to express **sheer existence** (*Are there angels?*, compare example (191)) or, “when occurring with a locative expression, [to] express a [**generic, stable, or**] **habitual relation between the object and the location**” (*There are horses in Canada*, compare (192); *There is a pond in my garden*, compare (193); Czinglar 2002:86, 88, 94, 96).

(191) *Nūtāyà-wegú’ú ÿkú <ì... > ná’a* tres aspectos diferentes *ngē-mā-’ú* [...].

<sup>213</sup>This rare form is attested in a similar context in the Tikuna variety spoken by Ngematücü aka Pedro Inácio Pinheiro (on whom see note 295). In an utterance referring to past events within which he mentions both his wife and his wife’s uncles (*i.e.* two referents normally assigned to salientive), he refers to the latter, a plural referent, as **<guamata tchorü tchiüra[...]** *tüma arü tiagü* > (boldface is mine) ‘my wife’s... her uncles [lit. ‘these uncles of my wife... of her’]’ (which most likely corresponds to SMAT *gũàmàtá <chó’rũ chũrà... > tũmààrũ tiogú*; Pinheiro et al. 2014:38–39).

### 3. THE NOMINAL PHRASE

*nū̄ = tā = yà = wẹ-gú-’ú̄* *úkú̄* <ì = ... >  
 3M/N/NS.ACC = 1PL.SBJ = AM.3M/N/NS.OBJ = show-PL\SBJV-SUB I.mean LK.NS

*ná’a tres aspectos diferentes ngē-mā-’ú̄*  
 CONJ three aspects different MED.NS-ANAPH\SBJV-SUB

‘Like, we go to show them the... that there’s three different aspects [of particular interest regarding the primary jungle] [...].’ [JGS 227–228]

(192) *Ná-ngēmàchíre ì nábù’ākù rù ù-chí’ègúmārè’ú̄.*

*ná = ngē-mà-chíre* *ì = ná-bù-’ākù* *rù*  
 3M/N/NS.SBJ = MED.NS-ANAPH-admittedly LK.NS = 3N/NS-edible.plant-child and

*ĩ = ì = chí’è-gú-mārè-’ú̄*  
 3ALOC = PCĪ = be.bad-PL-just\SBJV-REL.NS

‘[A fallow swidden is a swidden that no longer yields fruit.] There is tiny products [*i.e.* in such swiddens] but rather bad ones.’ [LAR D385]

(193) *Mā chíre kú ná-gûmà.*

*mā = chíre = kú* *ná = gû-mà*  
 PRF = APRF = I.mean 3M/N/NS.SBJ = DIST.N-ANAPH

‘[That’s why we didn’t study.] Although there was one already [*i.e.* a school in the community].’ [GRA 164]

Just like the German construction *es gibt X* (Czinger 2002:119–120), the SMAT “pure existential” construction may additionally be employed to predicate the **existence, whether generic or temporary, of events** (as opposed to entities) at a given location, as shown in (194):

(194) *Núà gá... tà encuentro gá ná-ngēmà.*

*nú-à = gá = tà* encuentro = gá *ná = ngē-mà*  
 PROX.ALOC-EXO = PST = ADD meeting = PST 3M/N/NS.SBJ = MED.NS-ANAPH

‘Here... too there was meetings.’ [JSG A220–221]

Finally, it may occasionally be used in **generic or habitual possessive predication**, as in (195):

(195) *(Dâà tô’rī ìànèwá) tótá-yí’è-má yá dīērù.*

*(dâ-à tô-’rī ì-ànè-wá)* *tó = tá = yí’è-má*  
 PROX.N-EXO 2PL-GEN building-space-ALOC 1PL.BEN = 3S.SBJ = MED.S-ANAPH

*yá = dīērù*  
 LK.M/N/S = money

‘(In this village,) we have money [lit. ‘..., there’s money for us.].’ [JSG elic.]

Note that by contrast to existential constructions in other languages, including the German construction *es gibt X* and the English construction *There is X*, the **SMAT pure existential construction is not impersonal**. In this construction, the entity or event whose existence is being predicated seems to display all the ordinary properties of subjects in SMAT. The subject marking on the inflected predicative phrase (*i.e.* the subject proclitic, whenever present) agrees for nominal class with the NP that denotes that entity or event (contrast the salientive third person subject index /tá= / in (195) with the subject index /ná= / ‘3M/N/NS.SBJ’ in (192–194)). Furthermore, the **endophoric demonstrative itself also agrees for nominal class** with that NP. Finally, while the medial endophoric is available in this construction in any context, whether past or non-past (compare (192) and (194)), the distal endophoric may be specifically used to convey that the predication applies to a pre-hodiernal past context.

Thus, in example (193), the subject proclitic /ná= / ‘3M/N/NS.SBJ’ agrees for nominal class with the participant it refers to, namely a school, *i.e.* a participant assigned to the neuter nominal class. The neuter form of the endophoric demonstrative /gû-mà/ ‘DIST.N-ANAPH’ is also selected for, again in agreement with the nominal class of the subject. Finally, in order to encode explicitly that the predication applies to a remote past, the distal endophoric is employed instead of the medial endophoric.

The semantically bleached word *ngēmà’ú* ‘thing’ is likely to have arisen as a lexicalized subject relativization derived from the clause /ná=ngē-mà/ (3M/N/NS.SBJ = MED.NS-ANAPH) ‘there is’, literally meaning ‘what there is’ or ‘existing [thing]’.

### 3.4.5 Presentational construction involving the non-locative demonstratives

Following Lambrecht’s terminology, I call (exophoric) “**presentational construction**” (called “presentative construction” in Skilton 2019:85–86) a SMAT construction that yields meanings equivalent to English *Here/There is X!* and is prototypically used “to call the attention of an addressee to the hitherto unnoticed presence of some person or thing in the speech setting” (Lambrecht 1994:39–43). The kind of reference involved in this construction is exophoric inasmuch as it always intro-

duces a referent from the text-external world (while Lambrecht also discusses the existence of presentational constructions that introduce entities that are not present in the speech setting; 1994:39, 177–181).

This construction involves a **non-locative demonstrative functioning as the predicative complement of the verb *î* ‘be’**. In most cases, the subject is syntactically present, in which case it always follows the verb *î*. Note that the latter, when inflected in the Indicative Inflectional Type, may be omitted (as in (160) and (200); it cannot be omitted, by contrast, when it is inflected in the Subjunctive Inflectional Type, as in (199)), as is regularly the case when it occurs as the main verb of a clause. This construction may be summarized as follows:

NON-LOCATIVE.DEM (3SBJ = be) (LK = NP<sub>SBJ</sub>)

In most cases, the non-locative demonstrative employed in this construction is an **exophoric demonstrative in /-à/ ‘EXO’** (see SECTION 3.4.2). The three grammatical degrees of distance of the demonstratives (PROX, MED, DIST) then take their regular physical range interpretation. Example (196) illustrates the case of a presentational construction involving a **proximal exophoric non-locative demonstrative**: the referent introduced is located in the very hand of the speaker (see (160) above and (T18) for additional cases of proximal presentational construction).

(196) “*Dâ`è tî-î yà kû`rû propina rû siga adelante!*” *ñâgû`û châ`û.*

*dâ`è*    *tî=î*                    *yà=kû`rû*            *propina rû*    *sigá*    *adelante*  
 PROX.NS    3S.SBJ.PCì = be    LK.N/S = 2SG-GEN    tip                    and go.on forward

*ñâ-gû`û*                    *châ`û*  
 do.thus-PL\SBJV-SUB    1SG-ACC

‘[And they gave me money.] “Here’s a tip for you [with a gesture as if he were taking something from the pocket of his pants], keep going!” they told me.’ [JGS 452–453]

A case of presentational construction involving a **medial exophoric demonstrative** is provided in (197): the referent introduced is located at a short distance from both speaker and hearer.

(197) *Yâ nî-î yá ípátâ!*

*yî-â*                    *nî=î*                    *yá=í-pátâ*  
 MED.N-EXO    3M/N/NS.SBJ.PCì = be    LK.M/N/S = building-house

‘Here [lit. ‘There ...’] is the house [*i.e.* at a short distance]!’ [JSG elic.]

Finally, a case of presentational construction involving a **distal exophoric** demonstrative is provided in (198): the referent introduced is coming from far away from both speaker and hearers. Note that in this example the distance implied is emphasized by prosodic means, specifically through the lengthening of the stressed syllable of the distal demonstrative.

(198) “*Gûuu’è tî=î yà táé rù ngémà nētá-ú rù tá-gê’chírù!*”

*gû’è*    *tî=î*                      *yà=tá-é*                      *rù ngé-mà*  
 DIST.S    3S.SBJ.PCì = be    LK.N/S = 4-mother    and    MED.ALOC-ANAPH  
*né=tá=ú*                                      *rù tá=gê-’chírù*  
 CTRPET.3ALOC = 3S.SBJ = go.SG    and    3S.SBJ = not.have-clothes

“‘There comes our mother, faaar away [lit. ‘Theeere is our mother, coming from the distance: ...’]: she’s naked!’” [IGS 115]

In some cases, presentational constructions involving an exophoric non-locative demonstrative seem to convey a **locational meaning** (*X is here.*) instead of fulfilling a genuinely presentational function (*Here is X!*). The speaker in (199) has just found that the heap of corn that she asked her daughter-in-law to make beer with this morning is still in the exact same place when she comes back home in the afternoon. The demonstrative *dâà* here is probably better interpreted as a locational predicate.

(199) “*Nǎ nòtúkámá nî=î chàunē’útàgú kùrū-áú’ú kǎ dâà tàà yì-ì’ú yá chàwú!*” *ñâ’ú.*

*nǎ*    *nòtúkámá*    *nî=î*                                      *chàunē-’útà-gú*  
 ASSERT    vain.attempt    3M/N/NS.SBJ.PCì = be    1SG-son-immediate.vicinity-PLOC  
*kù=rū=áú-’ú*                                      *kǎ*    *dâ-à=tàà*  
 2SG.SBJ\SBJV = PCrú = stay.SG\SBJV-SUB    so.that    PROX.N-EXO = itself  
*yì=ì-’ú*    *yá=chàwú*  
 PCì.3F/M/N/NS.SBJ.SBJV = be\SBJV-SUB    LK.M/N/S = corn  
*ñâ-’ú*  
 do.thus.3M/N/NS.SBJ.SBJV-SUB

‘[A mother-in-law to her daughter-in-law who has apparently not made beer with the corn as she was asked to do:] “Come on, you’re staying with my son in vain with the corn still being here [*i.e.* I won’t accept you if you don’t work]!” she said.’ [JSG B253–255]

Interestingly, the non-locative demonstrative employed in the presentational construction may also be a **medial endophoric demonstrative in /-mǎ/** (see SECTION 3.4.3). The medial endophoric is used in cases where, for some reason, the referent introduced, **although present in the speech setting, cannot be identified by pointing at it**, *i.e.* in cases where it is not accessible to the visual perception of speaker or hearer (or both of them). In example (200), the speaker is shouting from a distance to his addressees, who have just stolen his axe and are running away with it. The referent introduced by the presentational construction, specifically the axe, is therefore not visible to the speaker and cannot be pointed at, although it is visible to the hearer (see (593) for a parallel example where the item stolen from the speaker is a plantain offshoot).

(200) “Ngémà í chò’rū pětā-pětà rù ngímá’a pī-ǔgúànē!”

*ngé-mà*      *í = chò-’rū*      *pětā.pětà rù ngí-má’a*  
 MED.F-ANAPH    LK.F = 1SG-GEN    axe                      and    3F-COM

*pī = ǔ-gú-ànē*

2PL.SBJ.PCĪ.SBJV = make-PL-space\SBJV

“‘There you have my axe: open fields with it!’” [LAR E66]

In (201), the mythical figures Yoi and Ipi are hearing characteristic noises in the distance, from which one of them deduces that the creature that ate up their father must be finally arriving. The referent introduced is invisible to both speaker and hearer, although physically present.

(201) “Ngēmà mā nū-ĩ ì tò’rū ūwànū rù ǎ nēná-ú!”

*ngē-mà = mā*                      *nū = ĩ*                      *ì = tò-’rū*      *ūwànū rù*  
 MED.NS-ANAPH = precisely    3M/N/NS.SBJ.PCĪ = be    LK.NS = 4-GEN    enemy    and

*ǎ*                      *nē = ná = ú*

MED.ALOC.ANAPH    CTRPET.3ALOC = 3M/N/NS.SBJ = go.SG

“‘Here comes our very enemy [lit. ‘There is our very enemy, coming from the distance!’]!’” [LAR C473]

In (202), finally, the speaker (located in the interfluvial Tikuna community of Buenos Aires) is most likely addressing her message to the hearer (located in San Martín de Amacayacu) over the radio. At utterance time, the hearer (and possibly also the speaker) cannot see the referent being introduced (the hearer’s brother), although the latter is considered by the speaker as present, in a broad sense, in this far from prototypical speech setting.

(202) “Yĩmá tá nũ-ĩ yá kúéne’e rù kùgù’ùtawá tá nũ-ĩ ì kùnā-gà’ũ!” ñátàgù’ũ.

yĩ-má = tá                      nũ = ĩ                      yá = kú-éne’e                      rù  
 MED.M-ANAPH = FUT    3M/N/NS.SBJ.PCì = be    LK.M = 2SG-brother    and

kù-gù-’ùtā-wá = tá                      nũ = ĩ  
 2SG-REFL-immediate.vicinity-ALOC = FUT    3M/N/NS.SBJ.PCì = be

ì = kù = nā = gà-’ũ  
 LK.NS = 2SG.SBJ\SBJV = 3M/N/NS.OBJ = lead\SBJV-SUB

ñá-tā-gù-’ũ  
 do.thus-3S.SBJ\SBJV-do.thus-SUB

“Here’s your brother coming: you’ll take him with you at your home!” she said.’ [JGS 747]

The proximal and distal endophoric non-locative demonstratives do not occur in the presentational construction in my data.<sup>214</sup>

<sup>214</sup>Interestingly, however, the proximal endophorics—at least—are probably able to occur in presentational constructions in Cushillococha Tikuna, where they possibly imply that the referent introduced is especially close to the deictic center although it is not visible. This is suggested by the forms <ñō<sup>2</sup>ma<sup>2</sup>ma<sup>3</sup>> (whose likely SMAT reflex would be /ñō-mā = mā/ ‘MED.NS-ANAPH = precisely’) and <do<sup>23</sup>ma<sup>4</sup>ma<sup>2</sup>> (SMAT /dô-mā = mā/ ‘MED.N-ANAPH = precisely’) recorded by Anderson & Anderson (2016:31, 197). These forms are defined by the authors as ‘to be coming, to be approaching’, with the former applying to ‘a dangerous animal or a dangerous person’ (*i.e.* to referents typically assigned to the non-salientive nominal class) and the latter applying to a ‘motor boat, [a] motor-bike, [a] car, [or a] plane’ (*i.e.* to referents typically assigned to the neuter nominal class). The most plausible interpretation of this unusual translation of nominal forms by verbal phrases is that the authors observed them employed in presentational constructions where they actually meant ‘Here it is [very close to us although we don’t see it]!’ (with ‘it’ referring to a threatening entity or to a vehicle, respectively). If this interpretation of Anderson & Anderson’s (2016) data is correct, then it is possible that the proximal, and perhaps also the distal, endophorics are also able to occur in presentational constructions in SMAT, potentially with pragmatic implications of particular proximity or remoteness of the referent introduced with respect to the deictic center, who does not have visual perception of that referent. This interesting hypothesis (which would imply that some Tikuna varieties have grammatical means in at least one construction to refer exophorically to invisible physical entities and simultaneously specify whether that invisible entity is located especially close to or far away from the deictic center), certainly a fragile one at this stage, could be easily confirmed or invalidated by further research. Note that it is not incompatible, in any case, with Skilton’s (2019) demonstration that the Cushillococha Tikuna reflex of SMAT’s medial endophoric, when used exophorically in reference to invisible entities, may refer to entities located at any distance from the deictic center, including on their own body (*e.g.* in reference to a speaker’s tooth) or beyond the horizon (*e.g.* a remote town). It could be that among the endophorics, the medial one functions as the default choice in invisible exophoric uses, without however preventing occasional uses of the



### 3.4.6 Non-locative demonstrative roots bearing a “focal” suffix

Most bound morphemes that may be attached to nominal constituents are normally bound to whole, well-formed NPs that could equally well stand on their own in discourse. As a consequence, such bound morphemes may **normally only be attached to a whole exophoric or endophoric demonstrative**, *i.e.* to a morphologically complex form made of a demonstrative root augmented with either /-à/ ‘EXO’ or /-mǎ/ ‘ANAPH’, and not to a demonstrative root alone, which cannot constitute a well-formed NP on its own.

The “focal” suffixes, however, are usually—but not always obligatorily—**attached directly to a demonstrative root** in cases where that demonstrative serves as a syntactic head (*i.e.* not as a modifier) and has a syntactic function that corresponds to the zero case (*i.e.* a syntactic function that does not require any specific marking). In other words, a non-locative demonstrative such as the non-salientive endophoric /ngē-mà/ (MED.NS-ANAPH) ‘that one’, when combined with the “focal” suffix /-’íkǎ/ ‘only’, may yield either /ngē-mà-’íkǎ/ (MED.NS-ANAPH-only) ‘only that one’ or the less expected form /ngē-’íkǎ/ (MED.NS-only) ‘only that one’ (but /ngē-mà-má’a-’íkǎ/ (MED.NS-ANAPH-COM-only) ‘only with that one’, not \*/ngē-má’a-’íkǎ/, given the presence of syntactic function marking; and /ngē-mà chǐnú-’íkǎ/ (MED.NS-ANAPH pineapple-only) ‘only that pineapple’, not \*/ngē chǐnú-’íkǎ/, due to the modifying function of the demonstrative). These two options apparently stand in free variation, although the latter (DEM.ROOT-“FOCAL”.SUFFIX) seems to be preferred.

In my corpus, the only **widely productive “focal” suffixes attested directly on a demonstrative root** are /-’íkǎ/ ‘only’, as in examples (203–204) (see also (T44)), and /-’írà/ ‘first’, as in (205). Interestingly, in (204), the demonstrative *ngē(’íkǎ)* ‘(only) that’ is left in the zero case and its syntactic function as an accusative complement of the verb *ū* ‘say’ is marked by means of a co-referent accusative index on that verb (/nū = / ‘3M/N/NS.ACC’; lit. ‘this only I say it with you’) instead of being marked by means of an accusative suffix on the demonstrative itself (which would presumably have yielded /ngē-mà-’ū-’íkǎ/ (MED.NS-ANAPH-ACC-only), with the suffix /-mǎ/ ‘ANAPH’, due to the presence of syntactic function marking).

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proximal or distal ones instead in cases where speakers intend to specify the distance range that separates the referent from the deictic center.

(203) *Yì'è'íká tî-î<sup>o</sup> gá ngî'rû bolsillo-wá queda'è.*

*yì'è-'íká* *tî=î<sup>o</sup>* *gá=ngî-'rû* *bolsillo-wá* *queda-'è*  
 MED.S-only 3S.SBJ.PCÌ=be LK.PST=3F-GEN pocket-ALOC remain\SBJV-REL.S

‘[Before dropping her wallet, she had taken 50,000 pesos from it.] That’s all that was left [lit. ‘It’s only that that remained ...’] in her pocket.’ [JSG B464]

(204) *Mārū, ngē'íká kúmá'a nūchî-ū rù chō'rū pūrākúwá tá chā-ú!*

*mārū,* *ngē-'íká* *kú-má'a* *nū=chî=ū* *rù* *chō-'rū*  
 PRF MED.NS-only 2SG-COM 3M/N/NS.ACC=1SG.SBJ.PCÌ=say and 1SG-GEN

*pūrākú-wá=tá* *chā=ú*  
 work-ALOC=FUT 1SG.SBJ=go.SG

‘[At the end of an interview:] That’s it, I’ll stop here [lit. ‘I tell you only this, ...’], I’ll go to work now.’ [GRA 311–312]

(205) *Ngē'írà tá tã-ǔgú [...].*

*ngē-'írà=tá* *tã=ǔ-gú*  
 MED.NS-first=FUT 1PL.SBJ=make-PL

‘[We plan to hold a ritual between ourselves.] We’ll do that first [and then we’ll hold another one for tourists.]’ [IGV 235]

The “focal” suffixes /-rù/ ‘as.for.it’ and /-'rû/ ‘in.peace’, of much more restricted use, are for their part only attested on non-locative demonstrative roots in my data (*i.e.* not on pronominal and locative demonstrative roots, nor on any well-formed NP being able to stand on its own, including whole endo- or exophoric demonstratives). The former mostly survives, in fact, in the **invariable and synchronically unanalyzable discourse connector ngērù** ‘as.for.it’ (see example (206)), which is in practice often left unstressed and realized as *ērù* (as in (207)). This discourse connector essentially signals a **shift of topic**, often involving a comparison or a contrast with a previous topic, and immediately follows the new main topic (which may already be marked by the clitic /=rù/ ‘TOP’, as in (207)).<sup>215</sup>

(206) *Áh! Mhhh, chagraārū ǔ ngērū, tōmà nî-î tikūnà tū-ǔgú'ú rù, nūwá [...].*

<sup>215</sup>The “focal” suffix /-rù/ ‘as.for.it’ is likely cognate with the topic marker /=rù/, and possibly also with the conjunction *rù* ‘and’, although the exact diachronic relationships between these three morphemes are unclear.

*áh mhhh chagra-àrū ũ ngērù tō-mà nî.ĩ tikūnà*  
 oh mhhh swidden-GEN make **as.for.it** 1PL-ANAPH CONJ Tikuna

*tū = i-gū-’ū = rù nūwǎ*  
 1PL.SBJ.PCÌ.SBJV = be-PL\SBJV-SUB = TOP well.M/N/NS

‘[How is the process of swidden making?] – Oh! Mhhh, swidden making, well, we Tikunas [...].’ [LAR D221–223]

(207) *Chòmà rù ērù <tāu... > tǎ’ú’ǔ chǎná-tǎ’u ērú chā-completo ì chòmà [...].*

*chò-mà = rù ērù <tāu... > tǎ’ú’ǔ*  
 1SG-ANAPH = TOP **as.for.it** NEG be.absent\SBJV-REL.NS

*chǎ = ná = tǎ’u ērú chā = completo ì = chòmà*  
 1SG.BEN = 3M/N/NS.SBJ = be.absent because 1SG.SBJ = complete LK.NS = 1SG-ANAPH

‘[My brother is disabled in his hands.] As for myself, I don’t... I don’t lack anything, I’m complete [*i.e.* fully able-bodied] [...].’ [JGS 727]

This discourse connector can be considered as a lexicalized form of the synonymous morphologically complex form /ngē-rù/ ‘MED.NS-as.for.it’. Such **synchronically analyzable forms made of a demonstrative root—whether medial or distal—regularly inflecting for nominal class plus the “focal” suffix /-rù/ ‘as.for.it’ still exist**, although they are much rarer than the lexicalized invariable form *ngērù/ērù* ‘as.for.it’ to which they have given rise. The demonstrative root—the medial one in any context and optionally the distal one in pre-hodiernal past contexts specifically—then agrees in nominal class with the main topic of the utterance. Thus /yǐ-rù/ (MED.M-as.for.it) ‘as for it’ in (208) agrees with the masculine participant *pō’ǐ* ‘plantain’, the main topic of this non-pre-hodiernal-past utterance.

(208) *Kǎ pō’ǐ ì... <nò’rū... > como tàunēkū yà-gè-’ǔ yá pō’ǐ yǐrù nî-ĩ <yà... > yǎ’ǔ.*

*kǎ pō’ǐ = ì <nò-’rū... > como tàunēkū*  
 and plantain(M) = CONTR.TOP 3N/NS-GEN like year

*yà = gè-’ǔ yá = pō’ǐ yǐ-rù nî.ĩ*  
 3M/N/NS.SBJ.PCÌ? = carry.SG\SBJV-SUB LK.M/S = plantain **MED.M-as.for.it** CONJ

*<yà = ... > yà = yǎ-’ǔ*  
 PCÌ.3M/N/NS.SBJ\SBJV = PCÌ.3M/N/NS.SBJ\SBJV = grow\SBJV-SUB

‘[Manioc grows in six months. Pineapple produces fruit after two years.] Now, bananas... their... for their part bananas take like a year to grow.’ [LAR D274–276]

The “focal” suffix /-’rú/ ‘in.peace’ too is only attested in direct association with a medial or distal demonstrative root. The resulting forms indicate that the referent of the demonstrative root **is or should be left in peace or aside**, *i.e.* away from involvement in any potential process. They mostly occur as the predicative complement of the verb *í* ‘be’, as in example (209), or in clauses lacking an inflected predicative phrase altogether, as in (210–211) (note that the extremely awkward literal translations provided in these two examples are calqued on English constructions such as ‘Away with poverty!’ or ‘Off with his head!’ and are merely intended to give a sense of the original construction).<sup>216</sup>

(209) *Ngé’rú nû-í ì-tâyàgú rù tá’ú’ègú tárū-īnū.*

*ngé-’rú*            *nû = í*                      *ì = tâyà-gú*                      *rù*  
 MED.NS-in.peace    3M/N/NS.SBJ.PCì = be    PCØ.SBJV = be.hungry-CIRC    and  
*tá’ú-’è-gú*                      *tá = rú = īnū*  
 be.absent\SBJV-REL.S-PLOC    4SBJ = PCrú = think

‘[When you don’t have a family, you don’t have responsibilities.] No problem [lit. ‘It is in peace/away from trouble ...’] if you’re hungry, you don’t [have to] worry about anyone.’ [JGS 590]

(210) “*Ngé’rú rù mārū ī-nà-áchí!*”

*ngé-’rú*            *rù mārū ī = nà-áchí*  
 MED.F-in.peace    and    PRF    3F.SBJ = calm.down-upslope

‘[A mother, after pretending to invite an evil spirit to get her rid of her daughter who won’t stop crying:] “Forget about her [lit. ‘In peace with her, ...’], she’s calmed down already!” [IGS 314]

(211) *Mārū rastrojo yì-í’gù ì, ngé’rú mā rù mā táu nūtà-dâu’ú.*

*mārū rastrojo*            *yì = í-’gù = ì*  
 PRF    fallow.swidden    PCì.3F/M/N/NS.SBJ.SBJV = be-CIRC = CONTR.TOP  
*ngé-’rú = mā*                      *rù mā = táu*  
 MED.NS-in.peace = precisely    and    PRF = NEG  
*nū = tà = dâu-’ú*  
 3M/N/NS.ACC = 3S.SBJ\SBJV = touch\SBJV-SUB

<sup>216</sup>The medial demonstrative root is also attested in my elicited data in direct association with the “focal” suffix /-’àkù/ ‘APPROX’. The resulting forms (*e.g.* *ngé’àkù*, *yí’àkù*, *yí’àkù*, etc.) are apparently used in contexts similar to the ones described in this paragraph for /-’rú/ ‘in.peace’ and with a similar meaning (*e.g.* *Yí’àkù!* ‘Leave him alone!’). Note that these forms are not attested in my corpus, however.

‘Once it’s a fallow swidden, you leave it as is [lit. ‘..., aside with it ...’] and you no longer touch it.’ [LAR D281–282]

Unexplainably, these forms may also be **directly inflected like predicative phrases**, with the meaning ‘to leave X in peace’, ‘to forget about X’ (with X being the referent of the demonstrative root), as shown in the following example:

(212) [...] *rù ngē’gùmá nû-î rù nà-ngē’rúmārē-’û*.

*rù ngē’gùmá nû=î rù*  
and ANAPH.CIRC 3M/N/NS.SBJ.PCì = be and

*nà = ngē-’rú-mārē-’-’û*  
3M/N/NS.SBJ\SBJV = MED.NS-in.peace-just-3M/N/NS.OBJ\SBJV-SUB

‘[He wanted to take a wife but was not allowed to,] and so he just forgot about it [lit. ‘... and it was like that and he just did away with it.].’ [AMB 96]

In my data, the demonstrative roots, when they are directly suffixed with a “focal” suffix and are therefore **left unspecified by /-à/ ‘EXO’ or /-mǎ/ ‘ANAPH’, happen to always exhibit an endophoric function** (anaphora/cataphora or discourse deixis), *i.e.* to behave semantically and pragmatically as though they bore the suffix /-mǎ/ ‘ANAPH’. This might be due to chance, however, and need not necessarily imply that the demonstrative roots are in fact inherently endophoric, unless explicitly specified as exophoric by the suffix /-à/ ‘EXO’. It could be that in cases where the demonstrative roots are morphologically unspecified for exo- or endophoricity, their exact function is in fact to be interpreted contextually. This interesting question could be easily settled by further research.

### 3.4.7 Non-locative demonstrative roots bearing the suffix /-’û/ ‘ACC’

Like most bound morphemes to the exception of the “focal” suffixes, the accusative suffix /-’û/ (on which see SECTION 3.6.2) is normally attached to whole endophoric or exophoric demonstratives including either /-à/ ‘EXO’ or /-mǎ/ ‘ANAPH’ (see beginning of the preceding section). This is shown in the following example:

(213) *Ngēmà’û chāyà-fǎ’chà’û ì chòmà.*

*ngē-mà-’ũ̄*      *chā=yà=fǎ-’chà’ũ̄*      *ì=chò-mà*  
 MED.NS-ANAPH-ACC 1SG.SBJ=AM=know-VOL LK.NS=1SG-ANAPH

‘[European countries are developed and have advanced technologies.] That’s what I’d like to go and see.’ [JSG B565]

However, in cases where a medial or distal non-salientive demonstrative serving as a syntactic head functions as the **complement in the accusative of the verbs *wǎgù* ‘to do’ or *ũ̄* ‘to make’**, both the expected forms /*ngē-mà-’ũ̄*/ (MED.NS-ANAPH-ACC) and /*yě-má-’ũ̄*/ (DIST.NS-ANAPH-ACC) on the one hand, and the **less expected forms /*ngē-’ũ̄*/ (MED.NS-ACC) and /*yě-’ũ̄*/ (DIST.NS-ACC)** on the other, may occur, with the latter forms being preferred, at least by older speakers. These forms *ngē-’ũ̄* and *yě-’ũ̄* are only attested with a discourse deictic function, referring to a previously mentioned activity. The medial *ngē-’ũ̄* may occur in any context, as shown in example (214) (see also (T18)), while the distal *yě-’ũ̄* only occurs, optionally, in pre-hodiernal past contexts, as in (215) (see also (T93)).

(214) *Gǔ’ũ̄ ì gũnē’ũ̄ ngē’ũ̄ chā-’ũ̄.*

*gǔ-’ũ̄*      *ì=gũnē-’ũ̄*      *ngē-’ũ̄*      *chā=’ũ̄*  
 finish\SBJV-REL.NS LK.NS=get.light\SBJV-REL.NS MED.NS-ACC 1SG.SBJ=make

‘I do this every day.’ [EAR elic.]

(215) [...] *nũ-’ĩ̄ gá=yě-’ũ̄ tà-wǎgù-è-’ũ̄*, [...].

*nũ-’ĩ̄*      *gá=yě-’ũ̄*      *tà=wǎgù-è-’ũ̄*  
 CONJ LK.F/M/S/NS.PST=DIST.NS-ACC 3S.SBJ\SBJV=do-INTR.PL\SBJV-SUB

‘[They now had manioc surpluses and made beer with them. After a while,] as they [were able to] do that, [they decided to held a ritual.]’ [LAR E216]

### 3.4.8 The *ngē-/yě-* words

I call *ngē-/yě-* words half a dozen functionally heterogeneous forms that are hardly or plainly unanalyzable synchronically but are obviously **composed diachronically of the non-salientive form of the medial or distal non-locative demonstrative root** (i.e. /*ngē-*/ ‘MED.NS’ or /*yě-*/ ‘DIST.NS’) plus a bound morpheme which in certain cases may still be identified with some degree of certainty. These forms all exist under **two inflectional forms**, one, starting with /*ngē-*/, being a default form unspecified for nominal tense, and the other, starting with /*yě-*/,

being a specialized form optionally used to make it explicit that the utterance it is part of refers to pre-hodiernal past processes. The pre-hodiernal past form of several of them, however, appears to be very uncommon in spontaneous speech, at least in younger speakers.

While all of these forms are historically based on deictic roots, **only two have retained a clear deictic meaning**, and more specifically a discourse deictic one, by involving reference to a circumstance alluded to in the preceding discourse (*ngē'gùmá/yě'gúmá* '(at) that time; that way' and *ngē'kúrúwǎ/yě'kúrúwǎ* '(in) those days'). The other five *ngē-/yě-* words can be considered to no longer feature any deictic meaning. In spite of their non-deictic nature, I briefly mention them in this section on the SMAT demonstratives inasmuch as they are derived etymologically from deictic words.

Three of the *ngē-/yě-* words are **circumstantial independent nouns** (respectively meaning '(at) that time; that way', '(in) those days', and '(in a) recent time'). These are discussed first below. The remaining four are **discourse connectors** ('because; but', 'and; so that, while', 'or better still (?)', 'according to it (?)') and are discussed next.

(i) *Ngē'gùmá/yě'gúmá* '(at) that time; that way'. In most of its occurrences, this *ngē-/yě-* circumstantial independent noun refers to a **relatively well circumscribed temporal setting commented upon in an immediately preceding stretch of discourse**. In the following example, *ngē'gùmá* refers to a particular moment of the speaker's childhood that was the temporal background of events that have been the main topic of the preceding stretches of discourse:

(216) *Chà'íkǎ nî-î gá mā chà-yǎ'ú gá ngē'gùmá.*

*chà-'íkǎ nî=î gá = mā = chà = yǎ-'ú*  
1SG-only 3M/N/NS.SBJ.PCì = be LK.PST = PRF = 1SG.SBJ\SBJV = grow\SBJV-SUB

*gá = ngē'gùmá*  
LK.PST = ANAPH.CIRC

'I was the only one [of the children in my family] who was full-grown at that time.' [ANO1 100]

For temporal uses of this *ngē-/yě-* word in its pre-hodiernal past form *yě'gúmá*, see example (305) above and (T31–T32).

*Ngē'gùmá/yě'gúmá* also occasionally refers not to a temporal setting, but to the **way in which a previously mentioned process unfolds**. In this meaning, it fre-

quently bears the suffix /-'rú'ú/ 'like', usually acquiring the precise meaning of 'in a way *similar* to that', as in the following example (see also (T80)):

(217) *M̄mm, chòmà rù tà ngē'gùmárú'ú chómá'a ná-gú'chà.*

*m̄mm* *chò-mà = rù = tà*      *ngē'gùmá-rú'ú* *chò-má'a*  
 yeah    1SG-ANAPH = TOP = ADD    ANAPH.CIRC-like    1SG-COM  
*ná = gú'chà*  
 3M/N/NS.SBJ = be.difficult

'[I find it hard to tell stories.] – Yeah, same for me, I find it hard too [lit. 'Yeah, me too it's hard for me like that way.'].'] [IGV 601]

In the absence of /-'rú'ú/ 'like', *ngē'gùmá/yē'gúmá* exactly means 'by so doing, by doing what was just referred to' (i.e. *literally* 'that way'), as in (T154).

Finally, *ngē'gùmá/yē'gúmá* additionally occurs in a lexicalized form in the probably synchronically unanalyzable word /*ngē'gùmá(-)ré*/ 'that much, that many',<sup>217</sup> which refers to a **quantity mentioned in preceding stretches of discourse**. Example (218) provides an occurrence of *ngē'gùmáré*. Note that in this particular example, endophoric reference seems to be employed, rather unusually, as a summarizing device: the endophoric demonstrative *ngē'gùmáré* apparently stands as a generic quantifier that fills the syntactic position of the specific numeral that was actually uttered in the original situation reenacted by the speaker in an abridged fashion (as shown by the example's translation, the English demonstratives *this* and *that* can be used for the same pragmatic purposes).

(218) “[...] *ngē'gùmáré tá kù-dē'ú ì dùú'ú, ná'chíné'ewá!*”

*ngē'gùmá(-)ré = tá*      *kù = dē-'ú*  
 ANAPH.CIRC-amount? = FUT    2SG.SBJ\SBJV = collect\SBJV-SUB  
*ì = dùú-'ú*      *ná-'chíné'e-wá*  
 LK.NS = be.a.human\SBJV-REL.NS    3N/NS-mouth-ALOC

'[Before leaving, our boss briefed us: “You're going to do this and that,] you're going to pick up this number of people, at the river mouth!”] [JGS 318–319]

<sup>217</sup>A pre-hodiernal past form \**yē'gúmáré* corresponding to *ngē'gùmáré* is unattested in my data, although it can reasonably be assumed to exist based on the existence of the pre-hodiernal past form *yē'gúmá* corresponding to *ngē'gùmá* '(at) that time; that way'.



*Ngē'gùmáré* is obviously analyzable, from a diachronic perspective at least, as being composed of *ngē'gúmá/yě'gúmá* plus a bound morpheme \*/-'ré/ 'amount (?)'.<sup>218</sup> The fact that this quantity-specifying endophoric demonstrative is derived from a manner anaphoric demonstrative and therefore possibly literally means 'the amount of that way' (see preceding paragraph) might reflect the fact that amounts used to be conceived of by former speakers of the language (but most likely no longer are) as concepts that are communicated by gestures, *i.e.* through a procedure, specifically a way of moving one's body.

The second and third syllables of the forms *ngē'gúmá/yě'gúmá* are likely analyzable, from a diachronic perspective, as the **locative relational noun** /-gǔ/ 'PLOC'<sup>219</sup> and the suffix /-mǎ/ 'ANAPH', respectively, although it is unclear how such a morphological association may have arisen historically.

(ii) *Ngē'kúrúwá/yě'kúrúwá* '(in) those days'. This rare *ngē-/yě-* circumstantial independent noun is only attested in elicited data and might be somewhat old-fashioned. It refers to a **vaguely delimited temporal setting commented upon in an immediately preceding stretch of discourse**. The bound morpheme /-'kúrúwá/ which obviously composes this *ngē-/yě-* word is also found in other more easily analyzed forms referring to vague time periods (in particular, /nú'kúmá-kúrúwá/ (past.time-times?) 'in the old days' and /ñumá-kúrúwá/ (present.time-times?) 'these days').

(iii) *Ngē'wákà/yě'wákà* '(in a) recent time, recently'. This *ngē-/yě-* word, which I analyze as a circumstantial independent noun, refers to a **past time that is recent relative to the temporal setting of the processes being referred to**. It mostly functions as an adjunct, in which case it may be translated as 'recently'

<sup>218</sup>This bound morpheme is found in lexicalized form in the synchronically unanalyzable or hardly analyzable words *ñù're* 'how much? how many?', *nô're* 'be little, be few', *dù're* 'this much, this many (demonstratively)', and possibly *tǎ're* 'two' (</tǎ-'ré/ [4-amount?] 'the amount of you and I?').

<sup>219</sup>Today's suffix /-gǔ/ 'PLOC' probably used to have a pre-syllabic coda glottal stop, displaying a form \*/-<sup>[2]</sup>gǔ/ homonymous with the likely cognate circumstantial subordinator /-'gǔ/ 'CIRC'. This pre-syllabic glottal stop is exceptionally retained in the locative 2 form of certain monosyllabic independent nouns, *e.g.* *í<sup>[1]</sup>gǔ* 'in the house' from *í* 'building' and /-gǔ/ (rather than *ígù*, although the latter form is also acceptable). This highly plausible hypothesis allows to compare today's suffix /-gǔ/ 'PLOC' with the second syllable of *ngē'gúmá/yě'gúmá*, to which the word's glottal stop must have belonged originally, since the demonstrative roots /ngē-/ and /yě-/ do not, for their part, include a glottal stop in their lexical forms.

or ‘just’ and may convey a notion of **recent perfect perspectival aspect** (Dik 1997:238–241). The following example, by chance, features occurrences of both its default form *ngē’wákà* and its specifically pre-hodiernal past form *yē’wákà*:

- (219) [...] *tǎu ngē’wákà rù gá <nǔ’... > –uh! –nǔuu’kúmá’àkù, <ñàà... > <ñàà... > ñàà nàànè... yē’wákà nà-ǔū’ùchigú nǔ-ĩ gá ngēmà úpétū’ú!*  
*tǎu ngē’wákà rù = gá <nǔ’... > uh nǔ’kúmá-’àkù <ñà-à... >*  
 NEG recent.time and = PST oh.yes! past.time-APPROX PROX.NS-EXO  
*<ñà-à... > ñà-à nà-ànè yē’wákà*  
 PROX.NS-EXO PROX.NS-EXO 3N/NS-space recent.time.PST  
*nà-ǔū-’ùchì-gú nǔ = ǐ gá = ngē-mà*  
 PCnà = reach-at\CIRC-CIRC 3M/N/NS.SBJ.PCì = be LK.F/M/NS.PST = MED.NS-ANAPH  
*ú-pétū-’ú*  
 be.there.SG-across\SBJV-SUB

‘[That story took place a long time ago,] not recently [*i.e.* relative to a Reference Time that corresponds to Utterance Time] but long... – oh yes! – looong ago, that happened when this... this... this world... had just come to existence [lit. ‘... had recently come to existence’, *i.e.* relative to a pre-hodiernal past Reference Time]!’ [IGS 221–223]

A form *ngē’wá*, of apparently identical meaning, is attested twice in my corpus in co-occurrence with the suffix /-’àkù/ ‘APPROX’, as in the following example:

- (220) [...] *ómé gá ngē’wá’àkù tànā- <fègùkú... > fègùgúkú <àrū... > -àrū... nâũnūtā-tānù ã’a tà-yà-’ú’ú ã’a gá yémá tûmàũnūtā.*  
*ómé gá = ngē’wá-’àkù*  
 brown.woolly.monkey LK.F/M/S/NS.PST = recent.time-APPROX  
*tà = nā = <fè-gù-kú... > fè-gù-gú-kú <-àrū... > -àrū*  
 3S.SBJ\SBJV = 3M/N/NS.OBJ = shoot-PLURAC- shoot-PLURAC-PL\SBJV-REL.M-GEN GEN  
*nâ-ũnūtā-tānù = ã’a*  
 3N/NS-bowels-group-QUOT  
*tà = yà = ù-’ú = ã’a*  
 3S.SBJ\SBJV = AM.3M/N/NS.OBJ = be.there.SG\SBJV-SUB = QUOT  
*gá = yē-má tû-mà-ũnūtā*  
 LK.F/M/S/NS.PST = DIST.NS-ANAPH 3S-ANAPH-bowels

‘[So that more manioc beer could fit in his belly, the supernatural being Iya-Iya left the party for a second and took off his stomach. While doing so,] he left his bowels among the bowels of woolly monkeys they [*i.e.* the hosts] had recently hunted.’ [LAR E241–243]

The corresponding pre-hodiernal past form *yě'wq* is only attested in elicited data. The distribution of *ngē'wákà/yě'wákà* vs *ngē'wq/yě'wq* is unclear.

The second syllable of *ngē'wákà/yě'wákà* and *ngē'wq/yě'wq* might be cognate with the locative relational noun /-wǎ/ 'ALOC'.<sup>220</sup>

(iv) **Ngē-/yě- DISCOURSE CONNECTORS.** At least four discourse connectors appear to be derived, diachronically, from the non-salientive forms of the medial or distal non-locative demonstrative roots.

The very frequent discourse connector *ngērú/yérú* typically translates to English 'because', although it may also mean '[not ...] but [instead ...]' in specific cases where it introduces a positive clause that serves as a correction of an immediately preceding negative clause (see SECTION 7.8). For occurrences of the default form *ngērú* (under its more typical unstressed form *ērú*; see below), see example (207) and (T18) and (T134), among many others. For occurrences of the specifically pre-hodiernal past form *yérú*, see (T34) and (T44).

The frequent word *ngēkq* (or *ēkq*; see below) may be used as a conjunction that loosely coordinates two clauses. It then virtually always occurs under the abridged and invariable form *kq* and can be translated as 'and, and then', as in example (182). It often involves a subtle contrast between the two clauses it coordinates, as in (208). *Ngēkq* may additionally be used as a conjunction that introduces semantically vague adverbial clauses. It can then be roughly translated as 'so that ...' or 'while ...', as in (199), (T58), or (T106). For more on this construction, see SECTION 5.2.6, p.424. The pre-hodiernal past form *yěkq* corresponding to *ngēkq* is only attested in elicited data. The second syllable of *ngēkq/yěkq* might be cognate with the relational noun /-'kq/ 'CAUSE'.<sup>221</sup>

<sup>220</sup>Today's suffix /-wǎ/ 'ALOC' probably used to have a pre-syllabic coda glottal stop, displaying a form \*/-<sup>□</sup>wǎ/. This pre-syllabic glottal stop is exceptionally retained in the locative 2 form of certain monosyllabic independent nouns, e.g. *í<sup>□</sup>wǎ* 'to the house' from *í* 'building' and /-wǎ/ (besides the—equally attested—expected form *íwǎ*). This highly plausible hypothesis allows to compare today's suffix /-wǎ/ 'ALOC' with the second syllable of *ngē'wákà/yě'wákà* and *ngē'wq/yě'wq*, which is the syllable to which these two words' glottal stops must have belonged originally, since the demonstrative roots /ngē-/ and /yě-/ do not, for their part, include a glottal stop in their lexical forms.

<sup>221</sup>Possibly problematic for this hypothesis, however, is the fact that *\*ngē<sup>□</sup>kq/yě<sup>□</sup>kq*, with a glottal stop, might then have been expected instead of *ngēkq/yěkq*, since /-<sup>□</sup>kq/ 'CAUSE' features a glottal stop.

The discourse connector *ngēnèkátú* (or *ēnèkátú*; see below) is only attested once in my corpus of spontaneous speech, in example (221), where it occurs under its unstressed form *ēnèkátú*. It seems to be roughly translatable as ‘or even better’. Its pre-hodiernal past form *yēnèkátú* is only attested in elicited data.

(221) *Ēnèkátú ēgá mēà tǔkù-ǔtànùgù rù gǔ'ǔ mā tǔ-ūgǔ!*

*ēnèkátú*      *ēgá mēà tǔ = kù = ǔ-tànù-gù = rù*  
or.even.better? if well 3S.BEN = 2SG.SBJ\SBJV = make-compensation-CIRC = TOP

*gǔ-'ǔ = mā*                      *tǔ = ūgǔ*  
finish\SBJV-REL.NS = precisely 3S.SBJ.PCī = narrate

‘[Ask *him*, *he* will tell you all sorts of stories!] Or even better, if you pay him well, he’ll tell [you] everything!’ [IGS 567]

*Ngēwá* ‘according to it (?)’ (or *ēwá*; see below) is equally attested only once in my corpus, in example (222), where it occurs under its unstressed form *ēwá*. Its meaning is unclear and its analysis as a discourse connector is tentative and provisional. Its pre-hodiernal past form *yēwá* is only attested in elicited data.

(222) *Nǔyā-ūgǔgù ēwá rù ā'a gá, ná-abierto ā'a gá ngēmà morral.*

*nǔ = yā = ūgǔ-gù*                      *ēwá = rù = ā'a = gá*  
3M/N/NS.ACC = PCī.3F.SBJ.SBJV = narrate-CIRC      according.to.it? = TOP = QUOT = PST

*ná = abierto = ā'a*              *gá = ngē-mà*              *morral*  
3M/N/NS.SBJ = open = QUOT      LK.PST = MED.NS-ANAPH      bag

‘From what she said, the bag was open.’ [JSG B457–458]

It’s second syllable is likely cognate with that of the discourse connector *ngǐwǎ* (F)/*nǔwǎ* (M/N/NS)/*tǔwǎ* (S) ‘well, as for it’, and possibly with the locative relational noun /-wǎ/ ‘ALOC’.<sup>222</sup>

These four discourse connectors, although they may be realized as stressed words, are **virtually always left unstressed** in spontaneous speech. As a consequence, the **first syllable of their *ngē-* form is typically realized /ē-/**, i.e. without an initial velar nasal, yielding forms that are better transcribed as *ērǔ*, *ēkq* (or even

<sup>222</sup>Note that the hypothesis put forward in note 220 (according to which /-wǎ/ ‘ALOC’ may have formerly featured a pre-syllabic coda glottal stop, displaying the lexical form \*/-<sup>[3]</sup>wǎ/), makes the hypothesis that the second syllable of *ngēwǎ* (and, simultaneously, that of *ngǐwǎ*/*nǔwǎ*/*tǔwǎ* ‘well’) might be cognate with /-wǎ/ ‘ALOC’ relatively problematic, since \**ngē*<sup>[3]</sup>*wǎ* (and \**ngǐ*<sup>[3]</sup>*wǎ*/*nǔ*<sup>[3]</sup>*wǎ*/*tǔ*<sup>[3]</sup>*wǎ*) might then have been expected instead of *ngēwǎ*.

just *ka*), *ēnèkátú*, and *ēwá* respectively (on the phonetic and phonological effects of de-stressing stressed words, see SECTION 2.5.1, p.121).

The conjunction *ēgá* (also /*gá* = /) ‘if’ can be realized as *ngēgá* and may therefore have been formerly another *ngē-/yě-* word. A hypothetical corresponding pre-hodiernal past form *\*yěgá* is not attested in my data, however, and was explicitly rejected in elicitation. The enclitic / = *ēkà*/, which generally expresses unsureness of the speaker and is mostly employed in direct questions to make them more insistent, might also be a former *ngē-/yě-* word. Against this hypothesis, however, are the fact that it does not seem to be realizable as *\*ngēkà* and that a hypothetical corresponding pre-hodiernal past form *\*yěkà* is unattested in my data.

### 3.5 Linker

The linker makes a specific part of speech of its own. It is a **monosyllabic proclitic that inflects for both nominal class and nominal tense**. It is among the morphemes that occur with the highest frequency in discourse.

The essential and most frequent function of the linker can be viewed as that of **introducing any NP that constitutes a syntactic expansion of a participant already referred to within the clause**, whether that participant was previously referred to by means of a NP or by means of a pronominal index procliticized to a finite predicative phrase. A straightforward illustration of the former case, *i.e.* an instance of **expansion of a participant previously referred to by means of a NP**, is given in example (223), where the noun *nâi* ‘tree’ is expanded by two immediately subsequent relative clauses (each enclosed in square brackets). These relative clauses, because they follow the first mention of the participant they are elaborating on, must both be introduced by the linker (in its neuter inflectional form specifically, given that the speaker is here assigning *nâi* ‘tree’ to the neuter nominal class):

(223) *wí’á nâi yà tá’úchīnè yà wôchínè-má’a nà-ūgǐnèwǎ*

*wí’á nâi* [*yà = tá-’úchīnè*] [*yà = wôchínè-má’a*  
 INDF tree LK.N/S = be.big-genuinely\SBJV-REL.N LK.N/S = ceiba.tree-COM  
*nà = ū-gǐnè*]-*wǎ*  
 3M/N/NS.SBJ\SBJV = say-PL\SBJV-REL.N-ALOC

‘to a huge tree they call ceiba tree’ [JGS 123–124]

Example (224) features a slightly less straightforward illustration of the same type of expansion (the expansion is again enclosed in brackets). In this example, by contrast with the order featured in (223), the more head-like NP (*ì kōrígú* ‘White people’) *follows*—instead of preceding—the more dependent-like NP (*tògú* ‘others’).

- (224) *ngēmà tògú ì kōrígú*  
*ngē-mà*      *tò-gú*      [*ì = kōrígú*]  
 MED.NS-ANAPH    other.NS-PL    LK.NS = White.person-PL  
 ‘the other White people’ [JGS 300]

Because the corresponding participant is first referred to by *tògú*, this word does not bear the linker. The NP *ì kōrígú* ‘White people’, by contrast, since it refers to a participant already mentioned within the clause by *tògú*, functions as an expansion and must consequently include the linker. In other words, **of several NPs corresponding to a single participant within a single clause, it is always the non-first ones that bear the linker**, regardless of whether these non-first NPs are more head- or more dependent-like relative to the NP that represents the first mention of the participant within the clause. Note, thus, that the notion of expansion as I define it here does not equal that of dependent or modifier. Note, additionally, that **certain modifiers**, such as the indefinite determiner *wí’á* (as in (223)) and the non-locative demonstratives (such as *ngēmà* in (224)), as well as genitive phrases in general (*i.e.* NPs attached with the genitive case-marking suffix /-àrū/), **are directly preposed to the NP they modify**, that is, they do not admit the presence of the linker in front of that modified NP.<sup>223</sup>

Example (225) displays an occurrence of a NP (enclosed in brackets) functioning as a **syntactic expansion of a pronominal index**. The NP *yà tògū’è* ‘the other one’, which makes it explicit whom the subject index /*tá* = / ‘3S.SBJ’ is referring to, must include the linker, in this case in its salientive inflectional form (which in the speech of many speakers happens to be homonymous with its neuter form):

- (225) *Mārū tá-yǔ yà tògū’è*.  
*mārū*    *tá<sub>i</sub> = yǔ*    [*yà = tògū’è*]<sub>i</sub>  
 PRF      3S.SBJ = die    LK.N/S = other.S

<sup>223</sup>*Wí’á* ‘INDF’ does in fact require the presence of the linker in front of the NP it modifies in the speech of older speakers, and allows it, optionally, in the speech of younger speakers such as JGS (who is the speaker who uttered example (224)).

‘The other one already died.’ [IGS 448]

Note, importantly, that in this example the NP *yà tògū’è* ‘the other one’ occurs *after* the finite predicative phrase, which is why it is treated as an expansion of the pronominal index. If it had been placed *before* the predicative phrase, it would have represented itself the first mention of the referent within the clause and would therefore *not* have been procliticized with the linker.

Besides its essentially syntactic function just discussed, the linker may additionally be said to fulfill an important semantic function, inasmuch as it is the **locus most frequently employed in discourse for the encoding of nominal tense**, which indirectly informs the tense value of the whole utterance.

The details of the syntactic distribution of the linker may prove relatively complex in practice, as is shown further below, but for the most part they result from the general syntactic function just described. A particular circumstance that may significantly contribute to obscure this syntactic distribution to the non-native analyst, however, is the existence in the language of a **number of morphemes that are homonymous with certain inflectional forms of the linker and may occur in similar or identical positions as the linker in the speech flow**. The three morphemes with the highest potential for confusion are discussed in the following section. Importantly, however, these homonyms are either invariable or, for those of them that can be inflected, they also feature inflectional forms that are not homonymous with any of the forms of the linker. In most cases, these morphosyntactic properties allow to detect them with certainty in elicitation with adequate transformation tests.

SECTION 3.5.1 exposes the **morphological paradigm** of the linker. Its **syntactic distribution** is described and exemplified at length in SECTION 3.5.2.

### 3.5.1 Morphological paradigm

The morphological paradigm of the linker is displayed in TABLE 34 in its **three subdialectal variants** classified by degree of conservativeness or innovativeness. The inflectional forms of the linker **unspecified for nominal tense**, which are in practice mostly used in non-past ([-PST]) contexts, are laid out in the first row of each subdialectal variant of the paradigm. Its **specifically past inflectional forms** ([+PST]) are laid out in the second row of each variant.

	F	M	N	S	NS
<b>Conservative variant</b>					
unspecified	<i>í</i> =	<i>yá</i> =	<i>yà</i> =	<i>yà</i> =	<i>ì</i> =
[ + PST]	<i>gá</i> =	<i>gá</i> =	<i>gà</i> =	<i>gà</i> =	<i>gá</i> =
<b>Intermediary variant</b>					
unspecified	<i>í</i> =	<i>yá</i> =	<i>yà</i> =	<b><i>yá</i></b> =	<i>ì</i> =
[ + PST]	<i>gá</i> =	<i>gá</i> =	<i>gà</i> =	<b><i>gá</i></b> =	<i>gá</i> =
<b>Innovative variant</b>					
unspecified	<i>í</i> =	<i>yá</i> =	<b><i>yá</i></b> =	<b><i>yá</i></b> =	<i>ì</i> =
[ + PST]	<i>gá</i> =	<i>gá</i> =	<b><i>gá</i></b> =	<b><i>gá</i></b> =	<i>gá</i> =

TABLE 34. Morphological paradigm of the SMAT linker (including subdialectal variants)

The only forms concerned by the subdialectal variation featured by the inflectional paradigm of the linker are the **neuter and the salientive forms** (the forms highlighted in bold in the intermediary and innovative variants of the paradigm in TABLE 34 are the ones that differ from their equivalent forms in the conservative variant of the paradigm). This variation is only of a tonological (*i.e.* not a segmental) nature. Note, importantly, that this subdialectal variation is the reason for the apparent inconsistency in the way the forms of the linker are glossed in the examples throughout this grammatical description. Apparently identical forms of the linker are necessarily glossed differently across speakers whose speeches make use of distinct variants of the inflectional paradigm of the linker.

In the **conservative variant** of the paradigm (first two rows in TABLE 34), both the neuter and the salientive forms of the linker (whether its forms unspecified for nominal tense or its specifically [ + PST] forms) exhibit a toneme /<sup>1</sup>/. The reason I identify this variant as comparatively conservative is because it is the one employed by all the oldest speakers (*i.e.* those above age 60, approximately) who have collaborated in my research, regardless of their geographical origins (IGS, HGA, OSP, and GRA in particular; certain younger speakers also use this variant, such as JGS).

In the **intermediary variant** of the inflectional paradigm of the linker (third and fourth rows in TABLE 34), the neuter forms likewise exhibit a toneme /<sup>1</sup>/, but the salientive forms, for their part, exhibit a toneme /<sup>4</sup>/ (thereby aligning with the masculine forms of all three variants of the paradigm of the linker). Only LAR, among the speakers who collaborated in my research, employs this variant. She also uses, on rare occasions, the conservative variant (*i.e.* she occasionally uses



the toneme /<sup>4</sup>/ variants of the salientive forms of the linker). The intermediary variant can minimally be characterized as such from a structural point of view, with respect to the conservative variant on the one hand and the innovative one on the other. I tentatively hypothesize that it is also, diachronically, the bridge variant that allowed the conservative variant to evolve into the innovative variant.

Finally, in the **innovative variant** of the inflectional paradigm of the linker (last two rows in TABLE 34), both the neuter and the salientive forms exhibit a toneme /<sup>4</sup>/ (thereby aligning with the masculine forms). This variant is the one that displays **most syncretism**. The non-past form /yá= / is indiscriminately used in the masculine, neuter, and salientive nominal classes. The past form /gá= /, for its part, can be said to no longer agree for nominal class, given that it is used in all of them. I identify this variant of the paradigm of the linker as innovative both because it is mostly used by younger speakers (e.g. JSG and IGV), and because it allows to encode less grammatical distinctions than the other two variants (i.e. it most likely represents a simplification of one of the other two paradigms, which must therefore have been prior in time).

Note that there is the **possibility that more forms of the linker exist** besides those listed in TABLE 34. Attested in my data are a rare feminine form /á= /, an occurrence of which is displayed in example (226), and a substantially more frequent non-salientive form /ā= / (for occurrences of which see (T76), (T144), and (T154)), which I both identify—tentatively—as inflectional forms of the linker in view of their syntactic distribution and their apparent function.

(226) *Á ngémà chātū rù nâ-ē'ū̃ īyà-ī̃.*

*á* = ngé-mà      *chātū* = rù      *nâ-ē'ū̃*      *īyà* = ī̃  
 LK.F? = MED.F-ANAPH    giant.anteater = TOP    3N/NS-animal    3F.SBJ.PCì = be

‘The giant anteater, as for it, is an animal.’ [EAR elic.]

Diachronically speaking, the paradigm of the linker is **likely cognate with that of the non-locative demonstrative roots or the non-locative endophoric demonstratives** (on which see introduction to SECTION 3.4 and SECTION 3.4.3, respectively). More specifically, the inflectional forms of the linker **unspecified for nominal tense are likely to be cognate with the medial non-locative demonstrative roots or non-locative endophorics** (compare e.g. /yá= / ‘LK.M’ in the conservative variant of the paradigm of the linker with the medial non-locative demonstrative root /yĩ-/ ‘MED.M’ or the medial non-locative endophoric /yĩ-má/ ‘MED.M-ANAPH’; compare, likewise, /yà= / ‘LK.N/S’ in the conservative variant of the paradigm of the linker with /yĩ-/ ‘MED.N’ and *yĩ'è* ‘MED.S’ or /yĩ-mà/ ‘MED.N-ANAPH’

and /yî'è-má/ 'MED.S-ANAPH'). The **specifically past inflectional forms of the linker are likely to be cognate with the distal non-locative demonstrative roots or non-locative endophorics** (compare *e.g.* /gà = / 'LK.N/S.PST' in the conservative variant of the paradigm of the linker with the distal non-locative demonstrative roots /gû-/ 'DIST.N' and gû'è 'DIST.S' or the distal non-locative endophoric /gû-mà/ 'DIST.N-ANAPH' and /gû'è-má/ 'DIST.S-ANAPH'). Finally, the potential inflectional forms /á = / 'LK.F?' and /ā = / 'LK.NS?' of the linker discussed in the preceding paragraph, if rightly identified as such, might very hypothetically be cognate, for their part, with the proximal non-locative demonstrative roots or non-locative endophorics. Note that such a grammaticalization path leading from demonstratives to linkers is **well-attested cross-linguistically** (see Diessel 1999:130–132).

**Phonologically identical** with certain inflectional forms of the linker are the **contrastive topicalizer enclitic** / = ì /, the **clausal past tense enclitic** / = gá / (which also often functions as a topicalizer in past tense contexts), and the **conjunction** /gá = / 'if, when' (a phonologically-reduced free variant, mostly attested in younger speakers, of /ēgá ~ ngēgá/ 'if, when', on which see SECTION 3.4.8, p.250). Although these morphemes are likely remotely cognate with the linker, or minimally with the non-locative demonstrative roots from which the linker might have been derived, they must be clearly distinguished from it. However, clearly distinguishing these morphemes from the linker is complicated, in practice, by the fact that they often occur in positions in the speech flow that are identical or almost identical to positions where the linker may occur. An important difference between these three morphemes and the linker, however, is that they are, **by contrast with the linker, invariable markers**. The differences between the linker and the clausal past tense enclitic / = gá / 'PST', for instance, are manifest in an example such as the following:

(227) *Tûmà gá tà yě'má tōmá'a tà-āchí'û'û gâ tōé.*

*tû-mà = gá = tà      yě'-má      tō-má'a*  
3S-ANAPH = PST = ADD    DIST.PLOC-ANAPH    1PL-COM

*tà = āchí'û- 'û      gâ = tō-é*  
3S.SBJ\SBJV = have-home\SBJV-SUB    LK.N/S.PST = 1PL-mother

'[When I was a child, our mother had two brothers who lived in the upper Loretoyacu river.] Our mother too settled there with us [lit. 'She too in the past got to have a home there with us our mother.'].']' [GRA 125]

First, / = gá / 'PST' is a (second-position) enclitic, which is why it may be followed by another enclitic, such as the additive / = tà / in this example. The linker, by con-

trast, is a proclitic that precedes the nominal constituent it “links” with a previously mentioned nominal constituent into a single NP (in this case, /gà = / ‘LK.N/S.PST’ “links” *tōé* ‘our mother’ with the pronoun *tûmà* ‘she’, with which it stands in a relation of close apposition). Second, / = gá / ‘PST’, being invariable, does not agree with its phonological host, in this example an independent pronoun in the salientive nominal class. The linker, by contrast, agrees for nominal class with its phonological host (whose nominal class is in its turn determined by the nominal class to which the participant it refers to is assigned in the context). Thus, the inflectional form of the linker that is procliticized to *tōé* ‘our mother’ in this example is the (neuter/)salientive form /gà = /, *tōé* referring to a participant that is being assigned to the salientive nominal class by the speaker in the context (in practice, participants corresponding to parents are virtually always assigned to the salientive nominal class).

## 3.5.2 Syntactic functions

This section elaborates on the general description of the syntactic distribution of the linker provided in the introduction to SECTION 3.5 above. It **exemplifies this distribution in detail and discusses more peripheral uses of the linker** that can arguably be considered, for part of them at least, as derived from its **essential function of “establish [ing] an overt link between the elements of a complex noun phrase”** (Diessel 1999:130).

Note that in all the examples in this section, the nominal constituent to which the linker (highlighted in bold) is being procliticized is bracketed out for clarity. Whenever present, the previous nominal constituent to which the nominal constituent that bears the linker is being linked is likewise enclosed in square brackets. In cases where the linker is linking a nominal constituent not to another nominal constituent, but to a pronominal index belonging to the inflectional morphology of the predicative phrase, that index is similarly marked with a subscript letter (as in e.g. /ná<sub>i</sub> = ũ / ‘he went’) that makes explicit its relation of coreferentiality with the linked nominal constituent.

### 3.5.2.1 Linking parts of a complex NP

Examples (228–231) illustrate the most straightforward use of the linker, which closely fits in the definition of its essential function just mentioned. In this use,

the linker **links two syntactically adjacent parts of a complex NP**. The linker in (228) **introduces a relative clause** (just like in (223) above):

(228) *Chàuéng'e gá chārū-yāmāèkū gá rù Leticiawá ná-ǵu.*

[*chàu-éng'e*] [*gá = chā = rū = yā-māè-kū*] = *gá = rù*  
1SG-brother LK.PST = 1SG.ACC = PCrū = grow-COMPAR\SBJV-REL.M = PST = TOP

Leticia-wá ná = ǵu  
Leticia-ALOC 3M/N/NS.SBJ = learn

'My older brother studied in Leticia.' [ANO1 96–97]

The linker in (229) **introduces the head of the NP** (*kōrī* 'White person'). The modifier of that head (/gǔ-'ǔ/ [finish\SBJV-REL.NS] 'all', lit. 'that are finished') is, like in (228), a relative clause, but its semantic function is specifically that of a quantifier, which is why it precedes the head it modifies (quantifiers, whether they are morphologically an independent noun or a relative clause, as well as certain other types of modifiers typically precede the nominal constituent they quantify in SMAT; compare the ordering of modifier and head in (224) above).

(229) *Gǔ'ǔ gá kōrī'ǔ námá'a tá-tǎ'ēgǔ.*

[*gǔ-'ǔ*] [*gá = kōrī*]-'ǔ *ná-má'a* *tá = tǎ'ē-gǔ*  
finish\SBJV-REL.NS LK.F/M/NS.PST = White.person-ACC 3N/NS-COM 3S.SBJ = trade-PL

'They would sell it [*i.e.* rubber] to all White people [*i.e.* Peruvians, Colombians, etc.].' [HGA 85]

The linker in (230) **introduces a close apposition**, *i.e.* one that narrows down the referential potential of /ná-'tá'a/ (3N/NS-lake) '(a/the) lake' (in this case to a single referent designated by its proper name).<sup>224</sup>

(230) *Ná'tá'a yà Tarapotowá námá'a chà-ǔ'ǔ.*

[*ná-'tá'a*] [*yà = Tarapoto*]-wá *ná-má'a* *chà = ǔ-'ǔ*  
3N/NS-lake LK.N/S = Tarapoto-ALOC 3N/NS-COM 1SG.SBJ\SBJV = go.SG\SBJV-SUB

<sup>224</sup>On the notion of close (or restrictive, or integrated) apposition, as opposed to "loose" (or, one could say, parenthetical) apposition, see *e.g.* Acuña-Fariña (2016). Examples of close appositional constructions in English are *my friend Smith* or *you girls*. An example of "loose" appositional construction is *The writer, Tom Lebowsky, insisted on prizes being awarded by categories*. (Acuña-Fariña 2016:61–62, 76).

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‘I go to Lake Tarapoto with them.’ [JGS 106]

The linker in (231) introduces a slightly different type of close apposition of very common use in SMAT discourse. In this appositional construction, a NP features as its first element an independent pronoun that is followed by a nominal constituent (introduced by the linker) that makes explicit the referent of that pronoun.

(231) *Ngémà, expresogú ìnà-gũ-gú-ú ì nû-mà ì ngēmà kōrígú.*

*ngě-mà*                  *expreso-gú*  
MED.ALOC-ANAPH    express.boat-PLOC

*í = nà = gũ-gú-ú*                                  *ì = [nû-mà]*  
3ALOC = 3M/N/NS.SBJ\SBJV = reach-PL\SBJV-SUB    LK.NS = 3N/NS-ANAPH

*[ì = ngē-mà*                  *kōrígú]*  
LK.NS = MED.NS-ANAPH    White.person-PL

‘[My typical schedule, when I’m in charge of a group of tourists, starts with preparing my boat. Then I go to the mouth of the Amacayacu river.] Then the tourists arrive in express boat.’ [JGS 12]

In many cases, this appositional construction is essentially equivalent, from a semantic and pragmatic perspective, to just mentioning the nominal constituent without its preceding pronoun and, consequently, without the linker (*e.g.* /*[nà-má’a]* [*ì = pō’í*]/ [3N/NS-COM LK.NS = plantain] = /*pō’í-má’a*/ [plantain-COM] ‘with plantains’). When the pronoun in the kind of appositional construction under discussion is an independent pronoun in the zero-case (*i.e.* a pronoun in /-*mă*/ ‘ANAPH’; see SECTION 3.3.3), however, expressing a participant via the appositional construction contrasts with mentioning it plainly in that employing the appositional construction explicitly signals that the mention of the participant involves a change of topic (*e.g.* /*[tû-mà]* [*yá = chô-’rũ pāpá*]/ [3S-ANAPH LK.M/S = 1SG-GEN dad] ‘(as for) my father’ contrasts with /*chô-’rũ pāpá*/ [1SG-GEN dad] ‘my dad’). This is why the speaker in (231) mentions the tourists—which in the context entail a change of topic—via the appositional construction (involving the independent pronoun in the zero-case /*nû-mà*/ [3N/NS-ANAPH]).

Examples (232–236) essentially illustrate the same use of the linker as (228–231) above. In (232–236), however, the two **parts of the complex NP between which the linker is establishing an overt link are not syntactically adjacent, but separated by constituents that are not part of that complex NP**. I call “scattered NPs” such NPs interrupted by constituents that do not belong to them syntactically. The linker in (232) introduces a **relative clause**, just like in (228) above,

except that the NP integrated by the linker in (232) is scattered on both sides of the predicative phrase.

- (232) [...] *ērú yà tù'è rù pō'ĩmùmá'a tánā-g̃àu'é'e ì mêà ì-dōkā'ũ.*  
*ērú*    *yà = tù'è = rù*    [*pō'ĩ-mù*]-*má'a*    *tá = nā = g̃àu-'é'e*  
 because LK.N = manioc = TOP    plantain-past-COM    4SBJ = 3M/N/NS.OBJ = join-CAUS  
 [*ì = mêà*    *ì = dōkā-'ũ*]  
 LK.NS = well    PCī = boil\SBJV-REL.NS

‘[As for the alcoholic beverage called *pururuka*, that one is made with a different process] because the manioc, you mix it with well-cooked plantain mash.’ [LAR D350–352]

Example (233) is likewise parallel to (229) above, with a linker also **introducing the head of a NP**, except that the NP in (233) is scattered on both sides of the predicative phrase:

- (233) *Tò nūwǎ tà-ũ'ũ ì nâàné.*  
 [tò]    *nūwǎ*    *tà = ũ-'ũ*    [*ì = nâ-àné*]  
 other.NS    well.M/N/NS    3S.SBJ\SBJV = make\SBJV-SUB    LK.NS = 3N/NS-space

‘[Once a swidden has grown old, you leave it uncultivated.] So you make another swidden.’ [LAR D286]

Example (234) features a linker introducing a **close apposition** in a NP scattered on both sides of the NP (contrast with (231) above):

- (234) [...] *chàu'kq nà-kàgǐ'ũ gá ná'a námá'a chà-pūrākǐ'ũkq gà Casa Gregoriomá'a nà-ũgǐné.*  
*chàu-'kq*    *nà = kà-gǐ-'ũ*    *gá = ná'a*    [*ná-*]*má'a*  
 1SG-CAUSE    3M/N/NS.SBJ\SBJV = ask-PL\SBJV-SUB    LK.F/M/NS.PST = CONJ    3N/NS-COM  
*chà = pūrākǐ-'ũ-kq*    [*gà = Casa Gregorio-má'a*]  
 1SG.SBJ\SBJV = work\SBJV-SUB-CAUSE    LK.N/S.PST = Casa Gregorio-COM  
*nà = ũ-gǐ-nè*  
 3M/N/NS.SBJ\SBJV = say-PL\SBJV-REL.N

‘[...] they called me to work for what they call the *Casa Gregorio* [i.e. a hotel].’ [JGS 785–787]

Examples (235–236) feature instances of **scattered NPs that are not interrupted by a predicative phrase, but by a nominal constituent** (note that *chî'è* ‘be bad’ in (235) and *pūrākú* ‘to work’ in (236), although they happen to be verb roots, occur in these examples as zero-derived nominalizations, which is why they can be analyzed as nominal constituents). The linker in these two examples introduces **close appositions** in constructions of the type PRONOUN LK = NOMINAL.CONSTITUENT presented above in the discussion of example (231).

(235) *Ngēmà nî-ĩ gá tûmààrũ chî'è gá chô'rî pāpǎ gá ná'a tà-à'èchā'ũ.*

*ngē-mà*      *nî=ĩ*      *gá = [tû-mà]-àrũ*      *chî'è*  
 MED.NS-ANAPH    3M/N/NS.SBJ.PCì = be    LK.PST = 3S-ANAPH-GEN    be.bad

[*gá = chô-'rî*    *pāpǎ*]    *gá = ná'a*  
 LK.PST = 1SG-GEN    dad      LK.PST = CONJ

*tà = à'-ē-èchā-'ũ*  
 3S.SBJ\SBJV = drink-ANTIP2-PERSIST\SBJV-SUB

‘[My dad was a good person but he used to drink a lot.] That was my dad’s vice, spending his time drinking.’ [ANO1 145–146]

(236) *Chô'rî pūrākú ì chòmà rù ná-mũ.*

[*chô-]*'rî    *pūrākú*    [*ì = chò-mà*] = rù      *ná = mũ*  
 1SG-GEN    work      LK.NS = 1SG-ANAPH = TOP    3M/N/NS.SBJ = be.several

‘I have several occupations [lit. ‘My occupations, me, are several.’].’ [JSG A11]

### 3.5.2.2 Linking a nominal constituent to a coreferential index that precedes it

Examples (237–240) illustrate a function of the linker that is relatively different from the one discussed in the preceding section. In (237–240), the linker does not link two parts of a complex NP, but a **pronominal index that is part of the inflectional morphology of the predicative phrase, on the one hand, and a nominal constituent that is coreferential with that index and occurs after the predicative phrase, on the other hand** (this function of the linker was introduced in the discussion of (225) above). This use of the linker is **functionally comparable to its use in the PRONOUN LK = NOMINAL.CONSTITUENT close appositional construction**, except that here the pronominal element in the construction is no

longer a free form as above, but an index. In (237), two distinct (*i.e.* non coreferential) nominal constituents occur after the predicative phrase, with each of them making referentially explicit one of the two pronominal indexes procliticized to the predicative phrase:

(237) *Chǎná-ǵũ ì chòmà ì gǔ'ú.*

*chǎ*<sub>i</sub> = *ná*<sub>j</sub> = *ǵũ*                      [*ì* = *chò-mà*]<sub>i</sub>              [*ì* = *gǔ'-ú*]<sub>j</sub>  
 1SG.BEN = 3M/N/NS.SBJ = hurt    LK.NS = 1SG-ANAPH    LK.NS = finish\SBJV-REL.NS

‘I regret all of it [lit. ‘It all hurts for me.’]’ [ANO1 163]

Example (238) illustrates the same phenomenon (in the second of the two clauses it comprises), but additionally shows (in its first clause) that the linker is *not* required to introduce a nominal constituent that precedes the predicative phrase (in that case, the nominal constituent is not indexed on the predicative phrase):

(238) *Kōpīwāràmàchī tī-gû. Táyā-gû ì kōpīwāràmàchī.*

*kōpīwārà-màchī*    *tī* = *gû*                      *tá* = *yā*<sub>i</sub> = *gû*  
 capybara-meat      3S.SBJ.PCĪ = roast    3S.SBJ = PCĪ.3M/N/NS.OBJ = roast

[*ì* = *kōpīwārà-màchī*]<sub>i</sub>  
 LK.NS = capybara-meat

‘She roasted the capybara meat. She roasted the capybara meat.’ [JSG C146–147]

Example (239) displays a case where the predicative phrase is a non-verbal one (on non-verbal predicative phrases in /-gǔ/ ‘PLOC’, see SECTION 4.3.3.1) and the pronominal form it comprises is not an index, but in fact a free pronoun. The nominal constituent that follows the predicative phrase and makes this free pronoun referentially explicit bears, as expected, the linker.

(239) [...] *tá-tûmàtānùgù ā'a gû'è-má dùã* [...].

*tá* = *tû*<sub>i</sub>-*mà-tānù-gù* = *ā'a*                      [*gá* = *gû'è-má*                      *dùã*]<sub>i</sub>  
 3S.SBJ = 3S-ANAPH-group-PLOC = QUOT    LK.F/M/S/NS.PST = DIST.S-ANAPH    human

‘[...] he was in the middle of the people [...].’ [LAR E229]

In (240), the presence of a linker introducing the nominal constituent can be interpreted as representative of the same function of the linker as a marker establishing an overt link between a nominal constituent and an index that precedes it. This utterance lacks a predicative phrase altogether, however, and consequently lacks any



index that could stand in a relation of coreferentiality with the nominal constituent that bears the linker. This is because an **inflected form of the copular verb**  $\overset{\circ}{i}$  ‘to be’ (in this case, /nî<sub>i</sub> =  $\overset{\circ}{i}$ / [3M/N/NS.SBJ.PCì = be] ‘it is’), **although ellipsed (as is often the case with this verb root), is virtually present in the utterance**. In a way, in such a configuration, it is the linker that signals where the ellipsed form of the copular verb (which would necessarily have occurred *before* the linker) is to be virtually inserted (in the absence of the linker highlighted in bold in (240), the whole utterance would be interpreted as an NP meaning ‘that work of mine’).

(240) Ngēmà ì chārũ pūrākú ì chòmà.

ngē-mà            [ì = chā-rũ      pūrākú    ì = chò-mà]<sub>i</sub>  
 MED.NS-ANAPH   LK.NS = 1SG-GEN   work        LK.NS = 1SG-ANAPH

‘That[’s] my work.’ [JGS 80]

The linker that introduces the second half of the cleft constructions that serve for focalization can be interpreted as representing, again, the same use of the linker as a marker establishing an overt link between a nominal constituent and an index that precedes it. Instances of such constructions are provided in examples (241–243). In (241), the **focalized constituent** (/pě-nátũ/ [2PL-father] ‘your father’) **has the semantic role of the subject** of the predicative phrase /ũ-’chírũ/ (make-clothes) ‘to clothe’. At a strictly syntactic level, however, that focalized constituent functions as the complement of the copular verb /nî =  $\overset{\circ}{i}$ / (3M/N/NS.SBJ.PCì = be) ‘it is’. What functions as the syntactic subject of the copula is the relative clause *chā-ũ-’chírũ-kũ tá ì ñumá* ‘who will clothe me from now on’. Because that relative clause is coreferential with the subject index /nî = / ‘3M/N/NS.SBJ.PCì’ in *nî- $\overset{\circ}{i}$*  ‘it is’ and occurs after the main predicative phrase, it has to bear the linker (on focalization implemented by means of cleft constructions involving relative clauses, see SECTION 5.2.5, p.420).

(241) “Mārũ pěnátũ nũwǎ nî- $\overset{\circ}{i}$  yá chā-ũ-’chírũ-kũ tá ì ñumá [...]”

mārũ    pě-nátũ    nũwǎ            nî- $\overset{\circ}{i}$   
 PRF    2PL-father   well.M/N/NS   3M/N/NS.SBJ.PCì = be

[yá = chā = ũ-’chírũ-kũ = tá                                    ì = ñumá]<sub>i</sub>  
 LK.N/S = 1SG.ACC = make-clothes\SBJV-REL.M = FUT   LK.NS = present.time

“Well, it’s your (pl.) father who will clothe me from now on [...]” [IGS 246]

In (242–243), because the **focalized constituent does not have the semantic role of the subject or object** of the embedded predicative phrase, the second half of

the cleft construction is not a relative clause but a subordinate clause in /-'ú/ 'SUB' (on focalization implemented by means of cleft constructions involving subordinate clauses in /-'ú/ 'SUB', see SECTION 5.2.6, p.426). Because that subordinate clause functions syntactically as the subject of the copular verb and follows it, it bears, again, the linker.

(242) “Mò, gè'tá nî-î ì chónímá'a nékù-úú'ú'ú?”

Mò            gè'tá            nî<sub>i</sub> = î            [î = chónímá'a  
Moe~VOC where?.ALOC 3M/N/NS.SBJ.PCì = be LK.NS = fish-COM

né = kù = ú-ú'ú-ú<sub>i</sub>  
CTRPT.3ALOC = 2SG.SBJ\SBJV = go.SG-at.intervals\SBJV-SUB

“Moe, where is it you always get fish from [lit. ‘... where is it you come again and again from with fish?’]?” [JSG B315]

(243) Ngēmámá'a nî-î gá tànā-d'ái'ú gá nû'kímá.

ngē-mà-má'a            nî<sub>i</sub> = î  
MED.NS-ANAPH-COM 3M/N/NS.SBJ.PCì = be

[gá = tà = nā = d'ái-ú  
LK.F/M/NS.PST = 3S.SBJ\SBJV = 3M/N/NS.OBJ = kill.PL\SBJV-SUB

gá = nû'kímá]<sub>i</sub>  
LK.F/M/NS.PST = past.time

‘[Do you know what curare is?] It’s with that that they killed them [*i.e.* wild animals] in ancient times.’ [IGS 606]

Note that, just like in (240) above, the **copular verb may be ellipsed from focalization constructions**. The constituent that virtually occurs “after” the copular verb, however, retains its linker, although no coreferential index preceding it is in practice present (see (342) for a case of ellipsis of the copular verb from a focalization construction).

### 3.5.2.3 A note on coordination and loose apposition

Incidentally, note that in cases where a nominal constituent linked to a previous one or to a preceding index itself comprises several coordinated nominal constituents (as in (244)) or a nominal constituent that stands in “loose” apposition to another one (as in (245)), the **linker only occurs once, *i.e.* it is not repeated in front of each of these coordinated or apposed nominal constituents**. In other

words, the linker links parts of a NP that stand in a syntactic relation of the type modifier-head with each other (which includes the syntactic relation of close apposition), but not parts of a NP that stand in a relation of coordination or “loose” apposition with each other.

- (244) *Ná'kq chà-dǎu'ú yá wá'à, ā'tápē, pǎwúgú rù ngēmà ùkú chí'ègúmārè'ú ì insectos ñâgú'ú.*

[ná-]'kq chà = dǎu-ú [yá = [wá'à] [ā'tápē] [pǎwú-gú]  
3N/NS-CAUSE 1SG.SBJ\SBJV = see\SBJV-SUB LK.M = tarantula snake spider-PL

rù [ngē-mà ùkú chí'è-gú-mārè-ú ì = insectos  
and MED.NS-ANAPH I.mean be.bad-PL-just\SBJV-REL.NS LK.NS = insects

ñâ-gú-ú]  
do.thus-PL\SBJV-REL.NS

‘I look for tarantulas, snakes, spiders, and those nasty things they call insects.’  
[JGS 163–166]

- (245) *Ngēmà nî-î gá chārū pūrākú, nô'r'úchì nǎwǎ chà-nā-ǔgú'ú gá pūrākú.*

ngē-mà nî<sub>i</sub> = î [gá = [chā-rū pūrākú]  
MED.NS-ANAPH 3M/N/NS.SBJ.PCì = be LK.F/M/NS.PST = 1SG-GEN work

[nô'r'úchì nǎ-wǎ chà = nā = ǔgú-ú  
beginning-genuinely 3N/NS-ALOC 1SG.SBJ\SBJV = 3M/N/NS.OBJ = start\SBJV-REL.NS

gá = pūrākú]]<sub>i</sub>  
LK.F/M/NS.PST = work

‘That was my job, the job I started with initially.’ [JGS 759–760]

### 3.5.2.4 Contexts where the linker is typically absent

In summary, we have seen so far that the **linker occurs in front of any nominal constituent that 1) follows, whether immediately or not, another nominal constituent with which it forms a single NP and with which it stands in a modifier-head relation** (excepting a few cases, in particular when the modifier comes first and is the indefinite determiner *wí'á*, a non-locative demonstrative, or a genitive phrase), **or 2) comes after an index with which it is coreferential**. Examples (246–248) are meant to show that **nominal constituents do not usually bear the linker out of these cases**. In particular, the linker is usually not procliticized to extra-clausal constituents (*kùmà* in (246), *Nátútàmámá'a nà-ǔgúnèwǎ* in (248)), clause-internal nominal constituents that precede the predicative phrase

(e.g. *ingléswǎ* in (246)), or clause-internal constituents that follow the predicative phrase but are not indexed on it (*ná'kq gá internado* in (247)).

(246) “*Kùmà rù ingléswǎ kī-dé'à?*”

*kù-mà = rù*      *inglés-wǎ*    *kī = dé'à*  
2SG-ANAPH = TOP    English-ALOC    2SG.SBJ.PCī = speak

“Do you speak English?” [JGS 345]

(247) *Ngémà gá wénà chàyà-tǎègū'ú ná'kq gá internado.*

*ngé-mà = gá*                      *wénà chà = yà = tǎ-ègū-'ú*                      [*ná-'kq*  
MED.ALOC-ANAPH = PST    again    1SG.SBJ\SBJV = AM = drop.SG-INV\SUB    3N/NS-CAUSE

*gá = internado*  
LK.PST = boarding.school

‘Then I went back to the boarding school again.’ [JSG A386–387]

(248) *Ngémà ì museowǎ námá'a chà-ú'ú, Nátútàmámá'a nà-ūgǐnèwǎ.*

*ngé-mà = ì*                                      *museo-wǎ*    *ná-má'a*  
MED.ALOC-ANAPH = CONTR.TOP    museum-ALOC    3N/NS-COM

*chà = ú-'ú*                                      [*Ná-tú-tàmà-má'a*  
1SG.SBJ\SBJV = go.SG\SBJV-SUB    3N/NS-river-inside-COM

*nà = ū-gǐn-è-wǎ*  
3M/N/NS.SBJ\SBJV = say-PL\SBJV-REL.N-ALOC

‘Then I go to the museum with them, to what they call the “Natutama” [“Underwater”, the name of the museum].’ [JGS 135–136]

There is two contexts, however, where the linker is regularly procliticized to a nominal constituent without linking it to any preceding coreferential nominal constituent or index. These contexts, which are the topic of the following two sections, allow the linker to occur in syntactic positions unaccounted for by the summarized description of its distribution just put forward.

### 3.5.2.5 Generalization of the linker after the predicative phrase

**Circumstantial independent nouns** (*i.e.* members of a closed class of independent nouns that typically occur in discourse without syntactic function marking) that refer to temporal positions regularly bear the linker (in its non-past

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or past non-salientive forms) **when they follow the predicative phrase**. Such circumstantial independent nouns are not, however, coreferential with any preceding nominal constituent or index within the clause. This regular context of occurrence of the linker is illustrated in examples (249–251).

(249) *Ngēmàkq chā-á'irà ì'ràríwǎ ì ñumá.*

*ngē-mà-kq*                      *chā = á'-irà*                      *ì'ràríwǎ*    [*ì = ñumá*]  
 MED.NS-ANAPH-CAUSE    1SG.SBJ = be.drunk-slightly    a.bit                      LK.NS = present.time

‘That’s why I’m a bit drunk now.’ [ANO1 182]

(250) *Mā nū-pá ì kùyā-gū'ú ì ngē'gùmá.*

*mā = nū = pá = ì*  
 PRF = 3M/N/NS.SBJ.PCĪ? = be.dry = CONTR.TOP  
*kù = yā = gū-'ú*    [*ì = ngē'gùmá*]  
 2SG.SBJ\SBJV = PCĪ.3M/N/NS.OBJ = roast\SBJV-SUB    LK.NS = ANAPH.CIRC

‘When they’re dry, then you burn them.’ [LAR D234]

(251) *Nūchāyārū-gǔmā ì nō'rí ná'a nūchī-ù'ú.*

*nū = chā = yā = rū = gǔmā*    [*ì = nō'rí*]                      *ná'a*  
 3M/N/NS.ACC = 1SG.SBJ = AM = PCrū = forget    LK.NS = beginning    CONJ  
*nū = chī = ù-'ú*  
 3M/N/NS.ACC = 1SG.SBJ.PCĪ.SBJV = say\SBJV-SUB

‘I forgot to mention it before.’ [JSG A116]

Note that it may also occasionally occur for a nominal constituent that is *not* a circumstantial independent noun to bear the linker in contexts where it occurs after the predicative phrase but is not coreferential with any nominal constituent or index that precedes it. This mostly happens in my corpus to nominal constituents in the areal locative syntactic function, as in examples (252–253) (for an occurrence of this phenomenon involving a nominal constituent in another syntactic function, see /*î = tō-'kq*/ [LK.NS = 1PL-CAUSE] ‘for us’ in (154) above). I interpret these irregular occurrences of the linker as the possible effect of a minor tendency in today’s SMAT towards marking with the linker any nominal constituent that follows the predicative phrase, whether it is or not coreferential with a preceding nominal constituent or index.

(252) [...] *ñumá rù 'ārù wěná rù tōmà rù tàyā-tógúgú ì tōnèwǎ.*

*ñumá = rù = 'arù*                      *wénà = rù*    *tō-mà = rù*  
 present.time = TOP = unlike.before    again = TOP    1PL-ANAPH = TOP  
*tā = yā = tó-gú-gú*                      [*ì = tō-òné-wá*]  
 1PL.SBJ = PCĪ.3M/N/NS.OBJ = plant-PL-PL    LK.NS = 1PL-space-ALOC

‘[This and that sort of timber trees and medicinal plants,] now, again, we plant them in our swiddens.’ [LAR D301–302]

(253) *Tá dù ì-ú'gù ì nāi'nēkūwá rù nà-mù ì mūrēnū* [...].

*tá*                      *dù*                      *ì = ú-'gù*                      [*ì = nāi'nēkū-wá*] = *rù*  
 ASSERT.EXPL    like.this    PCØ.SBJV = go.SG-CIRC    LK.NS = jungle-ALOC = TOP  
*nà = mù*    *ì = mūrēnū*  
 3M/N/NS.SBJ\SBJV = be.several\SBJV    LK.NS = fly

‘Because you know, when you go to the jungle, there’s lots of flies [...].’ [JSG C46–47]

### 3.5.2.6 Linker used as a type of definite determiner

Another case where the linker’s function is not to link the nominal constituent to which it is procliticized to any preceding coreferential nominal constituent or index is when it serves as a **particular type of definite determiner used to signal that a nominal constituent is intended to allow for the identification of a particular referent within a set of referents already established as a main topic** (implying a contrast between that particular referent and the other referents in the set of referents in question). This function of the linker is extremely reminiscent of the use of the non-locative endophorics as a type of definite determiners (on which see SECTION 3.4.3, p.225). In this function, the linker often marks a headless relative clause, as in (254–255), or minimally a NP modified by a relative clause. It may also mark a NP that does not contain any relative clause, as in (256).

(254) “*Kú ngì'ā yěà tá-îgú rù yá yîà wôchínè tá gēnágú'è tá tî-î yá pǒrá'è!*” *ñâ'ú tî'ú.*

*kú = ngì'ā*                      *yě-à*                      *tá = î-gú*                      *rù*    [*yá = yî-à*  
 come.on = let's.go    DIST.ALOC-EXO    4SBJ = go.PL-PL    and    LK.M/N/S = MED.N-EXO  
*wôchínè = tá*    *gē-nágú-'è*] = *tá*                      *tî = î*  
 ceiba.tree = FUT    carry.SG-on\SBJV-REL.S = FUT    3S.SBJ.PCĪ = be  
*yá = pǒrá-'è*    *ñâ-'ú*    *tî-'ú*  
 LK.M/N/S = be.strong\SBJV-REL.S    do.thus.3M/N/NS.SBJ.SBJV-SUB    3S-ACC

“‘Come on, let’s go over there, the strong[er of us two] will be the one who [manages to] lift that ceiba tree!’ he told him.’ [JSG B123–125]

(255) *Ka yá yímá gēǎ'ēkū nūwǎ ā'a gá ñómá nâànwǎ tǎmá'a nà-û'ú* [...].

*ka* [yá = yĩ-má                      gē-ǎ'ē-kū]                      nūwǎ = ā'a = gá  
and LK.M/S = MED.M-ANAPH   not.have-mind\SBJV-REL.M   well.M/N/NS = QUOT = PST

ñô-má                      nâ-ànè-wǎ                      tǎ-má'a  
PROX.NS-ANAPH   3N/NS-space-ALOC   4-COM

nà = û-'ú  
3M/N/NS.SBJ\SBJV = be.there.SG\SBJV-SUB

‘[The good mythological brother Yoi ended up in North America.] The mischievous one, by contrast, ended up with us in this region [...].’ [LAR D76]

(256) *Gá yâtù rù náyā-yâu'gú* [...]. *Ka gá gē'è gá nǎpē'egù tīyà-yâu'gú'ú rù tû-màchírùgù nà-gàugū'ú*.

[gá = yâtù] = rù                      ná = yā = yâu'gú                      *ka*  
LK.F/M/S/NS.PST = be.a.male = TOP   3M/N/NS.SBJ = PCĪ.3M/N/NS.OBJ = seize-PL   and

[gá = gē-'è] = gá                      nǎ-pē'e-gù  
LK.F/M/S/NS.PST = be.a.female\SBJV-REL.S = PST   3M-front-PLOC

tī = yà = yâu'gú-'ú                      rù   tû-mà-chírù-gù  
3S.ACC = PCĪ.3M/N/NS.SBJ\SBJV = seize-PL\SBJV-SUB   and   3S-ANAPH-clothes-PLOC

nà = gàu-gū-'ú  
3M/N/NS.SBJ\SBJV = tear-PLURAC\SBJV-SUB

‘[A man and a woman entered the territory of an isolated group.] The man they captured [...]. And the woman they captured before his [*i.e.* the man’s] eyes and they ripped her clothes off.’ [AMB 25–29]

### 3.5.2.7 Past form of the linker procliticized to subordinate clauses

This section discusses the syntactic distribution of a morpheme /gá = / that I tentatively analyze as the linker in its past non-salientive inflectional form. This morpheme is procliticized to apparently any type of subordinate clauses to indicate that they refer to past processes. Example (257) shows this morpheme /gá = / procliticized to a circumstantial adverbial clause in /-'gũ/ ‘CIRC’. Examples (258–259) show it procliticized to complement clauses introduced by the conjunction *ná'a* ~ *nû-ĩ* (*ná'a* and *nû-ĩ* are two subdialectal variants of the same conjunction; note that intriguingly, although these two variants generally have the

exact same distribution, they do not occur in the same order relative to the morpheme /gá=/ under discussion in this section, yielding /gá=ná'a .../ but /nî.ĩ gá=.../).

(257) *Ngēmà gá chārū mǎ'ũ gá chà-bû'gù.*

*ngē-mà*            *gá = chā-rū*            *mǎ'ũ*  
MED.NS-ANAPH   LK.F/M/NS.PST = 1SG-GEN   live

[*gá = chà = bû-'gù*]  
LK.F/M/NS.PST = 1SG.SBJ\SBJV = be.young-CIRC

‘[After telling the story of his childhood and youth:] That [was] my life when I was young.’ [JGS 797]

(258) *Chô'ri māmá gá tá-nâ'chà'ũ gá ná'a chà-superando'ũ, adelantewá chà-ũ'ũ.*

*chô-'rī*   *māmá = gá*   *tá = nâ<sub>i</sub>-'chà'ũ*    [*gá = ná'a*  
1SG-GEN   mum = PST    3S.SBJ = 3N/NS-VOL   LK.PST = CONJ

*chà = superando-'ũ*            *adelante-wá*   *chà = ũ-'ũ*]<sub>i</sub>  
1SG.SBJ\SBJV = surpass\SBJV-SUB   forward-ALOC   1SG.SBJ\SBJV = go.SG\SBJV-SUB

‘My mother, she wanted me to surpass myself, to move forward.’ [ANO1 120–121]

(259) *Tá-tá'ègú námá'a nî-ĩ gá mārū tà-ābùè'ũ ā'a.*

*tá = tá-ā'è-gú*            [*ná-*]*má'a*   [*nî.ĩ*   *gá = mārū*  
3S.SBJ = be.big-mind-PL   3N/NS-COM   CONJ   LK.F/M/S/NS.PST = PRF

*tà = ā-bù-è-'ũ*] = *ā'a*  
3S.SBJ\SBJV = have-edible.plant-INTR.PL\SBJV-SUB = QUOT

‘They were happy to have gotten crops [lit. ‘... happy with it that they had gotten crops.’].’ [LAR E218]

Importantly, the **non-past non-salientive inflectional form of the linker (/î=/)** never occurs in front of subordinate clauses that do not refer to past processes (or, minimally, that are not explicitly marked as referring to past processes).<sup>225</sup> Such subordinate clauses, regardless of whether they are coreferential

<sup>225</sup>Except in cases where a subordinate clause in /-'ũ/ ‘SUB’ occurs in a cleft construction serving for focalization, as in example (242) above. In this specific case, the subordinate clause does indeed bear the form /î=/ ‘LK.NS’ of the linker if the main clause refers to non-past (or not explicitly past) processes.



or not with a preceding nominal constituent or index, regularly occur with no morpheme of any sort filling the syntactic position that would be occupied by /gá = / if they were to be marked as referring to past processes. This observation is illustrated in the following example:

(260) *Mā nū̀kù-fǎ'ú ná'a ákú nà-trata'ú ì ñàà?*

*mā = nū̀<sub>i</sub> = kù = fǎ-ú* *[ná'a ákú*  
 PRF = 3M/N/NS.ACC = 2SG.SBJ\SBJV = know\SBJV-SUB CONJ what?.NS

*nà = trata-ú* *ì = ñàà<sub>i</sub>*  
 PCØ.IMP = deal.with\SBJV-SUB LK.NS = PROX.NS-EXO

‘[After telling a story from a book to his young son:] Do you know what this is about, now?’ [JSG C168]

This observation **questions whether the morpheme /gá = / that marks subordinate clauses referring to past processes actually is to be analyzed as a form of the linker**. Analyzing it that way implies considering that the linker exhibits a defective distribution in its occurrences on subordinate clauses. Such an analysis further implies to consider a syntactic constituent such as *chà-bù'gù* ‘when I was young’ in (257) as the syntactic equivalent of a nominal constituent, given that the linker, in all of its other uses, can only be procliticized to nominal constituents. Although the marker /gá = / of subordinate clauses referring to past processes is most likely cognate with the linker, it might in fact be better analyzed, from a synchronic perspective, as a separate morpheme rather than as an inflectional form of the linker.

### 3.6 Syntactic functions of nominal phrases

This section provides a brief overview of the **strategies employed in SMAT for encoding the syntactic function of NPs**. Morphologically speaking, these strategies involve either **head-marking** (*i.e.* encoding via markers—in practice proclitics for the most part—applied to the constituent that governs the syntactic relation, which in practice can only be a predicative phrase specifically), **dependent-marking** (*i.e.* encoding via markers—in practice suffixes and relational nouns—applied to the governed NP), or, in a few cases, a **complete lack of marking**. Head- and dependent-marking can only be said to co-occur in cases where a NP already marked with one of the two locative relational nouns (/wǎ/ ‘ALOC’ and /gǔ/ ‘PLOC’) is simultaneously indexed on the predicative phrase (on this phenomenon, see SECTION 5.7.2.1, and examples (515), (522), and (523) in particular).



correspond to a **third person participant assigned to the masculine, neuter, or non-salientive nominal class** always occur in the zero-case in the syntactic function of object (but not NPs that correspond to first, second, fourth, or third person feminine or salientive participants in object function; such NPs, by a phenomenon of differential object marking, are typically—but not always—marked with the accusative case-marking suffix, on which see next section). Depending on the situation, the syntactic function of such NPs may be encoded either by their **position only** (e.g. *gú'ú* ‘everything’ in (262), which only its position right before a transitive predicative phrase indicates to be an object), by **indexation only** (e.g. *kõwú* ‘the deer’ in (263), which only its coreferential index /*nā* = / ‘3M/N/NS.OBJ’ indicates to be an object), or by **both their position and indexation** (e.g. *pê'rũ pāpá* ‘your father’ in (264), which both its position right before an intransitive predicative phrase and its coreferential index /*ná* = / ‘3M/N/NS.SBJ’ indicate to be a subject).

(262) *Gú'ú tá-tó ì ñymá. Nũ'kúmá ná nà-tá'y, arroz!*

*gú-'ú*                      *tá = tó*              *ì = ñymá*                      *nũ'kúmá = ná*  
 finish\SBJV-REL.NS    4SBJ = plant    LK.NS = present.time    past.time = ASSERT

*nà = tá'y*                                      *arroz*  
 3M/N/NS.SBJ\SBJV = be.absent\SBJV    rice

‘[It was the White people who introduced rice here. People occasionally plant it here too now.] People plant everything nowadays. In the past it did not exist, you know, rice!’ [IGS 645–646]

(263) [...] *tâu tánā-ngo gá kõwú* [...].

*tâu*    *tá = nā = ngo*                                      *gá = kõwú*  
 NEG    3S.SBJ = 3M/N/NS.OBJ = bite    LK.F/M/NS.PST = deer

‘[...] they did not eat the deer [...].’ [IGS 274]

(264) “*Bè'mà rù pê'rũ pāpá chāná-yî!*”

*bè'mà rù*    [*pê-'rũ pāpá*]    *chā = ná = yî*  
 quietly and 2PL-GEN    dad              1SG.ACC = 3M/N/NS.SBJ = sway

“‘[What’s wrong with you, mum?] – Quiet, your dad is with me [in my hammock] [lit. ‘... your dad is rocking me!’]!’” [IGS 49]

Participants in the **accusative and benefactive(-malefactive)** syntactic functions are regularly marked with the corresponding case-marking suffixes when they

precede the predicative phrase, as in example (265) (on the case-marking suffixes, see next section). When they **follow the predicative phrase**, by contrast, they **virtually always occur in the zero-case and get indexed on the predicative phrase**, as in (266) (accusative complements of the deictic verb, however, do retain their dependent-marking when they occur after the deictic verb, which results from the fact that the inflectional morphology of the deictic verb does not allow for the indexation of such complements; see SECTION 6.1, p.507).

(265) [...] *nàì gá g̃ê'ũ nà-fá'ũ* [...].

[*nàì* *gá* = *g̃ê-'ũ*] *nà* = *fá-'ũ*  
 other.F LK.PST = be.a.female-ACC 3M/N/NS.SBJ\SBJV = know\SBJV-SUB

‘[...] he got to know another woman [...].’ [IGV 692]

(266) *Nū̀kù-fá'ũ ì ũgúànè?*

*nū̀* = *kù* = *fá-'ũ* *ì* = [*ũgúànè*]  
 3M/N/NS.ACC = 2SG.SBJ\SBJV = know\SBJV-SUB LK.NS = story

‘[After telling a story to his son:] Did you understand the story [lit. ‘Have you gotten to know (the meaning of) the story?’]?’ [JSG C176]

The **complement of the copular verb root *ĩ* ‘to be’ is always in the zero-case** (see e.g. the proper noun ‘Javier Sánchez’ in (261), which is morphologically unmarked for syntactic function). Its syntactic function is only encoded by its position immediately before the copular verb.

NPs in the **punctual locative syntactic function** are ordinarily marked with the relational noun /-gũ/ ‘PLOC’. This relational noun is **occasionally dropped**, however, with apparently no resulting effect of any sort. This seems to be possible only in cases where the NP in that syntactic function precedes the predicative phrase. See, for instance, the NP *ná'márjũ'ũ* ‘(in) its anus’ in the following example, whose punctual locative syntactic function is morphologically covert:

(267) [...] *wí'ámę'emá'a gá nò'táá ā'a ná'márjũ'ũ ā'a tàyā-wé'ũ ā'a gá gũmà quena ā'a* [...].

*wí'á-mę'e-má'a* = *gá* *nò'táá* = *ā'a* *ná-'márjũ'ũ* = *ā'a*  
 one-hand-COM = PST outright = PST 3N/NS-anus = QUOT

*tà* = *yā* = *wé-'ũ* = *ā'a*  
 3S.SBJ\SBJV = PCI.3M/N/NS.OBJ = set.straight\SBJV-SUB = QUOT

*gá* = *gũ-mà* *quena* = *ā'a*  
 LK.N.PST = DIST.N-ANAPH flute = QUOT



TABLE 35. Syntactic function markers in SMAT

	MA tr.	Gloss	Major semantic roles
<b>Suffixes</b>			
- <sup>̄</sup> ũ	n/a	ACC (accusative)	theme of perception and cognition processes ( <i>see X, know X</i> ), prototypical patients (usually encoded in the zero-case) in cases of differential object marking ( <i>he could kill you</i> )
- <sup>̄</sup> nà	n/a	DAT (dative)	recipient ( <i>give it to X</i> ), animate goal or source ground in motion and vision events ( <i>jump onto X to attack them, leave X to their activities, look after X</i> ), addressee of request ( <i>ask X a question/for something</i> )
- <sup>̄</sup> ũ (~ <sup>̄</sup> ũ)	n/a	BEN (benefactive- malefactive)	animate referent to the advantage or disadvantage of whom a process occurs ( <i>do a job for X</i> ), experiencer ( <i>please X</i> )
- <sup>̄</sup> nè	n/a	PART (partitive)	partitively affected object ( <i>eat some of the X's</i> )
- <sup>̄</sup> arū, - <sup>̄</sup> rū ~ - <sup>̄</sup> rī	+	GEN (genitive)	possessor in a broad sense ( <i>the boat of X, the master of X</i> ), complement of a zero-derived nominalization ( <i>the being strong of X, the killing of X</i> )
<b>Relational nouns</b>			
- <sup>̄</sup> ka		CAUSE	referent for the obtention of which a non-motion event occurs ( <i>look for X, steal X</i> ), animate goal ground in a motion event ( <i>come to see X, crouch next to X</i> ), reason or motive ( <i>as a result of X, for the sake of X</i> ), referent from the perspective of whom the process is viewed ( <i>for X, ...</i> )
- <sup>̄</sup> chì	+	with.hate. toward	complement of the verb root <i>âi</i> 'to hate' referring to the hated participant ( <i>hate X</i> )
- <sup>̄</sup> chqekū	+	because.of	cause ( <i>because of X</i> )
- <sup>̄</sup> má'a		COM (comitative)	accompanier ( <i>travel with X</i> ), addressee of uttering events ( <i>tell it to X</i> ), experiencer ( <i>be hard for X</i> ), tool ( <i>cut it with an X</i> ), container ( <i>store it in an X</i> )
- <sup>̄</sup> ũ	+	STATE	state ( <i>cause someone to be in state X, transform oneself into X</i> )

(continued)

### 3. THE NOMINAL PHRASE

MA tr.		Gloss	Major semantic roles
-àkù	+	MAN (manner)	referent in the manner of which a process occurs ( <i>in the manner of X</i> )
-'rú'ù		like	referent with which a relation of similarity holds ( <i>like X</i> )
-gǔ		PLOC (punctual locative)	ground conceived as a solid potentially featuring a specific topology (defines a punctual position) ( <i>stand in X, bump into X</i> ), vehicle ( <i>go there in X</i> ), track ( <i>go there via track X</i> ), punctual temporal reference ( <i>do it at time X, do it at the end of duration X</i> )
-wá		ALOC (areal locative)	ground conceived as an area lacking a specific topology (defines an areal localization, a source, or a goal) ( <i>live in X, walk past X, leave X, go to X, look at X</i> ), referent in quest of which a motion event occurs ( <i>go for product X</i> ), domain of activity ( <i>work in field X</i> ), conceptual domain ( <i>within domain X, one finds this and that element</i> ), language ( <i>speak in X</i> )
-wé		following	moving goal ground ( <i>follow X, run after X, shout after X</i> )
-'chqwá	+	AVERS (aversive)	referent from the potential undesirable effects of which a (physical or metaphorical) motion event occurs ( <i>run away from X, look away from X</i> )
-wěná		after	event after which a process occurs ( <i>after X</i> ), animate referent related to an event after which a process occurs ( <i>after the departure of X</i> )
-'úpā	+	before	event before which a process occurs ( <i>before X</i> ), animate referent related to an event before which a process occurs ( <i>before the departure of X</i> )

**Key:**

MA tr.	trigger of Pattern 2 morphotonological alternations (see SECTION 2.6.2.2; suffixes for which no indication is provided in this column do not trigger these alternations)
n/a	not applicable (the corresponding suffix never occurs in a context where it could trigger Pattern 2 morphotonological alternations)

Two types of syntactic function markers are to be distinguished from a morphological perspective, specifically **case-marking suffixes and relational nouns**.<sup>226</sup> Case-marking suffixes are defined by the fact that they select for Allomorph 3 (in the case of /-'ũ̄/ 'ACC', /-'nà/ 'DAT', /-'ũ̄̄/ 'BEN', and /-'nè/ 'PART') or Allomorph 4 (in the case of /-`ârũ̄/ 'GEN') of the pronominal roots when they are immediately attached to them (see SECTIONS 3.3.4–3.3.5). These allomorphs of the pronominal roots only occur in combination with the case-marking suffixes. The relational nouns, by contrast, select for Allomorph 1 of the pronominal roots when they are attached to them (see SECTION 3.3.2). Allomorph 1 of the pronominal roots is the one that is regularly used to encode the pronominal possessor of bound nouns. In other words, the **relational nouns behave morphologically like bound nouns**,<sup>227</sup> and the NP they mark behaves morphologically like their possessor.

The benefactive(-malefactive) case-marking suffix /-'ũ̄̄/ has a **marginal free variant** /-`ũ̄̄̄/, which is attested in my elicited data but not in my corpus of spontaneous texts. The genitive case-marking suffix /-`ârũ̄/ takes an **obligatory allomorph** /-'rũ̄/ (or its subdialectal variant /-'rĩ/) when directly combined with a pronominal root (see SECTION 3.3.5).

Note that a number of relational nouns (marked with a sign < + > in the column “MA tr.” in TABLE 35) belong to the lexical class of **triggers of Pattern 2 morphotonological alternations** (on which see SECTION 2.6.2.2). The genitive suffix /-`ârũ̄/ also acts as a trigger of Pattern 2 morphotonological alternations in the specific situation where it occurs attached to a predicative phrase in the NP incorporation construction (on which see SECTION 4.2.5.1, p.319).

Note that the **syntactic function markers only occur once in a given NP** (*i.e.* the language does not feature agreement for syntactic function within the NP). These markers are **often attached to the last constituent of the NP** (see *e.g.* example (223) for an instance of highly complex NP bearing the relational noun /-wǎ̄/ on its last constituent). Under certain conditions, however, they **may also**

<sup>226</sup>The label “relational noun” stems from the Meso-American, and more specifically the Mayan, terminological tradition (see *e.g.* Aissen et al. 2017). It is applied, in the description of certain Meso-American languages, to closed classes of morphemes that behave morphosyntactically like possessed nouns (and can often be shown, for part of them, to have been derived from initially prototypical nouns), but have in practice a function of syntactic function markers.

<sup>227</sup>Note, however, that combinations of relational nouns, although attested (*e.g.* /Africa-wǎ̄-rũ̄̄̄/ [Africa-ALOC-like] ‘like in Africa’), are extremely limited, while combinations of bound nouns are largely productive.



occur inside the NP. This is especially the case, in particular, when the PRONOUN LK = NOMINAL.CONSTITUENT construction is used, as in the following two examples (on this construction, see SECTION 3.5.2.1, p.258):

(269) *Chà-tôè'ú ná-má'a ì pō'ɣ* [...].

*chà = tô-è-ú* [ná-má'a ì = pō'ɣ]  
1SG.SBJ\SBJV = plant-ANTIP2\SBJV-SUB 3N/NS-COM LK.NS = plantain

'I plant plantains [lit. 'I do some planting with plantains'] [...].' [JSG A15-16]

(270) *Ngě-mà chò-mà ná'kq chà-dǎu'ú ì ná-chíkà ì pó'wō-ē-rú'ú.*

*ngě-mà chò-mà [ná-'kq chà = dǎu-ú]*  
MED.ALOC-ANAPH 1SG-ANAPH 3N/NS-CAUSE 1SG.SBJ\SBJV = see\SBJV-SUB

*ì = ná-chíkà ì = pó'wō-ē-rú'ú]*  
LK.NS = 3N/NS-room LK.NS = fishhook-EVENT.PRED-PURP

'Then I look for a place to fish.' [JGS 273]

### 3.6.3 Near-preposition *ñômá* 'like' and near-prepositional phrase *ñumá tà* 'up to'

*Ñômá*, the non-salientive form of the non-locative proximal endophoric demonstrative (see SECTION 3.4.3), occasionally occurs in a grammaticalized function that no longer seems to be related to its original demonstrative meaning, but resembles instead the function of a **preposition meaning 'like'**. In this function, *ñômá*, which does not seem to inflect for nominal class as it does in its ordinary demonstrative function, immediately **precedes an NP suffixed with the relational noun -'rú'ú** 'like'. This is shown in examples (271–272). Note that in this construction the syntactic function of the NP is marked twice: once by *ñômá*, and again by -'rú'ú 'like'. While -'rú'ú 'like' does not require the co-occurrence of *ñômá*, *ñômá* does conversely seem to require that of -'rú'ú 'like', whose function it merely “replicates” (with anticipation) at the left edge of the NP.

(271) [...] *ñômá... wí'á nâ-ē'ú ì <ngě'... > ngě'wákà ì-yâ'ù-ú-rú'ú ngě'má nárū-ǫ.*

*ñômá wí'á nâ-ē'ú ì = <ngě'... > ngě'wákà*  
like INDF 3N/NS-animal LK.NS = MED.PLOC recent.time

*ì = yâ'ù-ú-rú'ú ngě'-má ná = rū = ǫ*  
PCr\SBJV = seize\SBJV-REL.NS-like MED.PLOC-ANAPH 3M/N/NS.SBJ = PCrū = stay.SG

‘[He would never go anywhere,] he would stay there like a newly caught [pet] animal.’ [AMB 29]

(272) *Ñòmá tè'ě yà-bí'ichí-ànē-ú'ú'ú' ÿkú nû-í {ì} nûà [...].*

*ñòmá* tè'ě                      *yà = bí'ichí-ànē-ú'ú'ú'*                      *ÿkú*  
like      what/who?.S      AM.3M/N/NS.OBJ.SBJV = sweep-space\SBJV-SUB-like      I.mean  
*nû = í*                      {ì = }*nû-à*  
3M/N/NS.SBJ.PCì = be      LK.NS = PROX.ALOC-EXO

‘[The ground is clear in the primary jungle.] I mean, it’s like someone has swept the ground here [with an imprecise gesture pointing to the ground around him] [...].’ [JGS 243]

The phrase *ñumá tà* (/ñumá = tà/ ‘present.time = ADD’), usually employed as a near-conjunction with the temporal meaning ‘until’, may also exceptionally be used as a near-prepositional phrase. It then acquires the **spatial meaning ‘up to, all the way to’**. In this function, the phrase immediately **precedes an NP suffixed with the relational noun -wǎ ‘ALOC’**, as shown in the following example:

(273) *Ñumá tà yěà nò'rī ípátā í-ú'ú'wǎ tānā-nâgú'ú.*

*ñumá = tà*                      *yě-à*                      *nò-'rī*                      *í-pátā*  
present.time = ADD      DIST.ALOC-EXO      3N/NS-GEN      building-house  
*í = ú-ú'wǎ*                      *tā = nā = nâ-gú'ú*  
3ALOC = make\SBJV-REL.NS-ALOC      1PL.SBJ = 3M/N/NS.OBJ = carry.PL-PL\SBJV-SUB

‘We carry them all the way there where their depot is built.’ [JSG A53–54]



# Chapter 4

## Verbal and non-verbal predicative phrases and their non-inflectional morphology

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## 4.1 Introduction to the structure of the SMAT predicative phrase

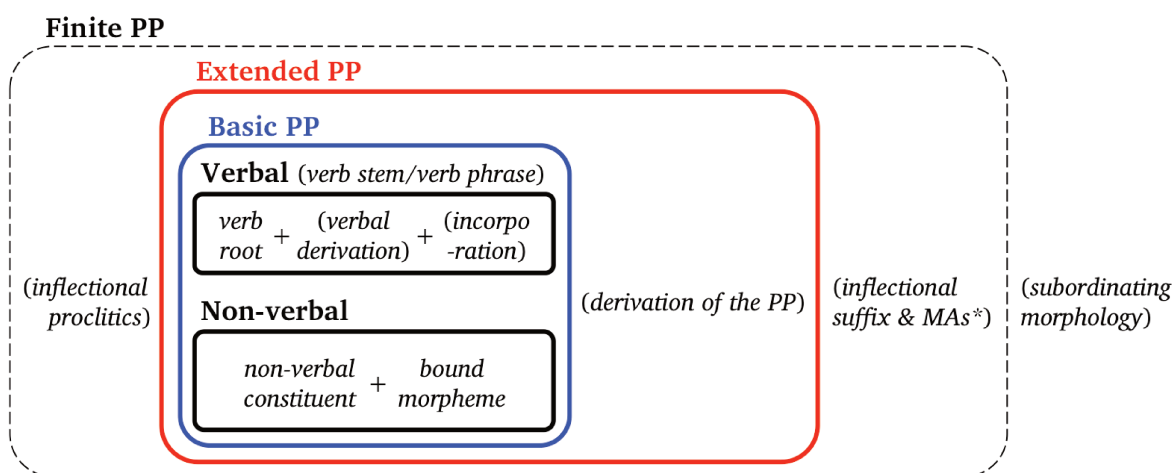
A general outline of the structure of the SMAT predicative phrase (PP) is provided in FIGURE 22. This chapter essentially discusses all the morphological phenomena that operate within the structural level delimited by the red box in this figure. Specifically, it introduces the major types of PPs occurring in the language, *i.e.* the **verbal PP and the non-verbal PP**. It further describes both the **derivational morphology specific to the verbal PP** (which includes derivation proper as well as incorporation of nominal constituents) and the **derivational morphology shared by verbal and non-verbal PPs**. The morphological phenomena that operate at the structural level delimited by the black dashed-line box in FIGURE 22 correspond to the inflectional morphology of the finite PP. They are treated separately in CHAPTER 5.

As was just mentioned, PPs are distributed in two major types, the verbal PP and the non-verbal PP (corresponding to the two innermost black boxes in FIGURE 22).

Verbal PPs may consist of a **verb root alone**, as in example (274):

- (274) *chā = ná = chí*  
 1SG.ACC = 3M/N/NS.SBJ = bite  
 ‘it bit me’

They may alternatively consist of a morphologically complex verb stem, *i.e.* a **verb root attached with one (and only one) derivational suffix of the verb root**. Thus, the PP in (275) is a verb stem composed of the same verb root as the PP in



\*MAs: Pattern 1 morphotonological alternations (see SECTION 2.6.2.1)

FIGURE 22. Outline of the structure of the SMAT predicative phrase (PP)

(274) attached with the plurilocal derivational suffix of the verb root /-ǎ/:

- (275) *chā = ná = chí-à*  
 1SG.ACC = 3M/N/NS.SBJ = bite-PLLOC  
 ‘it bit me in different parts [of my body]’

Nominal constituents, whether bound nouns or an entire NP, may additionally be **incorporated into verb roots or verb stems**. Depending on the morphosyntactic and semantic context in which they occur, incorporated nominal constituents may take a **wide range of semantic roles** in the process being encoded. Examples (276a–276b) show how a bound noun can be incorporated into the verbal PPs featured in (274–275) above. In this context, the incorporated nominal constituent is interpreted as referring to the subpart of the grammatical object that corresponds to the patient being directly affected by the process:

- (276) a. *chā = ná = chí-kùtū*  
 1SG.ACC = 3M/N/NS.SBJ = bite-foot  
 ‘it bit me in the foot/feet’  
 b. *chā = ná = chí-à-kùtū*  
 1SG.ACC = 3M/N/NS.SBJ = bite-PLLOC-foot  
 ‘it bit me in different parts of my foot/feet’

Non-verbal PPs, for their part, consist of **specific types of non-verbal constituents attached with specific types of bound morphemes**. An instance of

such a PP, involving an NP attached with the possessive suffix /-ã/ specifically, is provided in (277):

- (277) *ná = kūchì-ã*  
 3M/N/NS.SBJ = **pork-POSS**  
 ‘she/he has a pork/porks’

Both of these verbal and non-verbal “basic” PPs (blue box in FIGURE 22) may be further attached with **one or several derivational suffixes of the PP**, resulting in “extended” PPs (red box in FIGURE 22). For instance, as shown in (278a–278e), any of the basic PPs in (274–277) above may take the plural derivational suffix of the predicative phrase /-gú/:

- (278) a. *chā = ná = chí-gú*  
 1SG.ACC = 3M/N/NS.SBJ = **bite-PL**  
 ‘they bit me’
- b. *chā = ná = chí-à-gú*  
 1SG.ACC = 3M/N/NS.SBJ = **bite-PLLOC-PL**  
 ‘they bit me in different parts [of my body]’
- c. *chā = ná = chí-kùtū-gú*  
 1SG.ACC = 3M/N/NS.SBJ = **bite-foot-PL**  
 ‘they bit me in the foot/feet’
- d. *chā = ná = chí-à-kùtū-gú*  
 1SG.ACC = 3M/N/NS.SBJ = **bite-PLLOC-foot-PL**  
 ‘they bit me in different parts of my foot/feet’
- e. *ná = kūchì-ã-gú*  
 3M/N/NS.SBJ = **pork-POSS-PL**  
 ‘they have a pork/porks’

Although the ordering “verbal derivation + incorporation + derivation of the PP” within the verbal PP is indeed the one observed in an overwhelming majority of cases, note that it may **exceptionally occur for an incorporated bound noun to precede verbal derivation**, as in (279) (where the bound noun /-gà/ ‘sound’ precedes what appears to be the pluractional derivational suffix of the verb root /-gù/), **or to follow PP derivation**, as in (476) (where the bound noun /-égà/ ‘name’ follows what appears to be the plural derivational suffix of the predicative phrase /-gú/):

- (279) *Āgàgùmārè’ú ā’a.*



$\bar{a}$ -gà-gù-mārè-’ú =  $\bar{a}$ ’a  
 have-sound-PLURAC-just\SBJV-SUB = QUOT

‘It was simply making noises.’ [LAR D173]

(280) [...] ñumá tà tà-gú nû-î gá yémáàkù  $\bar{a}$ ’a tūyà-ǔgúégā’ú [...].

ñumá = tà            tà = gú            nû.î  
 present.time = ADD    3S.SBJ\SBJV = finish\SBJV    CONJ

gá = yé-má-àkù =  $\bar{a}$ ’a  
 LK.F/M/S/NS.PST = DIST.NS-ANAPH-MAN = QUOT

tū = yà = ǔ-gú-égā-’ú  
 3S.ACC = PCĪ.3M/N/NS.SBJ\SBJV = make-PL-name\SBJV-SUB

‘[The mythical figure Yoi examined all the animals one by one, giving a name to each,] until he finished giving all of them a name in the process [lit. ‘until they were finished that he made them names that way’] [...].’  
 [LAR C418]

A possible—although not definitive—way to account for the ordering observed in (279–476), considering that the two PPs under scrutiny are attested elsewhere in my data and cannot be discarded as accidental hapaxes, is to hypothesize that the historically complex forms / $\bar{a}$ (-)gà/ ‘to make a sound’ and /ǔ(-)gú/ ‘to make (pl.)’ might have been lexicalized to the point of being optionally treated as morphologically simplex verb roots in today’s language.

I have not investigated in a systematic fashion the relative ordering of the suffixes indiscriminately analyzed here as belonging to the derivational morphology of the PP. This morphological domain clearly features **some ordering variation**, especially as far as the relative position of the plural suffix /-gú/ is concerned (see e.g. the attested orderings /-èchà-gú/~/-gú-èchà/ and /-chìgù-gú/~/-gú-chìgù/ in cases where /-gú/ co-occurs with the persistive /-èchà/ and the singular distributive /-chìgù/, respectively). **Strong ordering tendencies** can also be observed, however, including regarding the relative position of /-gú/ ‘PL’. For instance, /-gú/ virtually always comes *after* the intransitive plural suffix /-ē/ when both co-occur within the same PP, yielding in most cases the immediate sequence /-ē-gú/. It is likely that a thorough examination of all cases of co-occurrences of derivational suffixes of the PP in a SMAT corpus would uncover more ordering tendencies or constraints of the kind just mentioned. Certain ordering variations might also be revealed to be regularly meaningful. In any case, note, importantly, that in SECTION 4.4, where these morphemes are dealt with, they are **grouped according to**

**general semantic criteria rather than following a hypothetical morphological template** that might underlie their organization. The presentational order of SECTION 4.4 should therefore not be interpreted as corresponding to any underlying morphological organization of the suffixes under discussion.

Before passing to the description of the various types of SMAT PPs and their derivational morphology, a brief definitional notice is in order. Although the description of the inflectional morphology of the finite PP is deferred to the next chapter, note, crucially, that it is what provides an operational criterion for defining what I simply refer to as a PP throughout the present chapter. I generally **define as a PP any phrase that may directly (i.e. without any morphological modification) receive inflectional morphology of the finite PP.**

Example (281) is intended to **briefly illustrate how I put this definition to use in practice.** In this example, the speaker is telling how his wife and his daughter, after prepaying for a bed, go pick it up from the store's depository:

(281) *Ngēmàkq tá-tǎ'ēgú rù ngēmà mé'e ná-î rù nā-ǔtànù-à'ú chǐrē.*

*ngē-mà-kq*                      *tá = [tǎ'ē-gú]*      *rù*      *ngē-mà = mé'e*  
MED.NS-ANAPH-CAUSE    3S.SBJ = trade-PL    and    MED.ALOC-ANAPH = DUB

*ná = [î]*                      *rù*  
3M/N/NS.SBJ = go.PL    and

*nā = [ǔ-tànù] -à- 'ú = chǐrē*  
3F.SBJ.SBJV = make-compensation-3M/N/NS.OBJ\SBJV-SUB = APRF

'They bought that [*i.e.* the bed] and I guess they went there, and she had already payed for it.' [JSG B451–452]

This example contains three PPs, which are individually enclosed in square brackets. The left boundaries of all three are straightforwardly delimited by the inflectional proclitics /*tá =* / '3S.SBJ', /*ná =* / '3M/N/NS.SBJ',<sup>228</sup> and /*nā =* / '3F.SBJ.SBJV', respectively. Because a PP minimally consists of one syllable, the location of the right boundary of the second PP, *î*, is obvious. The right boundary of the third PP, /*ǔ-tànù*/, is, like its left boundary, clearly manifested by inflectional morphology, in this case by the inflectional suffix /-à- / '3M/N/NS.OBJ'. Importantly, this leaves *out* of that PP the last morpheme in the utterance, / = *chǐrē* / 'APRF'. In such a context,

<sup>228</sup>In fact, /*tá = î* / 'they went', with the same proclitic /*tá =* / '3S.SBJ' as in /*tá = tǎ'ē-gú* / 'they bought', would have been expected in example (281) if, as is most likely the case, the subjects of both of these finite PPs share the same referent.

this / = chíre/ can be unequivocally distinguished from the homonymous derivational suffix of the PP /-chíre/ ‘admittedly’, which would have been positioned to the left of /-à/ ‘3M/N/NS.OBJ’. Finally, the right boundary of the first PP, /tâ’ē-gú/, cannot be established from (281) alone, but simple morphosyntactic tests show it to correspond to the right edge of the phonological word it belongs to. For instance, when the context of this finite PP is manipulated so as to cause it to shift from the Indicative Inflectional Type to the Subjunctive Inflectional Type, it is its last syllable that is affected by the morphotonological alternations triggered by the Subjunctive Inflectional Type (on the notion of Inflectional Type, see SECTION 5.2.1; on the morphotonological alternations triggered by the Subjunctive Inflectional Type, see SECTION 2.6.2.1). This syllable can therefore be deduced to be the last of the PP. As shown in example (282), the exact same PP precisely happens to be produced by the same speaker immediately before the utterance in (281) in a context where it occurs in the Subjunctive Inflectional Type, allowing the diagnostics just mentioned to be applied to identify the right boundary of the PP /tâ’ē-gú/ in (281):

(282) *Tô’rī camakā tà-tâ’ēgú’ú, tâ’ú, familiar.*

<i>tô-’rī</i>	<i>cama-kā</i>	<i>tà = [tâ’ē-gú]-’ú</i>	<i>tâ-’ú</i>	<i>familiar</i>
1PL-GEN	bed-CAUSE	3S.SBJ\SBJV = trade-PL\SBJV-SUB	be.big\SBJV-REL.NS	familial

‘They bought a bed for us, a big one, a double bed.’ [JSG B449–450]

Importantly, note that applying the definition of the PP just discussed in a systematic way **leads me to include among the derivational suffixes of the PP three morphemes that are homonymous with enclitics**, specifically /-chìgù/ ‘DISTR.SG’ (compare / = chìgù/ ‘DISTR.SG’), /-mārē/ ‘just’ (compare / = mārē/ ‘just’), and /-chíre/ ‘admittedly’ (compare / = chíre/ ‘APRF’). In fact, although the meaning of these suffixes is largely similar to that of their homonymous enclitics (with which these suffixes are obviously cognate), they do not exactly overlap, which further suggests to analyze these three suffixes and their corresponding enclitics as distinct morphemes. Thus, if the last PP in (281) had *contained* the suffix /-chíre/ ‘admittedly’ instead of being *followed by* the enclitic / = chíre/, the meaning of the corresponding clause would have been ‘although she payed for it, ...’ instead of ‘she had already payed for it’.

This chapter is organized as follows. **Verbal PPs**, *i.e.* verb roots, most of their specific derivational morphology, and the incorporation of nominal constituents into verbal PPs, are the topics of SECTION 4.2. The various **subtypes of non-verbal PPs** are discussed in SECTION 4.3. The **derivational morphology of the PP**, *i.e.* the derivational suffixes that may generally be attached to both verbal and

non-verbal PPs, is dealt with in SECTION 4.4 for the most part. Finally, the **derivational morphemes that operate on PPs' valency** (*i.e.* two derivational suffixes of the verb root and two derivational suffixes of the PP) are treated separately in SECTION 4.5, together with **two valency-manipulating constructions** lacking specialized morphological marking.

## 4.2 Verbal predicative phrases: verb roots, verb stems, verb phrases

This section is organized as follows. SECTION 4.2.1 first discusses the **identification of verb roots**, *i.e.* morphologically-simplex morphemes that are available for predication as they stand. SECTION 4.2.2 then introduces the **derivational morphology specific to verb roots** (*i.e.* only available to morphologically-simplex verb roots, as opposed to any other kind of predicative phrase), which derives (non-incorporating) verb stems from verb roots. The function of most of the derivational suffixes of the verb root is to encode figure-ground configurations achieved (non-durative motion process) or tended towards (durative motion process) in the process lexically encoded by the verb root. SECTION 4.2.3 describes and illustrates the use of each of these **figure-ground configuration suffixes**. The few derivational suffixes of the verb root that **do not contribute encoding of figure-ground configurations** are the topic of SECTION 4.2.4. The **incorporation of bound nouns and full NPs**, a morphological operation that is only available to verb roots and verb stems and derives incorporating verb stems or incorporating verb phrases, is dealt with last in SECTION 4.2.5.

### 4.2.1 Verb roots

I define verb roots as **synchronically unanalyzable PPs**, *i.e.* synchronically unanalyzable lexical items that may as such—*i.e.* with no additional morphology—receive regular inflectional morphology of the finite predicative phrase. According to this criterion, the following lexical items can be identified as verb roots:

- (283) a. *ũ* 'to make'  
 b. *ñā* 'to run (sg.)'  
 c. *pū* 'to rain'

d. <i>tá</i>	‘be big’
e. <i>tá’u</i>	‘be absent’
f. <i>yâtù</i>	‘be a male’
g. <i>chùtā</i>	‘to get dark’
h. <i>īnūkà</i>	‘to play’
i. <i>pūrākú</i>	‘to work’

All verbs are stressed morphemes (and therefore always bear stress on their first syllable). Although **most verb roots are monosyllabic**, as in (283a–283e),<sup>229</sup> monosyllabicity is not an obligatory phonological property of verb roots, as evidenced by (283f–283i).

I tentatively analyze the morpheme /*ǵě-*/ ‘not have’ as a verb root, although it does not satisfy the definition of verb roots above insofar as it cannot occur in discourse without incorporating a bound noun or an NP. This stressed morpheme, which functions as a counterpart in the negative polarity of the morphosyntactically regular verb root *ā* ‘to have, to give’ (see SECTION 7.2.3), does not quite fit in any morpheme class of the language.

The morphologically exceptional deictic “verb root” /*ñá-/ñâ-* + *-((rū)gù)*/ ‘do thus’ does not satisfy the definition of verb roots above either, as it cannot take any of the regular inflectional morphology of the finite predicative phrase (on the deictic verb, see SECTION 6). I call the deictic verb a “verb”, in the broad sense, insofar as it may form on its own a well-formed predicative phrase which, like verbs, consists in a functionally unanalyzable lexical form (for a discussion of the identification of the deictic verb as a “verb”, see SECTION 6.2.1).

Conversely, a few synchronically unanalyzable morphemes that I treat as non-verbal do appear to satisfy, paradoxically, the definition of verb roots above, since they may directly take regular inflectional morphology of the finite predicative phrase as they stand. These are morphemes such as *ǵè’tà* ‘where? (PLOC)’, *ǵàikàmà* ‘proximity (PLOC)’, or *yá’ú* ‘remoteness (PLOC)’. An instance of the latter occurring in PP position is provided by the following example:

(284) [...] *ērú nūwá* <n...> <nò’...> *náēya tá-yá’ú* [...].

<sup>229</sup>*Tá’u* ‘be absent’, although it surfaces as a disyllable ([ʔa:ʔu<sup>3</sup>]) under certain circumstances, is underlyingly monosyllabic (/tauʔ<sup>34</sup>/). On same-syllable coda /ʔ/s, see SECTION 2.1.3.1.

*ērú*      *nûwǎ*      <n...>      <nò-'...>      *ná-ēyq*  
 because well.M/N/NS                      3N/NS-                      3N/NS-sister

*tá=yá'ú*

3S.SBJ = remoteness.PLOC

'[If he intended to take a wife there, he would have to give his sister in exchange, but he couldn't] because, well, his... his sister was far away.'  
 [AMB 94–95]

These morphemes belong to the lexical class of circumstantial independent nouns (*i.e.* a class of independent nouns that always or often occur without syntactic function marking). When they occur as complements rather than in PP position, they are specialized for uses in the punctual locative (PLOC) syntactic function (although they do not—and probably cannot—bear the relational noun /-gǔ/, which usually serves as a marker for that syntactic function). Rather than verbs, these morphemes, when they occupy the function of PP, are in fact better considered as **nouns occurring in a particular configuration of the type of non-verbal predicative phrases that are made of an NP plus the predicative relational noun /-gǔ/ 'PLOC'** (on this type of non-verbal PP, see SECTION 4.3.3.1). The configuration of /-gǔ/-non-verbal PP in which these nouns are then involved is particular insofar as its PLOC marking is exceptionally covert (being subsumed in the lexical properties of the noun that constitutes the NP part of the /-gǔ/-non-verbal PP), while that marking is usually overt in /-gǔ/-non-verbal PPs.

## 4.2.2 From verb roots to verb stems: overview of the derivational morphology of the verb root

Verb roots, to the exclusion of any other kind of PP, have access to a **specific paradigm of at least 19 derivational suffixes** displayed in TABLE 36. The first 11, of which three feature a singular and a plural allomorph, contribute the encoding of an array of **specific figure-ground configurations** to the process denoted by the verb root. These are discussed in the next section. Of the remaining 8 suffixes in TABLE 36, two, specifically /-ètà/ 'ANTIP1' and /-ē/ 'ANTIP2', have an **antisativizing function**, *i.e.* convert transitive verbs into intransitive verbs whose subject retains the semantic role of agent. Note that these two morphemes are treated separately in SECTION 4.5.1, within a section dedicated to valency operations at the end of this chapter. Among those derivational suffixes of the verb root that do not encode figure-ground configurations, only the **pluractional marker /-gǔ/ and**

	MA trigger	Gloss	Section
<b>Figure-ground config.</b>			
/-kǔchí, -kǔ/		in.SG, in.PL	4.2.3.1
/-'ǚchí, -'ǚ/		out.SG, out.PL	4.2.3.2
/-nǎgǔ/		on	4.2.3.3
/-ǎchí/	+	upslope	4.2.3.4
/-ē, -ǚ/	+, +	off.SG, off.PL	4.2.3.5
/-ǚchì/		at	4.2.3.6
/-gàchì/	+	away	4.2.3.7
/-pétù/		across	4.2.3.8
/-ègù/	+	INV (inverted)	4.2.3.9
/-ǎ/		PLLOC (plurilocal)	4.2.3.10
/-yé/		in.the.middle	4.2.3.11
<b>Other suffixes</b>			
/-ètà/	+	ANTIP1 (antipassive 1)	4.5.1
/-ē/	+	ANTIP2 (antipassive 2)	4.5.1
/-gù/	+	PLURAC (pluractional)	4.2.4.1
/-tā/	+	closed	4.2.4.2
/-nǎ/		open	4.2.4.3
/-té/	?	apart	4.2.4.4
/-né/		repeatedly?	4.2.4.4
/-ēnǚ/		?	4.2.4.4

**Key:**

MA trigger trigger of Pattern 2 morphotonological alternations (see SECTION 2.6.2.2; suffixes for which no indication is provided in this column do *not* trigger these alternations)

**TABLE 36.** *Derivational suffixes of the verb root*

the suffixes /-nǎ/ ‘open’ and /-tā/ ‘closed’ are about as frequent as the two antipassive suffixes just mentioned. These and a few rarer suffixes are described in SECTION 4.2.4.

Only one derivational suffix of the verb root is virtually ever attested on a single verb root at a time in my corpus, *i.e.* sequences of two or more derivational suffixes of the verb root do not seem to occur. These suffixes therefore appear to be

mutually exclusive, or, in other words, to **all belong in the same morphological slot**. Cases where such sequences would seem to occur are dubious and probably involve bound morphemes homonymous with derivational suffixes of the verb root but in fact unrelated to them, or, minimally, fully lexicalized and synchronically unanalyzable occurrences of these suffixes. For instance, the verb root meaning ‘to run’ has two plural allomorphs,  $\bar{u}$  and  $\bar{u}g\grave{u}'\ddot{u}$  (on PPs with singular and plural allomorphs, see SECTION 5.10, paragraph (iii)). It can be tempting to analyze its latter allomorph as  $*/\bar{u}-g\grave{u}-'\ddot{u}/$  (run.PL-PLURAC-out.PL), lit. ‘to run (pl.) repeatedly out’, involving a sequence of two derivational suffixes of the verb root, specifically the pluractional  $/-g\grave{u}'/$  and the plural allomorph  $/-'\ddot{u}/$  of the figure-ground configuration suffix meaning ‘out’. In practice, the form  $\bar{u}g\grave{u}'\ddot{u}$  is fully lexicalized and does not seem to be analyzable in today’s language. Whatever its etymology may be, it is probably better treated as a (unitary) polysyllabic verb root in today’s SMAT, which makes its phonological sequence  $/-g\grave{u}'\ddot{u}/$  unproblematic from the morphological perspective adopted in this section.

Additionally, the derivational suffixes of the verb root **virtually always occur on monosyllabic verb roots in my corpus**, as will become manifest from the examples in the next sections. This fact, however, probably only expresses a very strong tendency that results from the overall prevalence of monosyllabicity among verb roots, rather than a strict phonological constraint on verb roots available for derivation by means of these suffixes. Occurrences of these suffixes on polysyllabic verb roots are indeed exceptionally attested (e.g.  $/ng\hat{u}'k\grave{a}-\bar{e}/$  ‘to till (a patch of land)’, from the disyllabic verb root  $ng\hat{u}'k\grave{a}$  and the antipassive suffix  $/-\bar{e}/$  ‘ANTIP2’).

On the **morphotonological alternations**  $/^{43}/ \rightarrow /^{31}/$  **and**  $/^{MC}/ \rightarrow /^{36}/$  undergone by monosyllabic verb roots whose lexical form features a toneme  $/^{43}/$  or  $/^{MC}/$ , respectively, when they are attached with certain bound morphemes (among which those marked with a plus sign  $< + >$  in TABLE 36), see SECTION 2.6.2.2.

### 4.2.3 Suffixes encoding figure-ground configurations

The following paragraphs first introduce the **general morphosyntactic and semantic properties of the figure-ground configuration (FGC) suffixes from a global and theoretically-oriented perspective**. The use of each of these suffixes in discourse is illustrated further below in the dedicated subsections 4.2.3.1 through 4.2.3.11.



The FGC suffixes are a system of 11 derivational suffixes of the verb root that characterize the spatial relation in which a figure stands relative to a ground in the process denoted by the verb root (for a list of these suffixes, see TABLE 36). The **figure participant** corresponds to the subject of intransitive verbs and to the (core) object of transitive verbs. The **ground by reference to which the spatial relation of the figure is characterized** typically corresponds to a non-core participant that may be explicitly expressed as an NP in the areal (ALOC) or punctual (PLOC) locative syntactic functions, indexed on the predicative phrase by means of a locative index standing for a participant in the ALOC or PLOC syntactic function (on which see SECTION 5.7.2.1), or left implicit in the context. Whether the ground is encoded as a participant in the ALOC or in the PLOC syntactic function depends on whether at the final phase of the process the figure is in a relation of contiguity with the ground (in which case it is encoded as a PLOC participant) or whether at the final phase of the process no such relation is prevailing between the figure and the ground (in which case the ground is encoded as a ALOC participant). For a straightforward illustration of this distinction, contrast examples (303) and (302) on p.304. In the former example, the figure (a group of people) gets to be contiguous with the ground (a tuk-tuk) by getting on it. The ground is accordingly encoded as a PLOC participant (NP /motocarro-gú/ ‘tuk.tuk-PLOC’). In (302), by contrast, the reverse process occurs, whereby the same figure gets off the same ground. The relation of contiguity between the figure and the ground prevailing at the initial phase of the process is cancelled. The ground is accordingly encoded as a ALOC participant (index /ʔ= / ‘3ALOC’).

Note that the **ground may also occasionally coincide with the figure itself as it stands at the initial phase of the process**, although this particular case is comparatively rare in discourse. The FGC suffixes then characterize the spatial relation (sometimes a metaphorical one) in which the figure stands during or at the end of the process relative to itself as it stood at the beginning of the process (for instances of figure-ground configurations encoded by the FGC suffixes in which the ground corresponds to the figure itself as it stands at the initial phase of the process, see SECTIONS 4.2.3.1, 4.2.3.2, 4.2.3.3, and 4.2.3.9).

The spatial relations encoded by the FGC suffixes may be **relations tended towards over the course of the process or achieved at the end of the process**. This depends on the *Aktionsart* properties of the verb root. Spontaneous and caused motion verb roots, in particular, with which the FGC suffixes co-occur in an overwhelming majority of cases in discourse (although these suffixes may also occur on non-motion verb roots), are lexically distributed in a durative and a non-durative

class. In Levisons & Wilkins' words (2006:531–532), durative motion (or “translocation”) predicates denote a “durative event involving passage through an indefinite series of points in space over time”, as opposed to non-durative motion (or “change of location”) predicates, which denote “a change of state without transitional phases”. Typical instances of **durative motion verb roots** in SMAT include *ú* ‘to go/come (sg.)’ (lit. ‘to move spontaneously for a single entity’), *ũ* ‘to run (pl.)’ (lit. ‘to move spontaneously with speed for several entities’), *gá* ‘to lead (sg.)’ (lit. ‘to cause a single animate entity to move with oneself’), or *tũ* ‘to pull’ (lit. ‘to cause one or several inanimate entities to move by pulling on them’). Typical instances of **non-durative motion verb roots** include *ú* ‘be there (sg.)’ (lit. ‘to get to be at a ground temporarily for a single entity’), /*chó-kù*/ (be.there.PL-in.PL) ‘to enter (pl.)’ (lit. ‘to get to be inside a ground for several entities’), *nũ* ‘to put (pl.)’ (lit. ‘to cause several entities to get to be at a ground’), or *chô* ‘to hang’ (lit. ‘to cause one or several inanimate entities to get to hang from a ground’). When they occur on durative motion verb roots, the FGC suffixes characterize a spatial relation tended towards over the course of the process. When they occur on non-durative motion verb roots, they characterize a spatial relation achieved at the end of the process.<sup>230</sup>

Importantly, the spatial relations encoded by the FGC suffixes are of a **topological nature**, *i.e.* they correspond to subtypes of contiguity (or “coincidence”) relations in which the figure does—or does not—stand relative to the ground. They tell, among other possible topological relations, that the figure gets to be or tends towards being—or gets to not be or tends towards not being—in, on, or at the ground in the process, three relations that are “usually considered to lie at the heart of the topological sub-domain” (Levinson & Wilkins 2006:4). The spatial relations encoded by the FGC suffixes are **not, consequently, of an angular nature**, *i.e.* they do not give an indication as to “in which direction from a ground we need to search to find the figure” in configurations where “figure and ground are separated in space” (Levinson & Wilkins 2006:4). They do not denote directions relative to the ground expressed in the terms of an absolute frame of reference (‘up from the

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<sup>230</sup>I do not have enough relevant data to discuss here the semantic contribution of the FGC suffixes in cases where they occur on posture verb roots, such as *chĩ* ‘to stand’, *tõ* ‘to sit’, *ká’ũ* ‘to squat’, or *kā* ‘to lie’. These verb roots, which denote neither a translocation nor a change of location, seem to be able to occur both with a stative *Aktionsart* (denoting a static posture) and a telic *Aktionsart* (denoting a—non-durative—change of posture). One may consequently hypothesize that the FGC suffixes, when they are attached to these verb roots, correspondingly characterize either a spatial relation prevailing in the process (static posture) or one achieved at the end of the process (change of posture).

ground, west of the ground, etc.’), a relative frame of reference defined by an observer (‘to the left of the ground, behind the ground, etc.’), or an intrinsic frame of reference defined by a body-like spatial organization projected on the ground (‘facing the top of the ground, facing the back of the ground, etc.’). The FGC suffixes do not encode orientations irrespective of any ground either, in the terms of any kind of frame of reference (‘down, west, towards a speech participant, etc.’). In brief, the FGC are *not directional markers*.<sup>231</sup>

The semantic content of 7 out of the 11 FGC suffixes of SMAT can be described as **privative features involving the topological relations (i.e. the subtypes of contiguity relations) of containment, support, and propinquity** (Levinson & Wilkins 2006:4). The FGC suffix /-kũchí, -kũ/ ‘in.SG, in.PL’ (which features a singular and a plural allomorph)<sup>232</sup> denotes the [+containment] topological relation (‘get to be in the ground or tend towards being in the ground’). Its negative counterpart is the suffix /-ṽchí, -ṽũ/ ‘out.SG, out.PL’ (which likewise features a singular and a plural allomorphs), which denotes the [-containment] topological relation (‘get to not be in the ground or tend towards not being in the ground’). Similarly, /-ṽchì/ ‘at’ and /-gàchì/ ‘away’ respectively denote the [+propinquity] and the [-propinquity] topological relations (‘get to be at/near the ground or tend towards being at/near the ground’, and ‘get to not be at/near the ground or tend towards not being at/near the ground’). Finally, /-nǎgú/ ‘on’ and /-áchí/ ‘upslope’ on the one hand, and /-ē, -ũ/ ‘off.SG, off.PL’ (which features a singular and a plural allomorphs) on the other hand respectively denote the [+support] and the [-support] topological relations (‘get to be on the ground or tend towards being on the ground’, and ‘get to not be on the ground or tend towards not being on the ground’). Interestingly, the [+support] topological relation is further subdivided into one where the **surface of the ground that supports the figure is explicitly horizontal** (/ -nǎgú/ ‘on’) and one where that **surface is explicitly inclined** (/ -áchí/ ‘upslope’). Note that the [-support] topological relation, by contrast, does not make this distinction, with /-ē, -ũ/ ‘off.SG, off.PL’ being available in relation to both horizontal and inclined surfaces.

Of the remaining 4 FGC suffixes, /-pétù/ ‘across’ denotes a **transverse topological relation** (whereby the figure ‘gets to be at the opposite side of the ground or

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<sup>231</sup>For a very brief introduction to the distinction between topological and angular spatial relations, see Levinson & Wilkins (Levinson & Wilkins 2006:3–4).

<sup>232</sup>On the functional uses of the singular vs plural allomorphy of the FGC suffixes meaning ‘in’, ‘out’, and ‘off’, see SECTION 5.10, paragraph (v).

tends towards being at the opposite side of the ground' relative to where that figure stands at the initial phase of the process).

/-ègù/ 'INV' does not denote a specific subtype of topological relation but indicates instead that the **topological relation prevailing at the initial phase of the process is inverted in the process**, *i.e.* shifts from plus to minus or the other way around (whereby the figure 'gets to be or tends towards being generally contiguous with the ground while it was initially not contiguous with it', 'gets to be or tends towards being at the ground while it was initially away from it', 'gets to be or tends towards being off the ground while it was initially on it', etc.). This suffix thus essentially functions as an inverter of topological relation polarity. In cases where the figure coincides with the ground, /-ègù/ indicates that the figure gets to stand or tends towards standing in a reversed orientation by reference to a plane tangent to it or intersecting it (*e.g.* 'the poster is hanging backwards', 'the canoe capsized', 'I put the glass upside down', 'I turned my pants inside out').

/-ǎ/ 'PLOC' denotes a **plural topological relation** (whereby the figure 'gets to be at several spots of the ground or tends towards being at several spots of the ground').

The exact semantic contribution of the comparatively rare suffix /-yé/ 'in.the.middle', finally, is less clear. I tentatively analyze it as belonging to the set of the FGC suffixes (although it might perhaps be better considered as a non-FGC derivational suffix of the PP) and describe it as a suffix denoting a **medial topological relation** (whereby the figure 'gets to be in the middle of the ground or tends towards being in the middle of the ground').

On the encoding of **static topological relations** in the absence of a verb root, which is implemented by non-verbal PPs made of an NP attached with the predicative relational noun /-gǔ/ 'PLOC', see SECTION 4.3.3.1.

#### 4.2.3.1 /-kǔchí, -kǔ/ 'in.SG, in.PL'

Illustrations of the use of the FGC suffix /-kǔchí, -kǔ/ 'in.SG, in.PL', which denotes a [**+containment**] **topological relation**, are provided in examples (285) (intransitive PP, the FGC suffix characterizes the spatial relation of the subject referent relative to a contextually understood ground) and (286–287) (transitive PPs, the FGC suffix characterizes the spatial relation of the object referent relative to a ground referred to by means of an NP or understood contextually).

(285) “Ngĩ”ā rù <tá-ch...> tá-chókù wá’í <pà n...> <pà...> pà ò’ó rù ná-chúṭā!”

ngĩ”ā rù <tá = ch...> tá = chó-kù wá’í <pà = n...>  
let’s.go and 3S.SBJ = 3S.SBJ = be.there.PL-in.PL CONTR VOC =

<pà = ...> pà = ò’ó rù ná = chúṭā  
VOC = VOC = little.child and 3M/N/NS.SBJ = get.dark

“Let’s get in [the house] now, my... my... my child, it’s getting dark!” [IGS 302–303]

(286) Nò’rī gè’rígú yà-úkùchíṭà’ú, ná’wètāgù. Tūyà-pekúchí’ú gá yí’emá kōpīwārà [...].

nò-’rī gè’rígú yà = ú-kùchí-à-’ú  
3M-GEN bag-PLOC PCĪ.3M/N/NS.SBJ\SBJV = put.SG-in.SG-3M/N/NS.OBJ\SBJV-SUB

ná-’wètā-gù tū = yà = pe-kúchí-’ú  
3N/NS-bag-PLOC 3S.ACC = PCĪ.3M/N/NS.SBJ\SBJV = cram-in.SG\SBJV-SUB

gá = yí’è-má kōpīwārà  
LK.PST = MED.S-ANAPH capybara

‘[A hunter shot a capybara.] He put it in his bag, in the rucksack. He crammed the capybara in [it].’ [JSG C74–76]

(287) Nánā-dē rīáchí nò’rī morralgú nà-núkúà’ú

ná = nā = dē rīáchí nò-’rī morral-gú  
3M/N/NS.SBJ = 3M/N/NS.OBJ = collect and 3M-GEN bag-PLOC

nà = nú-kú-à-’ú  
3M/N/NS.SBJ\SBJV = put.PL-in.PL-3M/N/NS.OBJ\SBJV-SUB

‘[A hunter saw some fruits on the ground.] He collected them and put them in his bag.’ [JSG C33]

An instance of use of /-kúchí, -kù/ as a FGC suffix characterizing the **spatial relation of the figure relative to itself** as it stands at the initial phase of the process (*i.e.* in a case where the ground coincides with the figure itself) is provided in the following example (see also (T88)):

(288) Kú pā’à ī-tōkúchí!

kú = pā’à ī = tō-kúchí  
come.on = be.quick PCĪ = sit-in.SG

‘Come on, sit down a bit [lit. ‘... get into a sitting posture in such a way as to fit within the space your body occupies as you stand right now!’, *i.e.* sit down without moving from where you’re standing right now, as opposed to moving and sitting down at a different spot than where you’re standing right now]!’ [IGS 290]

For instances of use of /-kǔchí, -kǔ/ apparently encoding a **topological relation of tight contact** rather than one of containment, and where the **ground is a sub-part of the figure itself**, see the verb stem /wě̀-̀kù/ (bind-in.PL) ‘to bind (a figure to a ground)’ in predicates meaning ‘to bind hairs to one another’ in (T145–T149).

Grounds conceived of as featuring an inside, apart from the prototypical case of physical envelopes enclosing a hollow space (such as a house, as in (285), or a bag, as in (286–287)), may be any extended portion of space (whether hollow or not, whether it possesses well-defined boundaries or not) that is considered to be **physically or metaphorically homogeneous in all of its parts but heterogeneous relative to its immediate surroundings** (e.g. a forest relative to a clearing, as in (289), or the other way around, as in (290) below; a solid underground relative to the hollow space above its surface; a rounded-off volume extrapolated around a body and considered as being occupied by it relative to the space that is not comprised in that volume, as in (288) and (292) and (291) below; etc.).

The **lexicalized verb stem /ú-kù/ (be.there.SG-in.PL) is irregular** in that, although it is the singular allomorph of a PP meaning ‘to enter’ (which has a regular plural allomorph /chó-kù/ [be.there.PL-in.PL]) and although its FGC suffix consequently characterizes the spatial relation of a singular entity (in this case, a singular subject referent), it features the plural—instead of singular—allomorph of that FGC. The following example shows an occurrence of this verb stem in discourse:

(289) “Nāi’nēkūwǎ chī-ú-kù!”

nāi’nēkū-wǎ chī = ú-kù  
jungle-ALOC 1SG.SBJ.PCĪ.SBJV = be.there.SG-in.PL

“I’m going into the jungle!” [IGS 101]

The **synchronically hardly analyzable verb root /pǒ’kú/ ‘to punish (a singular or plural object)’** most likely lexicalized from a former verb stem <sup>?</sup>/pǒ’-kú/ (block?-in.PL) meaning ‘to imprison (a plural object)’ (lit. ‘to block several entities inside a ground’), potentially suggesting that imprisonment may be considered (or have been considered) as the prototypical form of punishment in Tikuna culture.

#### 4.2.3.2 /-’<sup>x</sup>vchí, -’<sup>x</sup>ú/ ‘out.SG, out.PL’

Illustrations of the use of the FGC suffix /-’<sup>x</sup>vchí, -’<sup>x</sup>ú/ ‘out.SG, out.PL’, which denotes a [**-containment**] **topological relation**, are provided in examples (290–

292) (transitive PPs; see also (T29) for an occurrence of this suffix in an intransitive PP).

(290) *Ngē'gùmá gá ì'ràríwǎ pā'àáčí ìnà-mù'úchígúà'ú.*

*ngē'gùmá* = *gá*    *ì'ràríwǎ*    *pā'àáčí*  
ANAPH.CIRC = PST    a.bit            briefly

*í* = *nà* = *mù-'úchí-gú-à-'ú*

3ALOC = 3M/N/NS.SBJ\SBJV = send-out.SG-PL-3M/N/NS.OBJ\SBJV-SUB

'[A man was captured by an isolated group. At first he was never allowed out. Two years passed.] At that point, they [started to] let him out [of the village] a bit for short periods of time.' [AMB 52–53]

(291) [...] *tǎ'úgù ìnà-ú'ùchíà'ú gá <nò'rū... > nò'rū gè'rí* [...].

*tǎ'ú-gù*

be.absent\SBJV?-PLOC

*í* = *nà* = *ú-'ùchí-à-'ú*

3ALOC = 3M/N/NS.SBJ\SBJV = put.SG-out.SG-3M/N/NS.OBJ\SBJV-SUB

*gá* = *<nò-'rū... >*    *nò-'rū*    *gè'rí*

LK.N.PST = 3N/NS-GEN    3N/NS-GEN    bag

'[...] he would not take his... his bag off [lit. '... out', i.e. out of the volume extrapolated around himself] [...].' [LAR E139–140]

(292) *Posillo tūñà-nù'ú!*

*posillo*    *tū* = *í* = *nà* = *nù-'ú*

cup            3S.ACC = 3ALOC = PCØ.IMP = put.PL-out.PL

'Take the cups out [of the plate]!' [JCA E4]

Instances of use of /-'<sup>ǎ</sup>Vchí, -'ú/ as a FGC suffix characterizing the **spatial relation of the figure relative to itself** as it stands at the initial phase of the process are provided in examples (293) and (294). This suffix is regularly used to encode **transformation processes**, i.e. processes over the course of which the figure metaphorically emerges out of itself under a new shape (whether spontaneously or through an external intervention). A relatively large range of verb roots may occur with this suffix in its transformational meaning, including *í* 'be' as in (293), but more often motion or posture verb roots, such as *gū* 'to reach' as in (294). The PP's lexical predicative class frequently shifts to PCnà in the presence of /-'<sup>ǎ</sup>Vchí, -'ú/ employed in this specific function, as is clear in (293) ((294) displays a case of reinterpretation of PCnà as PCØ with associated motion, a phenomenon typical of younger speakers, on which see SECTION 5.9, p.481).

(293) *Nâ'ũ tánà-ĩ'ichí ì kōwũ.*

*nâ-ũ*            *tá = nà = ĩ-'ichí*            *ì = kōwũ*  
 3N/NS-STATE   3S.SBJ = PCnà = be-out.SG   LK.NS = deer

‘[Deers were now regularly visiting the woman in her house.] She had transformed into a deer [lit. ‘She was in the shape of a deer out of her own former shape.’]’ [IGS 192]

(294) *Ngēmà... nâchìpānũ ā'a gá ĩ-gùchìgũ'ũ chó'nĩ'ũ ā'a náyà-gũ'ùchìchìgũ.*

*ngē-mà*            *nâ-chìpānũ = ā'a*    *gá = ĩ = gũ-chìgũ-'ũ*  
 MED.NS-ANAPH   3N/NS-sliver = QUOT   LK.PST = 3ALOC = drop-DISTR.SG\SBJV-REL.NS  
*chó'nĩ-'ũ = ā'a*    *ná = yà = gũ-'ùchì-chìgũ*  
 fish-STATE = QUOT   3M/N/NS.SBJ = AM = reach-out.SG-DISTR.SG

‘[The legendary figure Moe started to chop down the Onane tree.] Each of the chips that fell down turned into a fish.’ [JSG B303–304]

Like /ũ-kù/ ‘to enter (sg.)’ (on which see SECTION 4.2.3.1), the **lexicalized verb stem /ũ-'ũ/ (go.SG-out.PL) is irregular** in that, although it is the singular allomorph of a PP meaning ‘to exit’ (which has a regular plural allomorph /chó-'ũ/ [be.there.PL-out.PL]) and although its FGC suffix consequently characterizes the spatial relation of a singular entity (in this case, a singular subject referent), it features the plural—instead of singular—allomorph of that FGC. The following example shows an occurrence of this verb stem in discourse:

(295) *Wá'í ná'a consorcio-wǎ chà-pūrākũ'ũ rù mārũ ĩchā-ũ'ũ náwǎ.*

*wá'í*    *ná'a*    *consorcio-wǎ*    *chà = pūrākũ-'ũ = rù*            *mārũ*  
 CONTR   CONJ   consortium-ALOC   1SG.SBJ\SBJV = work\SBJV-SUB = TOP   PRF  
*ĩ = chā = ũ-'ũ*            *ná-wǎ*  
 3ALOC = 1SG.SBJ = go.SG-out.PL   3N/NS-ALOC

‘[I used to work for two tourist agencies.] But now that I work for the consortium, I’ve quit [lit. ‘... I’ve gone out of it.’]’ [JSG A123]

Note that the plural **allomorph /-'ũ/ of this suffix is homonymous with several unrelated morphemes** with which the analyst can easily confuse it. Note, in particular, the existence of a bound morpheme /-'ũ/ (probably a bound noun, although it is not attested alone on an independent noun or a pronominal root) denoting the general notion of ‘container, enclosing envelope’ (perhaps especially



one that is specialized for liquid contents). This morpheme is found in e.g. /û-ē-’û/ (put.SG-off.SG-container?) ‘to remove (a cooking pot with liquid in it from a kitchen stove)’ (lit. ‘to take a container off?’) and /û-’û/ (put.SG-container?) ‘to place (a liquid somewhere in a container)’.

#### 4.2.3.3 /-nǎgú/ ‘on’

Illustrations of the use of the FGC suffix /-nǎgú/ ‘on’, which denotes a [+sup-port] topological relation specifically in cases where the surface of the ground that supports the figure can be considered as horizontal, are provided in examples (296) (intransitive PP) and (292) (transitive PP; see also (T5)).

(296) *Nágù nà-chínágú’é’eà’û* [...].

*ná-gù*      *nà = chí-nágú-’é’e-à-’û*  
3N/NS-PLOC    3M/N/NS.SBJ\SBJV = stand-on-CAUS-3M/N/NS.OBJ\SBJV-SUB

‘They had him stand on it [i.e. on a big tree root] [...].’ [AMB 68]

(297) [...] *dāu’û ā’a nà-chônágúwètā’ûā’û gá yěmá nâmàchī ā’a*.

*dāu’û = ā’a*      *nà = chôn-ágú-wètā’û-ā-’û*  
upper.part = QUOT    3M/N/NS.SBJ\SBJV = hook-on-bag-3M/N/NS.OBJ\SBJV-SUB

*gá = yě-má*      *nâ-màchī = ā’a*  
LK.F/M/S/NS.PST = DIST.NS-ANAPH    3N/NS-meat = QUOT

‘[...] they hung the bag of flesh from the top [lit. ‘... on the top’] [of their *maloca*, i.e. probably from a small platform or a beam].’ [LAR C558]

For possible instances of use of /-nǎgú/ as a FGC suffix characterizing the **spatial relation of the figure relative to itself** as it stands at the initial phase of the process, see (T53) and (T87). These utterances, which contain the verb stems /gũ-nǎgú/ ‘reach-on’ and /yû-nǎgú/ ‘jump-on’, respectively, both refer to the attempts of a man to leave the hammock where he is lying so as to get to stand on his feet. I tentatively interpret the use of /-nǎgú/ in these verb stems as indicating that the figure tries to get onto the surface represented by itself as it stood at the initial phase of the process. Considering that the ground might in fact be to be identified with the floor in these utterances, one could alternatively interpret /-nǎgú/ in a more concrete fashion as indicating that the figure, who is floating “off” the floor in his hammock at the initial phase of the process, tries in the process to get to be in a topological relation of support with the floor.

## 4.2.3.4 /-áčí/ ‘upslope’

Illustrations of the use of the FGC suffix /-áčí/ ‘upslope’, which denotes a [+support] topological relation specifically in cases where the surface of the ground that supports the figure can be considered as inclined, are provided in examples (298) (intransitive PP; see also (T34) and (T95)) and (299) (transitive PP).

(298) *Mārū íná-ûáčí nǔ’ákúnà, dāu’chítáwǎ nà-û’ú.*

*mārū* í= ná = û-áčí *nǔ-’ákúnà*  
 PRF 3ALOC = 3M/N/NS.SBJ = be.there.SG-**upslope** PROX.ALOC-APPROX.ALOC

*dāu’chítá-wǎ* nà = û-’ú  
 hill-ALOC 3M/N/NS.SBJ\SBJV = go.SG\SBJV-SUB

‘He then went uphill over here, he went on the hill.’ [IGS 398]

(299) *Ngēmà yâ’ú rù ná’a motor û-ǵěáčí-mārè-’ú ñyáčí ná’a bote í-tùáčí’ú.*

*ngē-mà* yâ-’ú = rù *ná’a* motor  
 MED.NS-ANAPH be.heavy\SBJV-REL.NS = TOP CONJ motor

í=ì = ǵě-áčí-mārè-’ú *ñyáčí* ná’a bote  
 3ALOC = PCØ.SBJV = carry.SG-**upslope**-just\SBJV-SUB and CONJ boat

í=ì = tù-áčí-’ú  
 3ALOC = PCØ.SBJV = pull-**upslope**\SBJV-SUB

‘[Working as a tourist guide is not a heavy job.] The heavy part is to simply carry the motor up and drag the boat up [*i.e.* up the slope from the dock to where they are stored, when you’re back from an excursion].’ [JGS 520–522]

This FGC suffix is **homonymous with the derivational suffix of the predicative phrase /-áčí/ ‘TEL’** (on which see SECTION 4.4.2.6). Note, however, that the FGC suffix /-áčí/ ‘upslope’, by contrast with its homonym /-áčí/ ‘TEL’, triggers the Pattern 2 morphotonological alternations on the monosyllabic verb roots to which it is suffixed (hence, in (298), the form /û-áčí/ with a toneme /<sup>31</sup>/ on its first syllable, derived from the verb root *ú* with a lexical toneme /<sup>43</sup>/; on these morphotonological alternations, see SECTION 2.6.2.2).

## 4.2.3.5 /-ē, -ũ/ ‘off.SG, off.PL’

Illustrations of the use of the FGC suffix /-ē, -ũ/ ‘off.SG, off.PL’, which denotes a **[-support] topological relation**, are provided in examples (300–301) (transitive PPs, see also (T45); see (302–303) and (T46) for occurrences of this suffix in intransitive PPs).

(300) *Nánā-tùēgú.*

*ná = nā = tù-ē-gú*

3M/N/NS.SBJ = 3M/N/NS.OBJ = pull-off.SG-PL

‘They dragged it [*i.e.* a canoe] down [*i.e.* down the riverbank to the river].’  
[JSG B327]

(301) *Pōĩĩrà ikù-wòũ’ũ.*

*pōĩĩrà      ĩ = kù = wò-ũ-’ũ*

plantain-first 3ALOC = 2SG.SBJ\SBJV = drop.PL-off.PL\SBJV-SUB

‘[In a recipe:] You put in [lit. ‘You drop off ...’] the plantains first.’ [TVJ B332]

Intriguingly, /-ē, -ũ/ ‘off.SG, off.PL’ is used not only in the expression of motions off a vehicle, as in (303), but also in the **expression of motions onto a vehicle**, as in (302).

(302) *Motocarrogú gá tī-chôũ’ũ {tà}.*

*motocarro-gú = gá      tī = chô-ũ-’ũ {tà}.*

tuk.tuk-PLOC = PST      3S.SBJ.PCĪ\SBJV = be.there.PL-off.PL\SBJV-SUB = ADD

‘[My parents-in-law also lost a bag with money in it once, just like my wife.] They also took a tuk-tuk.’ [JSG B481]

(303) *Ngěmà ítà-chôũ rù mé’e ngěmà tànā-tǎ’ũ motocarrowǎ.*

*ngě-mà                      ĩ = tá = chô-ũ                      rù = mé’e      ngě-mà*

MED.ALOC-ANAPH 3ALOC = 3S.SBJ = be.there.PL-off.PL and = DUB MED.ALOC-ANAPH

*tà = nā = tǎ-’ũ*

*motocarro-wǎ*

3S.SBJ\SBJV = 3M/N/NS.OBJ = drop.SG\SBJV-SUB tuk.tuk-ALOC

‘[They arrived at their apartment.] They got off it [*i.e.* the tuk-tuk] and I guess they left it [*i.e.* the bag] there in the tuk-tuk.’ [JSG B486]

The use of /-ē̄, -ũ̄/ in the expression of motions onto a vehicle, which may seem paradoxical from the perspective of English, might indicate that motions onto a vehicle in SMAT are conceived of as motions off the surface of the earth, rather than motions onto a platform (in that case, the ground by reference to which the suffix /-ũ̄/ characterizes the topological relation of the figure in (302) would be to be identified with the surface of the earth, not the tuk-tuk: lit. ‘They also got off [the surface of the earth] in a tuk-tuk’).

While the [+support] topological relation distinguishes between support on a horizontal surface (/ -nǎgú/ ‘on’, see SECTION 4.2.3.3) and support on an inclined surface (/ -ǎchí/ ‘upslope’, see SECTION 4.2.3.4), the [-support] topological relation encoded by /-ē̄, -ũ̄/ **does not make such a distinction**. Compare (303), which refers to a motion off a horizontal platform, with (300), which refers to a motion down a slope.

The singular allomorph /-ē̄/ of this suffix is **homonymous with several other morphemes in the language**, and in particular with the antipassive derivational suffix of the verbal root /-ē̄/ ‘ANTIP2’ (on which see SECTION 4.5.1) and the intransitive plural derivational suffix of the predicative phrase /-ē̄/ ‘INTR.PL’ (on which see SECTION 4.4.4).

#### 4.2.3.6 /-V̄chì/ ‘at’

An illustration of the use of the FGC suffix /-V̄chì/ ‘at’, which denotes a [+**proximity**] **topological relation**, is provided in example (304) (intransitive PP).

(304) *Ú̄chì’ú̄ ā’a* [...].

*ú̄-ūchì-’ú̄ = ā’a*                      *rù = ā’a*  
 go.SG-at\SBJV-SUB=QUOT    and=QUOT

‘[All the animals were standing in line. It came to the turn of the deer.] It came closer [to Yoi and Ipi, who examined it].’ [LAR C381]

Note, importantly, that despite the English translation of /ú̄-ūchì/ (go.SG-at) as ‘came closer’ in example (304) (*i.e.* a translation that implies a notion of perspective of an observer upon the process), the suffix /-V̄chì/ **does not in itself involve any semantic indication of deixis**. All this suffix tells in this utterance is that over the course of the process (in this case, a durative spontaneous motion), the figure (in this case, the deer) tends towards standing in a topological relation of

propinquity with the ground (in this case, the mythical brothers Yoi and Ipi). The deictic perspective imposed by a translation of this utterance into English is entirely absent from its original SMAT version.

This FGC suffix, like its negative counterpart /-gàchì/ ‘away’ (discussed in the next section), is **rare in discourse**.

#### 4.2.3.7 /-gàchì/ ‘away’

An illustration of the use of the FGC suffix /-gàchì/ ‘away’, which denotes a **[-propinquity] topological relation**, is provided in example (305) (intransitive PP).

(305) [...] *yê'gúmá ā'a tīyà-ḡé'ú rù ā'a tī-yû'gàchì'ú ā'a gá tûmà ā'a.*

*yê'gúmá = ā'a*      *tī = yà = ḡé-'ú*  
ANAPH.CIRC.PST = QUOT 3S.ACC = PCĪ.3M/N/NS.SBJ\SBJV = drop\SBJV-SUB

*rù = ā'a*      *tī = yû'-gàchì-'ú = ā'a*  
and = QUOT 3S.SBJ.PCĪ\SBJV = jump-away\SBJV-SUB = QUOT

*gá = tû-mà = ā'a*  
LK.F/M/S/NS.PST = 3S-ANAPH = QUOT

‘[When the hunter thrust a flute into the jaguar’s anus, the latter fainted, and] at that moment it [*i.e.* the jaguar] released him [*i.e.* the hunter] and he jumped away.’ [LAR D162]

Note, importantly, that like its positive counterpart /-V̄chì/ ‘at’, the FGC suffix /-gàchì/ **does not involve any semantic indication of deixis** (for a brief discussion of this observation, see the previous section).

The suffix /-gàchì/ ‘away’, like /-V̄chì/ ‘at’, is **rare in discourse**.

#### 4.2.3.8 /-pétù/ ‘across’

The FGC suffix /-pétù/ ‘across’ denotes a **transverse topological relation**, *i.e.* a relation (achieved or tended towards) of contiguity of the figure with the opposite side of the ground, with “opposite” being defined by reference to the side of the ground with which the figure is contiguous at the initial phase of the process. In simpler words, /-pétù/ indicates that, in the process, the figure gets to be or tends towards being at the other side of the ground. This FGC suffix, which I gloss ‘across’,

may also receive translations such as ‘through’ or ‘past’. Example (306) features two instances of use of /-pétù/ (in a transitive PP and an intransitive PP; see also (T154) for another occurrence of this suffix in an intransitive PP).

(306) *Yěmá nû-ĩ rù ã'a nà-mũpétù-à-ú nûwá rù ã'a úpétùchìgũ-ú gá gû'émá tãu*  
 <chî'ē-ú...> *chî'ē-ú námá'a ú'è.*

*yě-má*                      *nû = ĩ*                      *rù = ã'a*  
 DIST.NS-ANAPH    3M/N/NS.SBJ.PCì = be    and = QUOT

*nà = mũ-pétù-à-ú*    *nûwá*                      *rù = ã'a*  
 3M/N/NS.SBJ\SBJV = send-across-3M/N/NS.OBJ\SBJV-SUB    well.M/N/NS    and = QUOT

*ú-pétù-chìgũ-ú*    *gá = gû'è-má*    *tãu*  
 be.there.SG-across-DISTR.SG\SBJV-SUB    LK.F/M/S/NS.PST = DIST.S-ANAPH    NEG

<*chî'ē-ú...>*                      *chî'ē-ú*    *ná-má'a*                      *ú-'è*  
 be.bad\SBJV-REL.NS    be.bad\SBJV-REL.NS    3N/NS-COM    make\SBJV-REL.S

‘[The animals were standing in line. The mythical figure Yoi examined the puma’s mouth but found it clear of his father’s hairs.] And so, he let it [*i.e.* the puma] pass, and all those [*i.e.* the animals] who hadn’t done harm... harm to them [*i.e.* to Yoi and his siblings by killing their father] passed one after the other [*i.e.* from in front of Yoi to behind him].’ [LAR C459–461]

The ground across which the figure gets to be or tends towards being may be a physical entity, as in (306) (in this case, the mythical figure Yoi), but it may also be, **more abstractly, a period of time**, as in (T120). The verb stem bearing /-pétù/ may then be rendered in English as ‘to spend (time)’.

Conversely, the **figure itself may be an event, *i.e.* an abstract entity**, that metaphorically crosses a ground corresponding to an animate being, *i.e.* a physical entity. The FGC suffix /-pétù/ then allows a participant referring to a life experience to stand in the syntactic function of subject of intransitive verb stems translatable into English as ‘to happen (to an animate being)’. The animate referent with the semantic role of experiencer is encoded as a complement in the accusative, *i.e.* not as a regular ground, which is normally encoded as a participant in the punctual or areal locative. An occurrence of /-pétù/ in this semantic configuration, which is only attested with the verb roots *ú/chó* ‘be there (sg./pl.)’ and *gũ* ‘to reach’, is provided in the following example (see also (T58)):

(307) [...] *kú tá'ú'ú ì chî'ē-ú chā-gũpétùgù ì, hasta el final ñá'ú.*

*kú*      *tá'ú-ú*                      *ì = chí'ē-ú*  
 I.mean    be.absent\SBJV-REL.NS    LK.NS = be.bad\SBJV-REL.NS  
*chā = gū-pétù-gù = ì*                      *hasta el final*  
 1SG.ACC = reach-across-CIRC = CONTR.TOP    until    the end  
*ñâ-ú*  
 do.thus.3M/N/NS.SBJ.SBJV-SUB

‘[I want to continue working as a guide forever,] like, if nothing bad happens to me [lit. ‘... reaches the other side of me ...’], until the end, [as] they say.’ [JGS 562–563]

#### 4.2.3.9 /-ègù/ ‘INV’

The FGC suffix /-ègù/ ‘INV’ indicates that the **topological relation prevailing at the initial phase of the process gets to be or tends towards being inverted** in the process. The semantics of /-ègù/ ‘INV’ are roughly comparable with those of English ‘back’. In example (308) (intransitive PP), for instance, the figure (in this case, a group of people), which is not contiguous with the ground (in this case, the village where they stay at night) at the initial phase of the process, gets to be contiguous with it at the final phase of the process (see also (247) for a similar example):

(308) [...] *nà-pū'gù rù pā'à tá-wòègù ērù ì ngē'gùmá* [...]  
*nà = pū-ú = rù*                      *pā'à*      *tā = wò-ègù-gú*                      *ērù*  
 3M/N/NS.SBJ\SBJV = rain-CIRC = TOP    be.quick    1PL.SBJ = drop.PL-INV-PL    as.for.it  
*ì = ngē'gùmá*  
 LK.NS = ANAPH.CIRC

‘[We take the tourists fishing, but] if it rains then in that case we come back quickly [because it’s no fun fishing in the rain].’ [JGS 290]

An instance of use of /-ègù/ ‘INV’ as a FGC suffix characterizing the **spatial relation of the figure relative to itself** as it stands at the initial phase of the process is provided in the following example (see also (438)):

(309) *Tûmàchátākūrē'ú ā'a tūnà-kúègùpùtā'ú.*  
*tû-mà-chátākūrē-ú = ā'a*  
 3S-ANAPH-antler-STATE = QUOT  
*tū = nà = kú-ègù-pùtā-ú*  
 3S.ACC = 3M/N/NS.SBJ\SBJV = push-INV-tooth\SBJV-SUB

‘[The mythical figure Yoi examined the mouth of the deer, who in mythical times had the exact same shape as a jaguar.] He drove its [upper canine] teeth up over into antlers [*i.e.* he pressed on the jaguar-deer’s teeth up through its head so as to revert their orientation relative to their base and make them into the antlers that deers have nowadays].’ [LAR C389]

#### 4.2.3.10 /-ǎ/ ‘PLLOC’

The FGC suffix /-ǎ/ ‘PLLOC’ denotes a **plurilocal topological relation**, *i.e.* a relation (achieved or tended towards) of contiguity of the figure with two or more distinct parts of the ground. Illustrations of the use of this suffix are provided in examples (310) (intransitive PP) and (311) (transitive PP; see also (T46), where like in (311) /-ǎ/ indicates that the ground—a human being—is applied a figure—a wasp sting—in both members of a pair of limbs).

(310) *Yě’má tî-ǎ̀chí’úgú gá nú’kú má [...].*

*yě’-má*                      *tî = ǎ̀-à-chí’ú-gú*                      *gá = nú’kú má*  
 DIST.PLOC-ANAPH    3S.SBJ.PCĪ = have-**PLLOC**-home-PL    LK.F/M/NS.PST = past.time

‘[My relatives used to live in ordinary houses in the upper Loretoyacu river.] They used to live scattered over there formerly [lit. ‘... to have homes at several points in that region formerly.].’ [GRA 114]

(311) [...] *chîrúchîpǎ ǎ’a tîgù tî-núá’ú gá chû̀tākù.*

*chîrú-chîpǎ = ǎ’a*                      *tî-gù*  
*matamatá*.tree-small.concave.shape = QUOT    3S-REFL  
*tî = nú-á-’ú*                      *gá = chû̀tākù*  
 3S.SBJ.PCĪ\SBJV = put.PL-**PLLOC**\SBJV-SUB    LK.F/M/S/NS.PST = night.time

‘[To protect themselves from the coming attack of an evil ghost,] they put the *matamatá* fruit shells on [*i.e.* on both of their eyes] at night.’ [LAR A44]

#### 4.2.3.11 /-yé/ ‘in.the.middle’

I tentatively consider /-yé/ ‘in.the.middle’ as a FGC suffix denoting a **medial topological relation**, *i.e.* a relation (achieved or tended towards) of contiguity of the figure with the middle of the ground. An illustration of the use of this suffix is provided in example (312) (transitive PP used in a passive construction; on the passive construction, see SECTION 4.5.3).



(312) “Tè’ě tî-î yà... dùǎ yà chàu’chì ài’è ēkǎ yà-dǎyékùtǎ’ǔ ì ñǎà ná’í?”

tè’ě            tî=î            yà=dùǎ            yà=chàu-’chì  
 what/who?.S    3S.SBJ.PCì=be    LK.N/S=human    LK.N/S=1SG-with.hate.toward

ài-’è            ēkǎ            yà=dǎ-yé-kùtǎ-’ǔ  
 hate\SBJV-REL.S    so.that    PCì.3M/N/NS.SBJ\SBJV=chop-in.the.middle-skein\SBJV-SUB

ì=ñǎ-à            ná’í  
 LK.NS=PROX.NS-EXO    younger.chambira.palm

‘[A woman left her *chambira* palm skein outside at night, and on the next day she found it cut in halves.] “Who is it that... has something against me? [Why] is this *chambira* palm skein cut in halves?” [IGS 15–17]

If this analysis of /-yé/ as a FGC suffix is correct, then what is to be identified as the figure in (312) is a cut (*i.e.* a non-prototypical figure) and the ground corresponds to the skein.

Given the binary organization of part of the SMAT system of FGC suffixes in pairs of suffixes respectively encoding the positive value and the negative value of specific types of topological relations (*e.g.* /-kǔchí, -kǔ/ [+containment] vs /-’ǔchí, -’ǔ/ [-containment]; /-ǔchì/ [+propinquity] vs /-gǎchì/ [-propinquity]), one may wonder whether /-yé/, if it is rightly classified as a FGC suffix, could not be, in fact, the **counterpart of the plurilocal suffix /-ǎ/** (on which see the previous section). Perhaps /-yé/ and /-ǎ/ respectively denote the opposite values [singular] and [plural] of a more general type of topological relation that one might label [topological number]. If this hypothesis is correct, then the semantic contribution of /-yé/ in (312) would not be to indicate that the skein was cut in its middle part (so as to split in two halves of approximately equal size), but that it was cut in a single cut (so as to split in two parts and no more than two). More data on this suffix are needed to confirm or invalidate this speculative but plausible hypothesis.

This FGC suffix is **rare in discourse**.

#### 4.2.4 Other suffixes

This section deals with the few **derivational suffixes of the verb root that do not contribute encoding of figure-ground relations** (for a general list of these suffixes, see TABLE 36). Note that by contrast with the system of figure-ground configuration suffixes described in the previous section, the suffixes discussed in the present section **do not form a homogeneous class from a semantic perspective**.

Apart from belonging to the morphological slot of the derivational suffixes of the verb root, they only have in common the negative property of not denoting figure-ground relations.

The **antipassive suffixes** /-ètà/ ‘**ANTIP1**’ and /-ē/ ‘**ANTIP2**’ are, like the morphemes discussed in the following sections, derivational suffixes of the verb root unrelated to the encoding of figure-ground configurations. Note, however, that these two suffixes are treated separately in SECTION 4.5.1 towards the end of this chapter together with other valency-manipulating devices.

#### 4.2.4.1 /-gù/ ‘**PLURAC**’

The derivational suffix of the verb root /-gù/ ‘**PLURAC**’ is a **pluractional marker**. It indicates that the process denoted by the verb root is performed in its entirety in several instances on a single occasion. Illustrations of the use of this suffix are provided in examples (313) (intransitive PP with a complement in the accusative) and (314) (transitive and intransitive PPs; see also (T101) for another occurrence of /-gù/ on a transitive verb root).

(313) *Yěmá nû-î rù á’a nûti-ũgùégã’û nûwá gá gú’û gá nánētû [...].*

*yě-má*                *nû = î*                        *rù = á’a*  
 DIST.NS-ANAPH   3M/N/NS.SBJ.PCī = be   and = QUOT

*nû = tī = ũ-gù-égã-’û*    *nûwá*  
 3M/N/NS.ACC = 3S.SBJ.PCī \ SBJV = say-**PLURAC**-name \ SBJV-SUB   well.M/N/NS

*gá = gú-’û*    *gá = ná-nētû*  
 LK.F/M/S/NS.PST = finish \ SBJV-REL.NS   LK.F/M/S/NS.PST = 3N/NS-plant

‘[When the Tikunas stole the crop plants from the mythical figure Iya-Iya, the latter commanded them to plant them.] And so, he said the names of all the plants [...].’ [LAR E183]

(314) *Nû-ú ì nûmà ì, ngēmà ǒ’rî’î gá nà-dégû’û nû-gùgùchìgù.*

*nû = ú*                        *ì = nû-mà = ì*                        *ngē-mà*                *ǒ’rî’î*  
 3M/N/NS.SBJ.PCī = go.SG   LK.NS = 3M-ANAPH = CONTR.TOP   MED.NS-ANAPH   fruit

*gá = nà = dē-gû-’û*    *nû = gù-gù-chìgù*  
 LK.PST = 3M/N/NS.SBJ \ SBJV = collect-**PLURAC** \ SBJV-REL.NS   3M/N/NS.SBJ.PCī =

‘[A hunter came across some fruits. He picked them up, put them into his bag, and left.] He left, and the fruits he had picked up were dropping one by one.’ [JSG C38-40]

Note, importantly, that although this suffix naturally tends to occur in processes involving plural participants, it does not in itself have **any implication as to the grammatical or semantic number of participants**. The second clause of the following example, for instance, which features a verb root bearing the suffix /-gù/, involves a single agent referent (the speaker) and, implicitly, a single patient referent (a soccer ball, although it is not mentioned):

(315) *Rjüächí* <chà-...> *cháyà-ú'gù* ì tiempo ì, *chà-kǔ'gùtâè'ü* canchawǎ.

*rjüächí* <chà = ... >  
and 1SG.SBJ\SBJV =

*chǎ = yà = ú-'gù*  
1SG.BEN.3ALOC? = AM.3F/M/N/NS.SBJ.SBJV? = be.there.SG-CIRC

ì = tiempo = ì                      *chà = kǔ'-gù-tâè-'ü*  
LK.NS = time = CONTR.TOP 1SG.SBJ\SBJV = kick-PLURAC-ANTIP3\SBJV-SUB

*cancha-wǎ*  
sports.field-ALOC

‘And when I... when I have time, I play soccer [lit. ‘... I do repeated kicking ...’] at the sports field.’ [JSG A38–40]

Given their semantic proximity, it might be that the pluractional suffix of the verb root /-gù/ ‘PLURAC’ is cognate with the plural suffix of the predicative phrase /-gú/ ‘PL’ (on which see SECTION 4.4.4).

#### 4.2.4.2 /-tā/ ‘closed’

The derivational suffix of the verb root /-tā/ ‘closed’ only occurs on transitive verb roots in my data and is poorly attested in my corpus. Its semantic contribution is to indicate that the process denoted by the verb root and performed on the object referent (which at the initial phase of the process does not feature continuous boundaries) **causes that referent to come to feature continuous boundaries tightly separating a portion of space**. In other words, it indicates that the process results in the object referent becoming closed (three-dimensional entity), no longer perforated (two-dimensional entity, such as a wall), or fastened (linear entity, such as a belt). This suffix, which could be said to denote a [+sealed] feature, is the positive counterpart of /-nǎ/ ‘open’ (on which see next section). Illustrations of the use of this suffix are provided in examples (316) and (317).

(316) *Ñyüächí chānā-gǎtā'ü*.

*ñyáchí chā = nā = ḡā-tā-’ũ*  
 and 1SG.SBJ = 3M/N/NS.OBJ = lay-closed-container?

‘[That’s how I prepare manioc beer.] And then I cover it [lit. ‘... I seal its container by laying (its lid onto it).’].’ [LAR D325]

(317) *Nánā-wè’tā.*

*ná = nā = wè’tā*  
 3M/N/NS.SBJ = 3M/N/NS.OBJ = bind-closed

‘He fastened it with a knot [e.g. a bag or a basket].’ [EAR elic.]

#### 4.2.4.3 /-nǎ/ ‘open’

The derivational suffix of the verb root /-nǎ/ ‘open’ only occurs on transitive verb roots in my data. Its semantic contribution is to indicate that the process denoted by the verb root and performed on the object referent (which at the initial phase of the process features continuous boundaries tightly separating a portion of space) **causes that referent to no longer feature continuous boundaries**. In other words, it indicates that the process results in the object referent becoming open (three-dimensional entity), perforated (two-dimensional entity, such as a poster), or unfastened (linear entity, such as a belt). This suffix, which could be said to denote a [-sealed] feature, is the positive counterpart of /-tā/ ‘closed’ (on which see the previous section). Illustrations of the use of this suffix are provided in examples (318–320).

(318) *Tūnà-chũ’ná’ũ gá <yí’è-má... > yí’è-má kōpīwārà.*

*tū = nà = chũ’ná’ũ* *gá = <yí’è-má... >*  
 3S.ACC = 3M/N/NS.SBJ\SBJV = scratch-open\SBJV-SUB LK.PST = MED.S-ANAPH

*yí’è-má kōpīwārà*  
 MED.S-ANAPH capybara

‘He disemboweled the... the capybara [lit. ‘He ripped the capybara open.].’  
 [JSG C84]

(319) *Tô’ũ náyàrũ-wǎ’ná’ũgú a las cuatro de la mañana.*

*tô’ũ ná = yà = rũ = wǎ’ná’ũgú* a las cuatro de  
 1PL-ACC 3M/N/NS.SBJ = AM = PCrũ = hang-open-container?-PL at the four of

la mañana  
 the morning

‘[In a description of the daily routine at a boarding school:] They would come to open our building [lit. ‘They would come and hang our container open (*i.e.* unhang the door bar from it) ...’] at four in the morning.’ [IGV 494]

(320) *Téré ā’a gá nā-ngokū gá iyā-wânà’ū ā’a gá gūmá pē’chì nāwēnà ā’a fènūēwá nà-îyâně.*

*téré* = *ā’a*                      *gá* = *nā* = *ngo-kū* = *gá*  
*téré*.parrot = QUOT    LK.F/M/S/NS.PST = 3M/N/NS.OBJ = bite-REL.F = PST

*ī* = *yā* = *wā-nā-’ū* = *ā’a*  
 PCĪ = PCĪ.3M/N/NS.OBJ = gnaw-open-container? = QUOT

*gá* = *gū-má*                                      *pē’chì*    *nā-wēnà* = *ā’a*                      *fènūē-wá*  
 LK.F/M/S/NS.PST = DIST.N-ANAPH    basket    3N/NS-after = QUOT    hunt-ALOC

*nà* = *î-yâně*  
 3M/N/NS.SBJ\SBJV = go.PL-SIMULT.CIRC

‘[The mythical brothers Yoi and Ipi left their dead father Ngutapa’s flesh inside a basket in their *maloca* and went hunting. Some parrots came and pecked at the flesh.] The *téré* parrots that ate it [*i.e.* Ngutapa’s flesh] had gnawed the basket open after they [*i.e.* Yoi and Ipi] left to go hunting. [So the flesh started to drop out of it.]’ [LAR C571–573]

#### 4.2.4.4 Miscellaneous

The suffixes included in this section are **rare and mostly attested in elicited rather than spontaneous data**. Due to this lack of good-quality evidence, their exact semantic properties remain to a large extent unclear.

However, they may be **confidently considered as derivational suffixes of the verb root** insofar as 1) most of the verb roots they are found attached to do exist as separate lexical items (in other words, these morphemes may easily be isolated formally from the verb roots they are suffixed to) and 2) they are themselves not attested as lexical items with a meaning of their own (in other words, these morphemes cannot be considered—at least synchronically—as incorporated bound nouns; on bound noun incorporation, see SECTION 4.2.5.1). The characterization of these morphemes as derivational suffixes of the verb root can be confirmed by to the same criteria in the Cushillococha dialect of Tikuna, in which most of them are more widely attested (see Anderson & Anderson 2016, in particular).



watch’, based on the verb root *dǎu* ‘to see’). Because these **hypothetical morphemes**—if they can be rightly isolated at all—are most likely not synchronically productive, verb stems potentially containing one of them are treated as unanalyzable lexical items of their own in this grammatical description.

#### 4.2.5 Incorporating nominals to the verb root or verb stem

Incorporation<sup>233</sup> in SMAT is a morphosyntactic strategy that has the effect of **integrating into a verb root or a verb stem a nominal constituent (whether a bound noun or an NP)** that could in principle be alternatively expressed as (part of) a syntactically independent main constituent of the clause. The resulting incorporating verb stem or verb phrase is a verbal PP and may, as such, be subject to incorporation (recursively, although this only marginally occurs) and to the derivational morphology of the PP. Incorporation forces the integrated nominal constituent to occur in a rigid morphosyntactic configuration relative to the verb root or verb stem. It additionally prevents it from featuring any syntactic-function marking. The pragmatic effect of incorporation can be roughly characterized as that of **decreasing, to varying degrees, the discourse salience of the referent** corresponding to the incorporated nominal constituent. Incorporation is a **high-frequency phenomenon in SMAT discourse**.

Contrast the essentially parallel examples (324) and (325). In (324), the constituent *chàuchí’ǔ* ‘my house’ is not incorporated but occurs instead as a **main constituent of the clause, with the effect of leaving it salient in the context**. The speaker is not simply stating that he is building a house, but stressing that he is eventually building a house of his own, after living with his parents-in-law for years.

(324) *Ñumá rù chàuchí’ǔ íchā-ǔ ì chòmà.*

*ñumá* = *rù*            *chàu-chí’ǔ*    *í* = *chā* = *ǔ*            *ì* = *chòmà*  
 present.time = TOP    1SG-home    3ALOC = 1SG.SBJ = make    LK.NS = 1SG-ANAPH

‘Right now I’m building my own house.’ [JSG A113]

<sup>233</sup>The analysis of incorporation in SMAT proposed in this section is mostly inspired by Creissels (2006a, 2016) and Aikhenvald (2007).

In (325), by contrast, the referent ‘house’ is expressed as a **constituent incorporated to the verb root *ũ* ‘to make’** (in this case, via the formal type of incorporation that I call bound noun incorporation; see next section). The speaker here is not talking about a particular house, but simply referring to the general activity of building a house, a well-recognized one in Tikuna culture.

(325) [...] *nágù chārũ-ĩnũ-’ũ ÿkũ, mārũ chà-’ũchĩ’ũ’ũ tà.*

*ná-gù*      *chà = rũ = ãnũ-’ũ*      *ÿkũ*      *mārũ*  
 3N/NS-PLOC    1SG.SBJ\SBJV = PCrũ = think\SBJV-REL.NS    I.mean    PRF

*chà = ’ũ-chĩ’ũ-’ũ = tà*  
 1SG.SBJ\SBJV = **make-home**\SBJV-SUB = ADD

‘[And next, once I manage to achieve these new life plans,] well then my intention [is] to also build a house [lit. ‘... to house-make too.’].’ [JGS 795–796]

Contrast, likewise, example (326) with (327), which features a formally distinct but functionally parallel type of incorporation (which I call NP incorporation; see below). In the former example, the enacted speaker is having a curious idea for the first time, that of taking his own stomach out so as to be able to drink more manioc beer. He expresses it in a main clause. To make it absolutely clear that he is indeed thinking about this strange idea of removing his own stomach from his own belly by himself, he **refers to his stomach, whose identification is crucial in the context, as a separate syntactic constituent** (*chô’rũ tũè* ‘my (own) stomach’).

(326) “*Nã êkà chí mé’e íchànã-’ũ’ũchígù yá chô’rũ tũè* [...]...?”

*nã = êkà = chí = mé’e*  
 ASSERT = who.knows? = IRR = DUB

*í = chà = nã = ’ũ-’ũchĩ-gù*      *yá = chô-’rũ tũè*  
 3ALOC = 1SG.SBJ\SBJV = 3M/N/NS.OBJ = put.SG-out.SG-CIRC    LK.M/S = 1SG-GEN

stomach

“‘What if I took my own stomach out [so I can fit more manioc beer in my belly]...?’” [LAR E225]

In example (327), by contrast, the same project is now referred to within a subordinate clause, the general point of the utterance now being to imagine the potential consequences of the hypothesis being considered (‘If I do that, *then* ...’). The identification of the stomach now being well-established and therefore of **less discursive**



relevance, it is incorporated to the verb stem /ú-'ùchí/ (put.SG-out.SG) ‘to take out’.

(327) “*Chí nǎ mé’e ùkú chòmà rù chí tà chàgù íchà-ú'ùchíàrū tûègú ì, [...].*”

*chí = nǎ = mé’e ùkú chò-mà = rù = chí = tà chà-gù*  
IRR = ASSERT = DUB I.mean 1SG-ANAPH = TOP = IRR = ADD 1SG-REFL

*í = chà = ú-'ùchí-àrū tûè-ã-gú = ì*  
3ALOC = 1SG.SBJ\SBJV = put.SG-out.SG-GEN stomach-POSS-CIRC = CONTR.TOP

“But imagine, if—say—I took my stomach out [lit. ‘... I stomach-removed myself, ...’], [well then I could drink more].” [LAR E230]

The **two formal types of incorporation** attested in SMAT, bound noun incorporation and NP incorporation, are described in SECTION 4.2.5.1. SECTION 4.2.5.2 proceeds to expound the **three functional uses** for which these two formal types are employed, specifically core argument incorporation, possessee incorporation, and non-core participant incorporation. SECTION 4.2.5.3 finally discusses the use of **pseudo-incorporation in possessive predication**, *i.e.* constructions that are formally identical with bound noun or NP incorporation but do not correspond functionally to any of the three uses of genuine incorporation identified in SECTION 4.2.5.2.

#### 4.2.5.1 Formal types

From a strictly morphological perspective, incorporation in SMAT corresponds to two different constructions, **bound noun incorporation and NP incorporation**.

(i) **BOUND NOUN INCORPORATION** Bound noun incorporation, a very frequent construction, **allows a bound noun** (alone, *i.e.* without the stressed morpheme or stem to which it would necessarily have been attached to occur as a free syntactic constituent of the main clause in discourse) **to be directly attached to the right edge of a verb root or a verb stem**. Because bound nouns are (invariably) unstressed forms in SMAT, the resulting incorporating verb stem constitutes a **single phonological word**.

Illustrations of bound noun incorporation are given in example (328) (on the identification of the syntactico-semantic types of incorporation provided in parentheses, see next section). Note that certain bound nouns belong to a lexical class of bound morphemes that cause the **morphotonological alternations** /<sup>43</sup>/→/<sup>31</sup>/ and

/<sup>MC</sup>/→/<sup>36</sup>/ (Pattern 2 morphotonological alternations) when they are immediately attached to a verb root featuring a lexical toneme /<sup>43</sup>/ (as in (328c)) or /<sup>MC</sup>/ (as in (328d)), respectively, and lacking a same-syllable coda /ʔ/ (on these morphotonological alternations, see SECTION 2.6.2.2; on same-syllable coda /ʔ/ belonging with a stressed syllable, see SECTION 2.1.3.1).

- (328) a. *chā-mékūmā* (possessee incorporation)  
 /chā = mé-**kūmā**/  
 1SG.SBJ = be.good-custom  
 ‘I am a good person [lit. ‘I am good-customed’]’
- b. *núà chā-ñātá’ú* (non-core participant incorporation)  
 /nú-à chā = ñā-**tá’ú**/  
 PROX.ALOC-EXO 1SG.SBJ = run.SG-bounded.flat.surface  
 ‘I came here in a boat [lit. ‘I flat-surface-rushed here’]’
- c. *chī-dûgùnè* (with *dú* ‘to scrape’; core argument incorporation)  
 /chī = dû-**gùnè**/  
 1SG.SBJ.PCĪ.SBJV = scrape-dart  
 ‘I sharpen darts [lit. ‘I do some dart-scraping’]’
- d. *chānā-ngómàchī* (with *ngo* ‘to bite’; possessee incorporation)  
 /chā = nā = ngó-**màchī**/  
 1SG.SBJ = 3M/N/NS.OBJ = bite-meat  
 ‘I eat its flesh [lit. ‘I flesh-eat it’]’

(ii) **NP INCORPORATION** NP incorporation, although its functional uses are largely identical to those of bound noun incorporation, is a very different morphosyntactic construction of comparatively rare occurrence in discourse. It **allows, in principle, an entire NP to make up what I call a verb phrase together with a verb root or a verb stem.** Such incorporation of entire NPs is a rather rare phenomenon cross-linguistically (Aikhenvald 2007:13–14). Note, however, that in an overwhelming majority of cases in spontaneous speech, NP incorporation incorporates a **single, morphologically simplex independent noun** (as opposed to any morphologically or syntactically more complex nominal constituent; see, however, example (347) below for a unique case of (pseudo-)incorporation of a syntactically complex NP in my corpus). The intriguing morphosyntactic form of NP incorporation, which for unclear reasons requires the intervention of the genitive suffix /-àrū/ and the possessive suffix /-ã/ (which, in a formally similar but functionally distinct construction, is involved in possessive predication; see SECTION 4.3.3.6, in particular), may be represented as follows:

.....-àrū .....-ã  
 VERB.ROOT/STEM-GEN NP-POSS

In NP incorporation, the incorporated nominal constituent (which, as a well-formed NP, necessarily bears a stress on its first syllable) **retains its stress and consequently constitutes its own phonological word** (or several phonological words, in exceptional cases where the incorporated NP is syntactically complex) together with the unstressed possessive suffix /-ã/ that it bears at its right edge.

Instances of the NP incorporation construction are provided in examples (329–330) (see also (327) above; these three examples all involve incorporation of the possessee incorporation functional type, on which see next section). Note that the suffix /-àrū/ GEN belongs to the lexical class of bound morphemes that trigger the Pattern 2 morphotological alternations mentioned in the preceding paragraph (hence the forms /mê-àrū/ [be.good-GEN], from *mé* ‘be good’, in (329) and /í-àrū/ [be.small-GEN], from *í* ‘be small’, in (330)).

(329) *Ñù'gù'àkù ìkú {ì} ì-mê-àrū suerte-ã-gú nî-í ì námá'a ì-àè'ũ'ũ.*

*ñù'gù-'àkù ìkú{=ì} ì = mê-àrū suerte-ã-gú*  
 when?-APPROX I.mean = CONTR.TOP PCØ.SBJV = be.good-GEN luck-POSS-CIRC

*nî = í ì = námá'a*  
 3M/N/NS.SBJ.PCì = be LK.NS = 3N/NS-COM

*ì = àè'ũ'ũ*  
 PCØ.SBJV = succeed.at.hunting/fishing\SBJV-SUB

‘[We typically take the tourists fishing.] Sometimes you get some catch with them when you’re lucky [lit. ‘... when you’re luck-good.’].’ [JGS 287]

(330) “[...] *ērú cháǎ chā-í-àrū tûè-ã rù mārū chā-ngá'ü?*”

*ērú chá-ǎ chā = í-àrū tûè-ã rù mārū*  
 because 1SG-? 1SG.SBJ = be.small-GEN stomach-POSS and PRF

*chā = ngá'ü*  
 1SG.SBJ = be.full

“[What could I do to save this manioc beer from spoiling?] I have a small stomach [lit. ‘I am stomach-small ...’] and I’m full already...” [LAR E222–223]

The NP incorporation construction is the **only one in SMAT to derive PPs made of two or more phonological words**. It is mostly attested in a single one of the three syntactico-semantic types of incorporation identified in the following section, specifically the one I call possessee incorporation.

### 4.2.5.2 Functional types

From a syntactic and semantic perspective, I distinguish three major types of incorporation in SMAT: **core argument incorporation, possessee incorporation, and non-core participant incorporation.**

(i) **CORE ARGUMENT INCORPORATION** In core argument incorporation, the semantic role of the incorporated constituent corresponds to the **semantic role of the subject of an intransitive verb root/stem or the object of a transitive verb root/stem.** The subject syntactic position of the intransitive verb root/stem, or the object syntactic position of the transitive verb root/stem, is “absorbed” by the incorporated constituent. Core argument incorporation consequently **decreases the valency of the verb root/stem:** an intransitive one becomes avalent (rare), a transitive one becomes intransitive. Core argument incorporation mostly incorporates bound nouns (instead of entire NPs, but see (335)).

Only the bound noun /-àné/ ‘space (*i.e.* land or sky)’ is attested in my data to occur as an **incorporated bound noun absorbing the subject position of an intransitive verb root/stem** (subject-absorbing incorporation is not attested at all with an NP as the incorporated constituent). The resulting impersonal incorporating verb stem takes an expletive third person (non-salientive?) subject<sup>234</sup> and denotes a terrain condition (as in (331); see also (T30)), a weather condition (as in (T105)), or a sky condition corresponding to a specific moment of day or night (as in (332)<sup>235</sup>).

(331) [...] *chí nùà ñà'ti-wá rù ná-mê-àné.*

*chí nù-à*                      *ñà'ti-wá=rù*                      *ná=mê-àné*  
and PROX.ALOC-EXO    lower.part-ALOC=TOP    3M/N/NS.SBJ = **be.good-space**

‘[In the primary jungle, the canopy is dense] and here at ground level it’s clear [of undergrowth] [lit. ‘... it is space-good.’].’ [JGS 236]

(332) *Mārū nà-yâ-àné, mā nà-yâ-àné-gú'ũchì itā-gũgũ'ũ.*

<sup>234</sup>But see (T112), where the PP /pě-nū-àné-’ũ/ (clap-?-space\SUB) ‘there was thunderbolts’, an impersonal verb stem incorporating a subject-absorbing /-àné/, seems to take *āēmākū* ‘lightning’ as its subject.

<sup>235</sup>Although synchronically unanalyzable, the impersonal verb stem *yâ-àné* ‘be twilight’ in (332) clearly features a fully-lexicalized instance of subject-absorbing incorporation of /-àné/ ‘space’.

*mārū nà = yâànè*

PRF 3M/N/NS.SBJ\SBJV = be.twilight

*mā = nà = yáú-ànè-gú-’úchì*

PRF = 3M/N/NS.SBJ\SBJV = **be.blue/green-space-CIRC-genuinely**

*í = tã = gū-gú-’ú*

3ALOC = 1PL.SBJ.SBJV = reach-PL\SBJV-SUB

‘[As a guide, I take the tourists for a walk in the jungle and then we come back to the village.] We arrive at twilight, at the very end of the afternoon [lit. ‘... really when the sky is green.’?].’ [JGS 72]

Incidentally, the only cases in my data where (genuine) **incorporation is applied twice within a single verb stem** involve, as a second step, subject-absorbing incorporation of /-ànè/ ‘space’ (for a case of a verb stem displaying both possessive pseudo-incorporation and possessee incorporation, see example (345)). Thus, /nà = tá-**chíkà-ànē-’ú**/ (3M/N/NS.SBJ\SBJV = **be.big-room-space\SBJV-SUB**) ‘there was a lot of room’ in (333) can be analyzed as featuring, first, a case of possessee incorporation (‘[the room]<sub>POSSESSEE</sub> of the space is big’ > ‘the space is [room]-big’; on possessee incorporation, see below) followed by a case of core argument incorporation absorbing a subject syntactic position (‘[the space]<sub>SBJ</sub> is room-big’ > ‘it<sub>EXPLETIVE</sub> is [space]-room-big’).

(333) “[...] *nâpàgú tá-péégú rù ngēmàkq nî-í gá nà-táchíkàànē-’ú gá malocawá.*”

*nâ-pà-gú*

3N/NS-hammock-PLOC

*tá = pé-ē-gú*

3S.SBJ = sleep-INTR.PL-PL

*rù ngē-mà-kq*

and MED.NS-ANAPH-CAUSE

*nî = í*

3M/N/NS.SBJ.PCì = be

*gá = nà = tá-**chíkà-ànē-’ú***

LK.F/M/NS.PST = 3M/N/NS.SBJ\SBJV = **be.big-room-space\SBJV-SUB**

*gá = maloca-wá*

LK.F/M/NS.PST = *maloca*-ALOC

“[Our ancestors lived in large communal dwellings and had no mosquito nets,] they slept in hammocks and that’s why there [had to] be a lot of room in a *maloca* [*i.e.* so that all would fit in it at night?].” [JGS 428–429]

With **bound nouns or NPs absorbing the object position of a transitive verb root/stem**, core argument incorporation usually produces verb stems/phrases that denote relatively well-identified activities regularly practiced in Tikuna culture, as in example (334) (see also (325) above, and *tà-ǎ’pàè-’ú* ‘they twisted *chambira* fiber’ in (T82) and *tī-dûgùnègú-’ú* ‘they sharpened darts’ in (T83)).

(334) [...] *yěmáàkù nî-í gá nû'kú má ā'a gá tà-ũwēmùgú'ú nî-í gá tà-náiwēmū'ú gá yá'gùã.*

*yě-má-àkù*                      *nî=í*                      *gá = nû'kú má = ā'a*  
 DIST.NS-ANAPH-MAN 3M/N/NS.SBJ.PCì = be LK.F/M/S/NS.PST = past.time = QUOT

*gá = tà = ũ-wēmù-gú-ú*                      *nî.í*  
 LK.F/M/S/NS.PST = 3S.SBJ\SBJV = **make-food-PL\SBJV-SUB** CONJ

*gá = tà = ná-i-wēmū-'ú*                      *gá = yá'gùã*  
 LK.F/M/S/NS.PST = 3S.SBJ\SBJV = be.spicy-food\SBJV-SUB LK.F/M/S/NS.PST = ancestor

‘[And the Tikunas put some chili pepper in the cooking pot because] that’s how the ancestors used to cook [lit. ‘... to do food-making ...’], their food was spicy.’ [LAR E256]

Example (335) features a rare instance of object-absorbing core argument incorporation involving the incorporation of an NP (instead of a bound noun):

(335) *Nûmà gá fènũèkũ ũ'ã bè'mà ìná-ká'ârũ ãẽã rù ũ'à nũnà-dãwēnù'ú ũ'ã.*

*nû-mà*                      *gá = fènũè-kũ = ũ'ã*                      *bè'mà*  
 3M-ANAPH LK.F/M/NS.PST = hunt\SBJV-REL.M = QUOT quietly

*ì = ná = ká'-ârũ*                      *ãẽ-ã*                      *rù = ũ'à*  
 3PLOC = 3M/N/NS.SBJ = **lean-GEN** **blowgun-POSS** and = QUOT

*nũ = nà = dãwēnù-'ú = ũ'ã*  
 3M/N/NS.ACC = 3M/N/NS.SBJ\SBJV = watch\SBJV-SUB = QUOT

‘[A hunter heard weird splashing sounds in the jungle. Some human-like creatures were playing in a river.] The hunter silently leaned his blowgun against [a tree] and watched them.’ [GSG 1’37”–1’44”]

(ii) **POSSESSEE INCORPORATION** In possessee incorporation, the semantic role of the incorporated constituent corresponds, like in core argument incorporation, to the **semantic role of the subject of an intransitive verb root/stem or the object of a transitive verb root/stem**. Possessee incorporation may also occasionally occur in cases where the semantic role of the incorporated constituent corresponds to that of the complement in the accusative of an intransitive verb root/stem. However, unlike in core argument incorporation, **no valency decrease occurs**. The subject, object, or accusative complement syntactic position—respectively—is not absorbed by the incorporated constituent, but is instead **occupied by a participant that corresponds semantically to the possessor** of the incorporated constituent.

Thus, in possessee incorporation, the syntactic valency of the verb root/stem remains unchanged, but the mapping of its syntactic valency onto semantic roles is reorganized. In the case of a transitive verb root/stem, for instance, the presence of possessee incorporation implies that the participant in object position is not the patient, but the possessor of the patient, which is itself expressed as the incorporated constituent. Possessee incorporation **allows a semantic possessor to be promoted to the syntactic position of its possessee** and, as a result, to benefit from an increase in discursive salience, in particular over its possessee. Like core argument incorporation, possessee incorporation may yield relatively lexicalized incorporating verb stems (involving an incorporated bound noun) denoting well-identified concepts in the Tikuna culture, but it is generally **much more flexible and productive than core argument incorporation**.

Instances of possessee incorporation involving an incorporated constituent whose **possessor occupies the subject position of an intransitive verb root/stem** are provided in examples (336) (bound noun incorporation; see also (328a) above, and /yũ-nátũ/ [die-father] ‘to lose one’s father’ [lit. ‘to father-die’] in (472)) and (337) (NP incorporation; see also (329) and (330) above).

(336) *Ná-mayǎē. Nũ’àkù gá ná-yìyǎē.*

*ná = mǎ-yǎē*                      *nũ’-àkù = gá*                      *ná = yì-yǎē*  
3M/N/NS.SBJ = **be.long-hair**    PROX.PLOC-APPROX = PST    3M/N/NS.SBJ = **fall.PL-hair**

‘He had a long hair. His hair fell about here [with a gesture of the speaker at the level of his hips].’ [JSG B139]

(337) [...] *yà yîmà <m...> <m...> mû-àrũ àkúǎnè... ñâ’ũnè.*

*yà = yî-mà*                      *<m...> <m...> mû-àrũ*  
LK.N/S = MED.N-ANAPH                      **be.several-GEN**

*àkú-ǎ-nè*                      *ñâ-’ũnè*  
**what?.NS-POSS\SBJV-REL.N**    **do.thus.3M/N/NS.SBJ.SBJV-REL.N**

‘[We whip it with a wooden whisk,] this thing that has several... several, uh... [lit. ‘... that is what-numerous? ...’] that is like this [with a gesture drawing a whisk with several branches in the air].’ [TVJ B479–480]

An instance of possessee incorporation involving an incorporated constituent whose **possessor occupies the object position of a transitive verb root/stem** is provided in example (338) (bound noun incorporation; see also (328d) above, and /ǵà-nàgú-pērēmà/ [tie-on-upper.leg] ‘to hang someone up by the leg’ [lit. ‘to

leg-hang someone’] in (T5)). Note that in (338), the (core) object, a first person participant (/chō = / ‘1SG.ACC’), is encoded as a participant in the accusative as an effect of differential object marking for non-third person masculine/neuter/non-salientive participants. For an instance of the same functional type of incorporation involving NP incorporation, see (327) above.

(338) [...] *dâà îànèégàgú chõtà-ũégā’ũ gá yí’èmá pâi.*

*dâ-à*            *î-ànè-égà-gú*            *chō = tà = ũ-égā-’ũ*  
PROX.N-EXO   building-space-name-PLOC   1SG.ACC = 3S.SBJ = **make-name**\SBJV-SUB

*gá = yí’è-má*    *pâi*  
LK.F/M/S/NS.PST = MED.S-ANAPH    priest

‘[Because I was born the same year he had come and baptized the village,] the priest baptized me with the name of this community.’ [ANO2 2’59”–3’02”]

Instances of possessee incorporation involving an incorporated constituent whose **possessor occupies the syntactic position of the accusative complement of an intransitive verb root/stem** are provided in examples (339) (bound noun incorporation) and (340) (NP incorporation).

(339) [...] *tūnà-dāuá’ūnē’ũ gá gú’ūwá mā.*

*tū = nà = dāu-á-’ūnē-’ũ*  
3S.ACC = 3M/N/NS.SBJ\SBJV = **see-PLLOC-body**\SBJV-SUB

*gá = gú-’ũ-wá = mā*  
LK.F/M/S/NS.PST = finish\SBJV-REL.NS-ALOC = precisely

‘[The mythical figure Peta-Peta came across a weird feathered creature—in fact a Tikuna man. He crouched next to him and] [started to] examine his body [lit. ‘body-look at him ...’] from every possible angle.’ [LAR E40]

(340) [...] *tāmā nūchā-fǎārū dé’ã gá gūmá tōnátū.*

*tāmā*            *nū = chā = fǎ-ārū*    *dé’ã*  
NEG.precisely   3M/N/NS.ACC = 1SG.SBJ = **know-GEN**    **speak-POSS**

*gá = gū-má*    *tō-nátū*  
LK.F/M/NS.PST = DIST.M-ANAPH    1PL-father

‘[All the stories and songs I know I learned from my mother. Our father died when we were young so] I didn’t learn any stories from our father [lit. ‘I didn’t story-know our father at all.’]’ [GRA 173]



(iii) **NON-CORE PARTICIPANT INCORPORATION** Finally, in non-core participant incorporation, the **semantic role of the incorporated constituent does not correspond to that of either of the possible core arguments of the verb root/stem**. The interpretation of that semantic role is mostly **left to context** and may be delicate to establish with certainty. In most cases, the referent identified by the incorporated constituent can be broadly interpreted as having the **semantic role of a ground** (portion of space proper, as in example (341); container, as in (342); or vehicle, as in (328b) above) or as **characterizing the state reached by the object** of a transitive verb denoting a transformation process (as in (343); see also (169)). The valency of the verb root/stem and its mapping of syntactic positions with semantic roles are left unaltered. Non-core participant incorporation virtually always involves the incorporation of bound nouns (not entire NPs). Like possessee incorporation, non-core participant incorporation may yield relatively lexicalized incorporating verb stems, although it is **generally more flexible and productive than core argument incorporation**.

(341) Más adelante *gá, ǒ'ri'i'ũ ná-dǎu'ũ gá ngémà gùtũ'ũ'ũ.*

más adelante = *gá ǒ'ri'i'ũ ná = dǎu'ũ*  
 more ahead = PST fruit-ACC 3M/N/NS.SBJ\SBJV = see\SBJV-SUB

*gá = ngé-mà gù-tũ'ũ-ũ*  
 LK.PST = MED.ALOC-ANAPH drop-space.below\SBJV-REL.NS

'Further on, he saw some fruits that had dropped there on the ground [lit. '... that had below-dropped there', i.e. probably to the area below the tree they dropped from].' [JSG C29–30]

(342) “Tè'ě yà chǎnà-ngǒ'è ì chô'rũ <ô'... > chô'rũ ô'te'e ì nũ'à chà-útá'ũ'ũ ěka ná-tǎ'ú'ũ?”

tè'ě yà = chǎ = nǎ = ngǒ-'è ì = chô-'rũ  
 who?.S LK.N/S = 1SG.BEN = 3M/N/NS.OBJ = bite\SBJV-REL.S LK.NS = 1SG-GEN

<ô'... > chô-'rũ ô-'te'e ì = nũ-'à  
 ? 1SG-GEN ?-granular.substance LK.NS = PROX.PLOC-EXO

*chà = ú-tá'ũ-ũ ěka*  
 1SG.SBJ\SBJV = put.SG-bounded.flat.surface\SBJV-REL.NS so.that

*nà = tǎ'ú-ũ*  
 3M/N/NS.SBJ\SBJV = be.absent\SBJV-SUB

“Who ate my co... my corn flour that I had stored here [lit. '... that I had flat-receptable-put here?']? It's no [longer] there!” [GRA 239–241]

(343) [...] *rù mé'e wí'á tàã ã'a gá tí-yò'mù* [...].

*rù* = *mé'e*   *wí'á* = *tàã* = *ã'a* = *gá*   *tí* = *yò'-mù*  
and = DUB   one = itself = QUOT = PST   3S.SBJ.PCī = **chew-paste**

‘[A woman had asked her daughter-in-law to make into beer a whole heap of corn ears by chewing them. The girl was supernatural] so I guess after chewing [lit. ‘... chewing into paste ...’] a single one [all the jars got filled.]’  
[JSG B258]

#### 4.2.5.3 Pseudo-incorporation in possessive predication

Possessive predication of participants expressed as bound nouns exclusively operates through a construction that is **formally identical with bound noun incorporation** and appears to incorporate the bound noun to the **verb roots *ã* ‘to have’** (positive possessive predication) **or *gẽ* ‘not have’** (negative possessive—or privative—predication, on which see SECTION 7.2.3). Possessive predication of participants expressed as NPs may similarly operate through a construction that is **formally identical with NP incorporation** and involves the same two verb roots, although in the case of participants expressed as NPs an alternative construction involving non-verbal predication is available, and apparently preferred over NP incorporation to *ã* or *gẽ* (on this alternative construction, see SECTION 4.3.3.6). Note, however, that the incorporation-like constructions employed for possessive predication are not, strictly speaking, genuine incorporation given that their possessee participant cannot be extracted from *ã* or *gẽ*—so as to be expressed as a separate, syntactically independent nominal constituent. Furthermore, from a syntactico-semantic perspective, these incorporation-like constructions do not quite fit with any of the three functional types identified in the previous section. For these reasons, I consider them as cases of **pseudo-incorporation**, rather than incorporation proper.

Instances of **possessive pseudo-incorporation of a bound noun** are provided in examples (344) and (345).

(344) “*Ná-ã̀èrú yá gáú!*” *ñâ'ú ã'a*

*ná* = *ã̀-èrú*                      *yá* = *gáú*  
3M/N/NS.SBJ = **have-head**   LK.M/S = cover.with.feathers

*ñâ-'ú* = *ã'a*  
do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT

‘[The mythical figure Peta-Peta came across a weird feathered creature—in fact a Tikuna man—and started examining it.] “The feathered thing has a head!” he observed.’ [LAR E48]

- (345) *Nô'táá ā'a nū-chô ā'a nūwǎ ā'a gá yémá ā'a gá, nâē'ũ rù ā'a kù-āyǎēpùtā ā'a.*  
*nô'táá = ā'a      nū = chô = ā'a      nūwǎ = ā'a*  
 outright = QUOT    3M/N/NS.SBJ.PCĪ = open.one's.mouth = QUOT    well.M/N/NS = QUOT

*gá = yémá = ā'a = gá      nâ-ē'ũ = rù = ā'a*  
 LK.F/M/S/NS.PST = DIST.NS-ANAPH = QUOT = PST    3N/NS-animal = TOP = QUOT

*kù = ā-yǎē-pùtā = ā'a*  
 2SG.SBJ\SBJV = **have-hair**-tooth\SBJV = QUOT

‘[The mythical figure Yoi ordered the jaguar, who arrived last of the animals he had summoned, to open its mouth so he could examine it.] So it opened its mouth wide: lo and behold, the animal had hairs in the teeth [lit. ‘... the animal, your teeth have hairs!’] [*i.e.* he was the one who had eaten up Yoi’s father]!’ [LAR C514]

Note that /*kù = ā-yǎē-pùtā*/ (2SG.SBJ\SBJV = **have-hair**-tooth\SBJV) ‘he [lit. ‘you ...’] had hairs in the teeth’ in (345) can be analyzed as featuring both possessive pseudo-incorporation (‘his teeth have hairs’ literally encoded as ‘his teeth hair-have’) followed by possessee incorporation (‘his teeth hair-have’ > ‘he teeth-hair-has’; on the stylistically-marked use of second person singular marking with reference to a third person participant to convey a notion of surprise, see SECTION 3.3.6, p.206).

An instance of possessive **pseudo-incorporation of an NP** is provided in the following example:

- (346) *Ngēmà gá mārū gú'ũgù ná-āārū dārú'ũḡ.*  
*ngē-mà = gá      mārū    gú-'ũ-gù*  
 MED.ALOC-ANAPH = PST    PRF    finish\SBJV-REL.NS-PLOC

*ná = ā-ārū dā-rú'ũ-ḡ*  
 3M/N/NS.SBJ = **have-GEN see?-PURP-POSS**

‘[A man was captured by an isolated group.] After that, they would never leave him unwatched [lit. ‘... he had a watcher all the time.’].’ [AMB 54]

For instances of **pseudo-incorporation employed in privative predication**, see example (347) (the only case of formal incorporation where the (pseudo-)incorporated constituent is a syntactically complex NP in my corpus) and the examples in SECTION 7.2.3.

(347) [...] *núà rù tã-ǵěàrũ ngēmà nãĩǵgú* [...].

*nú-à = rù*                      *tã = ǵě-àrũ [ngē-mà nãĩ] -ǵ-gú*  
 PROX.ALOC-EXO = TOP    1PL.SBJ = not.have-GEN MED.NS-ANAPH tree-POSS-PL

‘[We usually take the tourists upriver to the primary jungle to show them this and that tree species because] here [*i.e.* around the village] we don’t have those trees [...].’ [JGS 252]

Interestingly, the possessee participant of a positive possessive pseudo-incorporation construction,<sup>236</sup> minimally in cases where it is an NP (as opposed to a bound noun, for which I do not have spontaneous data), may be **relativized using a kind of gapping strategy**. The pseudo-incorporated constituent is then dropped and the possessive suffix /-ǵ-/ gets directly attached to the verb stem after the genitive suffix /-àrũ/ (as in *e.g.* /chã = *ã-àrũ àirũ-ǵ*/ [1SG.SBJ = have-GEN dog-POSS] ‘I have a dog’ > /(*àirũ yà =*)chã = *ã-àrũ-ǵ-’è*/ [(dog LK.N/S = )1SG.SBJ\SBJV = have-GEN-POSS\SBJV-REL.S] ‘(the dog) that I have’). Note that gapping is otherwise only resorted to for relativizing participants with a syntactic function of subject or (core) object in SMAT, while relativizing participants with any other syntactic function regularly involves the use of a resumptive pronominal form standing for the pivot within the relative clause. An instance of relativization of the NP possessee participant of a positive pseudo-incorporation construction is provided in the following example:

(348) [...] *ērú nãĩ’nēkũ ì núà tã-ǵàrũǵgú’ũ* San Martínwǎ rù <*mārũ...*> *mārũ*  
 <*nágù...*> *náwǎ tà-pūrākúè’ũ nũ-ĩ* [...].

*ērú nãĩ’nēkũ ì = [nú-à*  
 because jungle LK.NS = PROX.ALOC-EXO

*tã = ǵ-àrũ-ǵ-gú-’ũ*                      San Martín-wǎ] = *rù*  
 1PL.SBJ.SBJV = have-GEN-POSS-PL\SBJV-REL.NS San.Martín.de.Amacayacu-ALOC = TOP

<*mārũ...*> *mārũ* <*ná-gù...*> *ná-wǎ*  
 PRF                      PRF    3N/NS-PLOC    3N/NS-ALOC

*tà = pūrākúè-è-’ũ*                      *nũ = ĩ*  
 3S.SBJ\SBJV = work-INTR.PL\SBJV-REL.NS    3M/N/NS.SBJ.PCì = be

‘[We usually take the tourists upriver from San Martín de Amacayacu to show them the primary jungle,] because the jungle that we have here in

<sup>236</sup>I do not have data on the relativization of the possessee participant of a privative pseudo-incorporation construction, if such relativization is possible at all.

San Martín is [jungle] that is exploited by man [lit. ‘... is [a jungle] that [people] have worked in already.’] [JGS 220–221]

### 4.3 Non-verbal predicative phrases

Several types of non-verbal predicative phrases are attested in SMAT. These are listed in TABLE 37. They involve the **combination of a nominal constituent** (a circumstantial independent noun, a—non-circumstantial—independent noun, or an entire NP) **or an onomatopoeia** together with a bound morpheme, which may be either a **suffix** (/-'ü̃/ ‘TEMP.PRED’, /-ē/ ‘EVENT.PRED’, or /-ã/ ‘POSS’), a **predicative relational noun** (/-'gũ/ ‘PLOC’, /-'rà'ũ̃/ ‘like’, /-'pɛ'e/ ‘equal’, /-'chà'ũ̃/ ‘VOL’, or /-'wãē/ ‘APPREC’ or one of its subdialectal variants), **or a bound noun**.

From a semantic perspective, the resulting PPs serve for the expression of a **varied array of predication types**. The meaning of each formal type of non-verbal predication identified in TABLE 37 is roughly glossed in the column ‘Resulting PP’ (with ‘X’ standing for the respective nominal constituent to which the bound morpheme in the leftmost column of the table is attached in the respective formal type of non-verbal predication).

Note that, as indicated by plus signs < + > in TABLE 37, certain of the bound morphemes that turn a nominal constituent into a non-verbal PP trigger the morphotonological alternation /<sup>43</sup>/→/<sup>31</sup>/ **when they are immediately attached to the Allomorph 1 of a pronominal root** featuring a lexical toneme /<sup>43</sup>/ (a process that represents an instance of Pattern 2 morphotonological alternation, on which see SECTION 2.6.2.2; on the definition of the Allomorph 1 of pronominal roots, see SECTION 3.3.1). Thus, the combination of the pronominal root /ná-/ ‘3N/NS’ with the predicative relational noun /-'chà'ũ̃/ ‘VOL’, for instance, yields the form /ná-'chà'ũ̃/, with the lexical toneme /<sup>43</sup>/ of /ná-/ turning into /<sup>31</sup>/ (/ná-/). Note that, by definition, only bound nouns and relational nouns can be directly attached to the Allomorph 1 of pronominal roots. Suffixes, by contrast with bound nouns and relational nouns, are defined as bound morphemes that cannot be attached to the Allomorph 1 of pronominal roots. That is why the bound morphemes in TABLE 37 that are suffixes, as opposed to bound nouns and relational nouns, feature the mention ‘n/a’ (for ‘not applicable’) in the column ‘MA trigger’ (for ‘Pattern 2 Morphotonological Alternation trigger’).

The various types of non-verbal predication listed in TABLE 37 are **discussed and exemplified individually in the next sections** (see the corresponding section

	MA trigger	Gloss	Resulting PP	Section	
<b>C.i.n. + ...</b>					
	/-’ü̃/	n/a	TEMP.PRED (temporal predicativizer)	‘belong to time X’	4.3.1
<b>I.n. + ...</b>					
	/-ē/	n/a	EVENT.PRED (event predicativizer)	‘to perform an action related to X’	4.3.2
<b>Onom. + ...</b>					
	/-ē/	n/a	EVENT.PRED (event predicativizer)	‘to make sound X’	4.3.2
<b>NP + ...</b>					
	/-gũ/		PLOC (punctual locative)	‘be in/on/at X’	4.3.3.1
	/-rà’ü̃/	+	like	‘be similar to X’	4.3.3.2
	/-’pē’e/	+	equal	‘be the equal of X’	4.3.3.3
	/-’chà’ü̃/	+	VOL (volitive)	‘to want X’	4.3.3.4
	/-’wāē/ <sup>a</sup>	+	APPREC (appreciative)	‘to like X’	4.3.3.5
	/-ã/	n/a	POSS (possessive)	‘to have/provide with X’	4.3.3.6
bound noun	variable	variable		‘to have one’s Y that has X’	4.3.4

<sup>a</sup> Variants: /-wāē, -’wē’e/

**Key:**

C.i.n. circumstantial independent noun

I.n. independent noun

Onom. onomatopoeia

MA trigger trigger of Pattern 2 morphotonological alternations (see SECTION 2.6.2.2; suffixes for which no indication is provided in this column do *not* trigger these alternations)

n/a not applicable (the corresponding suffix never occurs in a context where it could trigger Pattern 2 morphotonological alternations)

**TABLE 37.** *Formal types of non-verbal predicative phrases in SMAT along with their respective meanings*

references in the rightmost column of the table).

On **existential predicative constructions involving the endophoric non-locative demonstratives**, the only major formal type of non-verbal predication not dealt with in this section, see SECTION 3.4.4. On combinations of the non-locative demonstrative roots with the “focal” suffix /-’rú/ being directly inflected as PPs—a rare phenomenon—see SECTION 3.4.6, p.242.

### 4.3.1 Circumstantial independent noun + /-’ú<sup>x</sup>/

#### ‘TEMP.PRED’: ‘to belong to time X’

The rare suffix /-’ú<sup>x</sup>/ ‘TEMP.PRED’ combines with **circumstantial independent nouns referring to temporal positions** (e.g. *nô’rí* ‘(at) the beginning’, *nú’kúmá* ‘(in) ancient times’, *ngē’wákà* ‘(in) recent times’, *ìnè* ‘the day before’, /ìnè-ámá/ [day.before-DIR] ‘a few days before’) to yield PPs that can be generally glossed in English as ‘to belong to time X’. Illustrations of the use of this suffix are provided in examples (349) and (350) (see also (189)).

(349) [...] *nú’kúmá’ú’ú* < *gá...* > *gá tù’ègú*.

*nú’kúmá-’ú-’ú* < *gá = ...* > *gá = tù’è-gú*  
 past.time-TEMP.PRED\SBJV-REL.NS LK.F/M/S/NS.PST = LK.F/M/S/NS.PST = manioc-PL

‘ancient manioc varieties [lit. ‘manioc varieties that belong to the past’]  
 [LAR E197]

(350) *Wénà á’a gá núgù íyà-ú’ú rù tūnà-dāu’ú gá yí’émá nô’rí’ú’è gá nǎ’mq’a gá ná’a tà-pà’ú wénà.*

*wénà = á’a = gá nú-gù í = yà = ú-’ú*  
 again = QUOT = PST 3M-REFL 3ALOC = PCĪ.3M/N/NS.SBJ\SBJV = go.SG\SBJV-SUB

*rù tū = nà = dāu-’ú gá = yí’è-má*  
 LK.PST = MED.S-ANAPH beginning-TEMP.PRED\SBJV-REL.S LK.PST = 3M-wife

*nô’rí-’ú-’è gá = nǎ-’mq’a gá = ná’a tà = pà-’ú wénà*  
 LK.PST = CONJ 3S.SBJ\SBJV = be.nubile\SBJV-SUB again

‘[A man had left his first wife when she had children and he no longer desired her. When his second wife had children in her turn, he left her too.] He turned back again and saw that his first [lit. ‘... belonging to the beginning ...’] wife looked young again.’ [IGV 703–704]

In these examples, the non-verbal PP that /-ʰü/ contributes to form occurs in **subject relativizations** functioning as modifiers. Although, as I could confirm in elicitation sessions, such PPs may indeed occur in main clauses (/ná = ngē'wákà-ʰü/ [3M/N/NS.SBJ = recent.time-TEMP.PRED] lit. 'it belongs to recent times', *i.e.* 'it is recent or new', talking for instance of an item recently bought), this is not attested in spontaneous data.

### 4.3.2 Independent noun or onomatopoeia + /-ē/

#### 'EVENT.PRED': 'to perform an action related to X'

The rare suffix /-ē/ 'EVENT.PRED' combines with **independent nouns denoting physical entities or social events** to yield PPs that can be generally glossed in English as 'to perform an action involving the object X' (the exact meaning of the resulting PP is unpredictable from the meaning of the independent noun it comprises) or 'to hold the social event X'. It additionally combines with onomatopoeia to yield PPs meaning 'to make the sound X'. An illustration of the use of this suffix is provided in example (351) (see also (514)).

(351) [...] *chānā-ḡy'ē'e tà ná'a maloca rù ñómáükú'ü tàã rù náwá tā-pétàḡú'ü* [...].

*chā* = *nā* = *ḡy*-'ē'e = *tà*                                      *ná'a* *maloca* = *rù*  
1SG.SBJ = 3M/N/NS.OBJ = know-CAUS = ADD    CONJ *maloca* = TOP

*ñô-má-ükú'ü* = *tãã* = *rù*                                      *ná-wǎ*  
PROX.NS-ANAPH-time = itself = TOP    3N/NS-ALOC

*tā* = *pétà-ē-ḡú'ü*  
1PL.SBJ = celebration-EVENT.PRED-PL\SBJV-SUB

'[As their guide, I showed these tourists what a *maloca* is and] I also explained to them that the *maloca*, to this day, we hold our rituals in it [...].'  
[JGS 431–433]

Additional examples of PPs involving /-ē/ 'EVENT.PRED' stemming from elicited data are provided in the following example:

- (352) a. *chó'ní* 'fish' → *chó'níē* 'to fish'  
b. *wāwà* 'baby' → *wāwàē* 'to rock a baby'



- c. *wāiyūrí* ‘*minga*’<sup>237</sup> → *wāiyūrīē* ‘to hold a *minga*’  
 d. *ñōī* ‘*ñōī* sound’<sup>238</sup> → *ñōīē* ‘to sound *ñōī*’

Note that the suffix /-ē/ ‘EVENT.PRED’ is **homonymous with several other morphemes** in the language, specifically the derivational suffixes of the verb root /-ē/ ‘off.SG’ (on which see SECTION 4.2.3.5) and /-ē/ ‘ANTIP2’ (SECTION 4.5.1) and the derivational suffix of the PP /-ē/ ‘INTR.PL’ (SECTION 4.4.4). This usually does not particularly complicate its identification, however, as long as the stressed morpheme to which it attaches can be itself identified as an independent noun or an onomatopoeia, *i.e.* elements that do not have direct access to the inflectional morphology of the finite PP (while the homonyms of /-ē/ ‘EVENT.PRED’ just mentioned are attached to verb roots or PPs, *i.e.* constituents that do have direct access to the inflectional morphology of the finite PP).

### 4.3.3 NP + predicative relational noun or /-ã/ ‘POSS’

#### 4.3.3.1 NP + /-gũ/ ‘PLOC’: ‘be in/on/at X’

The predicative relational noun /-gũ/ ‘PLOC’ **combines with entire NPs** to yield PPs that predicate a static relation of spatial contiguity (*i.e.* a general topological relation; on the notion of topological relation, see SECTION 4.2.3) holding between a figure and a ground without specifying in any way the posture of the figure (specifying that posture would require the use of a verb root combined with a figure-ground configuration derivational suffix; on these suffixes, see SECTION 4.2.3). These PPs can be generally glossed in English as ‘**to be in/on/at X**’. Note, importantly, that /-gũ/ ‘PLOC’ is the only predicative relational noun that, apart from its function in forming non-verbal PPs, may serve (in practice more frequently) as a **syntactic function marker** for participants in the punctual locative (see SECTION 3.6.2). Illustrations of the use of /-gũ/ to form non-verbal PPs are provided in the following two examples:

(353) [...] *ñá’ú ù’á gá g’ò’o gá íātúgù’ú gá nù’àkúnà.*

<sup>237</sup>Sp. *minga* refers to a communal labor party.

<sup>238</sup>Sound of a blade being whet.

$\tilde{n}\tilde{a}\text{-}'\tilde{u} = \tilde{u}'\tilde{a}$

do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT LK.F/M/NS.PST = spirit

$g\acute{a} = \tilde{g}'\tilde{o}'\tilde{o}$

$g\acute{a} = \acute{i}\text{-}\tilde{a}\tilde{t}\tilde{u}\text{-}g\grave{u}\text{-}'\tilde{u}$

LK.F/M/NS.PST = **building-yard-PLOC**\SBJV-REL.NS

$g\acute{a} = n\acute{u}\text{-}'\grave{a}k\acute{u}\tilde{n}\grave{a}$

LK.F/M/NS.PST = PROX.ALOC-APPROX.ALOC

‘[A mother pretended to be calling an evil spirit over to frighten her daughter who wouldn’t stop crying. “Oh? Where is she?”] answered the evil spirit who was in the yard [around the house] about here [with a circular gesture pointing around her].’ [IGS 313]

(354) *Ngēmà nŭ-î ì ñumá ì tōtānùgùgǔ'ŭ.*

*ngē-mà*

*nŭ = î*

*ì = ñumá*

MED.NS-ANAPH 3M/N/NS.SBJ.PCì = be LK.NS = present.time

*ì = tō-tānù-gù-gǔ-'ŭ*

LK.NS = **1PL-group-PLOC-PL**\SBJV-REL.NS

‘[About 80 people are working for the consortium like me right now. They are people from communities X, and Y, and Z...] Those are the ones who are among us now [lit. ‘... who are in our group now.’].’ [JSG A82–83]

The predicative relational noun /-gǔ/ ‘PLOC’ is the only one, among the predicative relational nouns discussed in this section, to **occasionally undergo ellipsis**, as in example (355), where /tá = tŭ-mà-kŭwā-chìgù/ [3S.SBJ = 3S-ANAPH-side-DISTR.SG] ‘she had been staying [by] his side’ could most likely be made morphosyntactically more explicit as /tá = tŭ-mà-kŭwā-gú-chìgù/ [3S.SBJ = 3S-ANAPH-side-PLOC-DISTR.SG] (note that ellipsis of /-gǔ/ ‘PLOC’ also occasionally occurs in cases where it serves as a syntactic function marker).

(355) Siempre *gá <yí'è-má... yǎrǎrŭ yōrǎ gá rŭ... > tŭmààrŭ māmá rŭ tá-tŭmàkŭwā-chìgù.*

siempre = *gá <yí'è-má yǎrǎrŭ yōrǎ = gá = rŭ... > tŭ-mà-àrŭ*

always = PST MED.S-ANAPH tamarin-GEN master = PST = TOP 3S-ANAPH-GEN

*māmá = rŭ tá = tŭ-mà-kŭwā-chìgù*

mum 3S.SBJ = **3S-ANAPH-side-DISTR.SG**

‘[A hunter caught a baby tamarin monkey and took it back home.] The master of the tamarin... [Self-correction:] His mother had been closely following him all along [lit. ‘... had been [by] his side progressively all the time.’].’ [JSG C116–118]

## 4.3.3.2 NP + /-rà'ũ/ 'like': 'be similar to X'

The predicative relational noun /-rà'ũ/ 'like' **combines with entire NPs** to yield PPs that predicate a relation of similarity between the subject referent and the referent of the NP to which it is attached, yielding PPs that can be generally glossed in English as 'be similar to X, to look like X'. PPs formed by the suffix /-rà'ũ/ are regularly inflected in the **predicative class PCnà**, in its original form as in example (356) or, in younger speakers, in its reinterpretation as PCØ involving associated motion as in (357) (on PCnà and its reanalysis in younger speakers, see SECTION 5.9, p.481). For more instances of use of /-rà'ũ/, see (T70) and (T75).

(356) *Mārū náyà-tòmàrà'ũ.*

*mārū ná = yà = tò-mà-rà'ũ*

PRF 3M/N/NS.SBJ = AM = other.NS-ANAPH-like

'It's different [lit. 'It is like something else.']. [JSG B522]

(357) [...] *ákú'wǎ tánā-kǎ rù nánà-ũitē'erà'ũ.*

*ákú'wǎ*

*tá = nā = kǎ*

*rù*

what?.NS\SBJV-REL.N-ALOC 3S.SBJ = 3M/N/NS.OBJ = crush and

*ná = nà = ũi-tē'e-rà'ũ*

3M/N/NS.SBJ = PCnà = manioc.flour-granular.substance-like

'[Our ancestors used to toast corn and then] they would crush it in this thing [whose name the speaker does not recall right now] and it would look like fine manioc flour.' [GRA 234]

## 4.3.3.3 NP + /-'pe'e/ 'equal': 'be the equal of X'

The rare predicative relational noun /-'pe'e/ 'equal' **combines with entire NPs** to yield PPs that predicate a relation of equality of status or quality between the subject referent and the referent of the NP to which it is attached, yielding PPs that can be generally glossed in English as 'be the equal of X', as shown in the following example:

(358) *Tūyà-ũchìgū'ũ ná'a tà-nâ'pe'e'ũkq.*

*tū = yà = ũ-chìgū-'ũ*

*ná'a*

3S.ACC = PCĪ.3M/N/NS.SBJ\SBJV = make-DISTR.SG\SBJV-SUB CONJ

*tà = nâ-'pe'e-'ũ-kq*

3S.SBJ\SBJV = 3N/NS-equal\SBJV-SUB-CAUSE

‘He was setting him tests so that he would grow into his equal [lit. ‘... be his equal.’].’ [JSG B102]

#### 4.3.3.4 NP + /-'chà'ù/ ‘VOL’: ‘to want X’

The predicative relational noun /-'chà'ù/ ‘VOL’ **combines with entire NPs** to yield PPs that predicate a relation of desire between the subject referent and the referent of the NP to which it is attached, yielding PPs that can be generally glossed in English as ‘to want X’, as shown in the following example (see also (258) and (492)):

(359) *Ngēmà nî-î ì chà-nâ'chà'ù'ù ì chòmà.*

*ngē-mà              nî = î*  
MED.NS-ANAPH    3M/N/NS.SBJ.PCì = be

*ì = chà = nâ-'chà'ù-ù'ù                              ì = chò-mà*  
LK.NS = 1SG.SBJ\SBJV = 3N/NS-VOL\SBJV-REL.NS    LK.NS = 1SG-ANAPH

‘That’s what I want.’ [JSG A261]

The last two syllables of the synchronically unanalyzable verbs *gêchà'ù* ‘to miss (someone)’ (< /gê-/ ‘not have’ + \*/-'chà'ù/ ‘desire?’) and *gûchà'ù* ‘to arouse desire’ (< /gû/ ‘to hurt’ + \*/-'chà'ù/ ‘desire?’; see example (173) for an instance of use of this verb) are most likely cognate with the predicative relational noun /-'chà'ù/ ‘VOL’, which may formerly have been a regular bound noun meaning ‘will, desire’.

#### 4.3.3.5 NP + /-'wāē, -wāē, -'wē'e/ ‘APPREC’: ‘to like X’

The predicative relational noun /-'wāē, -wāē, -'wē'e/ ‘APPREC’ features three subdialectal variants. It **combines with entire NPs** to yield PPs that predicate a relation of affection or desire between the subject referent and the referent of the NP to which it is attached, yielding PPs that can be generally glossed in English as ‘to love X, to like X, to feel like an X, to want X’, as shown in the following example (see also examples (160), (485), and (605)):

(360) *“Mārū tâu chā-kû'wqē ì ñymá!”*

*mārū    tâu    chā = kû-'wqē              ì = ñymá*  
PRF     NEG   1SG.SBJ = 2SG-APPREC    LK.NS = present.time

‘[A man came back to his former wife after abandoning his new wife, but she rejected him:] “I don’t love you any more now!” [IGV 709]

The form /nâ-’wǎè’ú/ [3N/NS-APPREC\SBJV-SUB, or perhaps 3N/NS-APPREC\SBJV-REL.NS], lit. ‘(that) it likes it’ or ‘what likes it’ (or its morphosyntactically parallel subdialectal variants *nâwǎè’ú*, *nâ’wǎ’è’ú*) can be used in combination with a complement clause in *ná’a/nî-î* ‘CONJ’ to form an **impersonal construction expressing deontic modality** comparable to the French construction *il faut que ...* The morphologically simpler form /nâ-’wǎē/ [3N/NS-APPREC] (or its subdialectal variants *nâwǎē*, *nâ’wǎ’e*) may alternatively be used instead, as in example (361) (see also (T118)). The interpretation of the exact syntactic function of *nâ’wǎè’ú* or *nâ’wǎē* in the construction under discussion is unclear. This construction, which additionally does not feature fully-compositional semantics, is in any case better treated unitarily as a **highly grammaticalized one**.

(361) *Nâ’wǎ’e tá tà ná’a chòmà chî-ngî’ú ì chòmà.*

*nâ-’wǎ’e* = *tá* = *tà*      *ná’a* *chò-mà*      *chî* = *ngî-’ú*  
 3N/NS-APPREC = FUT = ADD    CONJ    1SG-ANAPH    1SG.SBJ.PCĪ.SBJV = hold\SBJV-SUB  
*ì* = *chò-mà*  
 LK.NS = 1SG-ANAPH

‘[My partner and I are not married yet, but my parents married, my parents-in-law married, so...] I’m going to have to get married too.’ [ANO1 65]

#### 4.3.3.6 NP + /-ǎ/ ‘POSS’: ‘to have/provide with X’

The suffix /-ǎ/ ‘POSS’ combines with entire NPs to yield PPs that **either predicate a relation of possession (intransitive uses) or express a transfer event**<sup>239</sup> (transitive uses) between the subject referent and the referent of the NP to which it is attached. The resulting PPs can be generally glossed in English as ‘to have X’ (intransitive uses) or ‘to give X, to provide with X’ (transitive uses).

Instances of **non-verbal PPs in /-ǎ/ ‘POSS’ employed intransitively** are featured in the following two examples (see also (471) and (536)):

<sup>239</sup>Strictly speaking, non-verbal PPs in /-ǎ/ ‘POSS’ employed transitively probably only predicate, in themselves, a caused static relation of possession holding between the object referent and the referent of the NP suffixed with /-ǎ/. In actual contexts, however, they may suggest, implicationally, a telic transfer event, as in example (364).

(362) [...] *mārū́ gá chà-diērù-ǎ'úú́ gá chòmà.*

*mārū́ = gá chà = diērù-ǎ-úú́ gá = chò-mà*  
 PRF = PST 1SG.SBJ\SBJV = **money-POSS**\SBJV-SUB LK.F/M/NS.PST = 1SG-ANAPH

‘[The fifteen days of work were over and] I now had money.’ [JGS 700]

(363) [...] *chô-rū́ pāpǎ rù gá tá-wí'á iēǎ, wí'á iē gá má'úúnè [...]*

*chô-rū́ pāpǎ = rù = gá tá = wí'á iē-ǎ wí'á iē*  
 1SG-GEN dad = TOP = PST 3S.SBJ = INDF **blowgun-POSS** INDF blowgun

*gá = má-úúnè*  
 LK.N.PST = be.long\SBJV-REL.N

‘[When he went hunting,] my father used [lit. ‘... had ...’] a blowgun, a long blowgun [...].’ [ANO2 5’48”–5’52”]

Instances of **non-verbal PPs in /-ǎ/ ‘POSS’ employed transitively** are featured in the following two examples:

(364) *Ngémà gá chānà-diērù-ǎgúú'ú.*

*ngé-mà = gá chā = nà = diērù-ǎ-gúú-ú*  
 MED.ALOC-ANAPH = PST 1SG.ACC = 3M/N/NS.SBJ\SBJV = **money-POSS-PL**\SBJV-SUB

‘[The group of tourists I had guided congratulated me.] And then they gave me some money [*i.e.* for a tip].’ [JGS 450–451]

(365) *Mêà mǎ kūnā-dê'ǎ-ǎ.*

*mêà = mǎ kū = nā = dê'ǎ-ǎ*  
 well = precisely 2SG.SBJ = 3M/N/NS.OBJ = **water-POSS**

‘[In a recipe: You pour some water in the mashed plantains to make them into a pulp.] You put a good amount of water in it [lit. ‘You provide it well with water.’].’ [TVJ B372]

Note that possessive predication involving a possessee expressed as an NP **may be alternatively expressed verbally**, by (pseudo-)incorporating that NP to the verb root *ǎ* (on the use of pseudo-incorporation for possessive predication, see SECTION 4.2.5.3).

### 4.3.4 NP + bound noun: ‘to have one’s Y that has X’

The combination of an **entire NP with in principle any bound noun** may occasionally be employed as an **intransitive non-verbal PP** indicating that the referent corresponding to the bound noun (which has a semantic role of possessee with respect to the subject referent) possesses or features the referent corresponding to the NP. In other words, these morphosyntactically and semantically intricate non-verbal PPs can be generally glossed in English as ‘**to have one’s Y that has X**’, involving a relation of possession embedded within another relation of possession.

The non-verbal PPs formed in this way may usually be analyzed as **possessive non-verbal PPs in /-ã/ ‘POSS’** (on which see the previous section) **that additionally feature possessee incorporation** involving a bound noun having the semantic role of the subject (on possessee incorporation, see SECTION 4.2.5.2, p.323). Thus, the meaning of /tá = ná-yǎē-pùtà/ (3S.SBJ = 3N/NS-hair-tooth) ‘he had his teeth that had hairs’ in example (366) could probably be equivalently expressed as <sup>?</sup>/tû-mà-pùtà ná = ná-yǎē-ã/ (3S-ANAPH-tooth 3M/N/NS.SBJ = 3N/NS-hair-POSS) ‘his teeth had hairs’, *i.e.* rephrased using possessive predication in /-ã/ ‘POSS’ with the initially incorporated bound noun /-pùtà/ ‘tooth’ moved to the syntactic position of subject.<sup>240</sup>

(366) [...] yêrú nû-ĩ gá... tīyà-chô-’é-’é-’úwá chí nû-ĩ gá < tà-fatūm... > tà-fatūmā’ū’ū  
tá nû-ĩ gá tè-’é nā-gēnátù’ú ērú tá-náyǎēpùtà ā’a.

yêrú nû.ĩ  
because.PST CONJ

gá = tū = yà = chô-’é-’é-’ú  
LK.F/M/S/NS.PST = 3S.ACC = PCĪ.3M/N/NS.SBJ\SBJV = open.one’s.mouth-CAUS\SBJV-SUB

-wá = chí nû = ĩ gá = < tà = fq-tūm... >  
-ALOC = IRR 3M/N/NS.SBJ.PCĪ = be LK.F/M/S/NS.PST = 3S.SBJ\SBJV = know-

tà = fq-tūmā’ū’ū = tá nû.ĩ gá = tè-’é  
3S.SBJ\SBJV = know-?\SBJV-SUB = FUT CONJ LK.F/M/S/NS.PST = what/who?.S

nā = gē-nátù-’ú ērú tá = ná-yǎē-pùtà = ā’a  
3M/N/NS.OBJ = not.have-father\SBJV-SUB because 3S.SBJ = 3N/NS-hair-tooth = QUOT

‘[The mythical figure Yoi ordered the tapir to open its mouth] because it was by ordering it to open its mouth that they would recog... recognize the

<sup>240</sup>For an utterance in which the exact same meaning, ‘to have hairs in the teeth’, is expressed using the verb ā ‘to have’ (as /ã-yǎē-pùtà/ [have-hair-tooth]), see example (345) above.

one who had robbed them of their father, because he would have hairs in his teeth [lit. ‘... he would have his teeth that had hairs.’] [LAR 408–411]

The following example illustrates the exact same construction as in (366) in an elicited utterance:

(367) *Kū-dê’ǎ’étù.*

*kū = dê’ǎ-’étù*

2SG.SBJ = water-eye

‘You’ve got some water in the eye [lit. ‘You have your eye that has water.’].’  
[JSG elic.]

For a morphosyntactically and semantically different instance of an NP + bound noun combination being directly inflected as a finite PP, see example (154). In this example, the form /ná = pūrākú-ànè/ (3M/N/NS.SBJ = work-space) ‘there is work’ (with an impersonal subject) can be analyzed as underlyingly featuring **possessive predication in /-ǎ/ ‘POSS’** (?/nâ-ànè ná = pūrākú-ǎ/ [3N/NS-space 1SG.SBJ = work-POSS], lit. ‘the space has work’) **secondarily undergoing subject-absorbing core argument incorporation** (on which see SECTION 4.2.5.2, p.321).

## 4.4 Derivational morphology of the predicative phrase

### 4.4.1 Overview

**PPs of all types**, whether verbal or non-verbal and regardless of their degree of morphological complexity, have access to a **paradigm of at least 22 derivational suffixes** displayed in TABLE 38. These suffixes are described and exemplified one by one in the following sections. Recall, importantly, that **the way they are grouped into these sections is based on general semantic criteria**, *i.e.* not on a hypothetical morphological template that might underlie their organization (for a discussion of the possible existence of such an underlying template, see SECTION 4.1, p.286). The derivational suffixes that encode notions of **Aktionsart, aspect, or mood** are treated in SECTION 4.4.2, those that encode a notion of **intensity** are discussed in SECTION 4.4.3, and those that encode a notion of **number** are briefly addressed in SECTION 4.4.4. SECTION 4.4.5 discusses a few **other suffixes that are less easily**



4. NON-INFLECTIONAL MORPHOLOGY OF THE PREDICATIVE PHRASE

	MA trigger	Gloss	Section	
<b>Aktionsart, aspect &amp; mood</b>				
	/-èchà/	+	PERSIST (persistive)	4.4.2.1
	/-tə'a/	+	with.a.tendency	4.4.2.2
	/-V'ü/		at.intervals	4.4.2.3
	/-chìgù, -ètānù/	+, +	DISTR.SG, DISTR.PL (distributive)	4.4.2.4
	/-ěgà/		INTENT (intensive)	4.4.2.5
	/-áčí/		TEL (telic)	4.4.2.6
	/-kú'ü/		INTENS.ITER (intensive iterative)	4.4.2.7
<b>Intensity</b>				
	/-'V'chì/		genuinely	4.4.3.1
	/-'Vrà/	+	slightly	4.4.3.2
<b>Number</b>				
	/-ē/	+	INTR.PL (intransitive plural)	4.4.4
	/-gú/		PL (plural)	4.4.4
<b>Valency</b>				
	/-tāē/	n/a	ANTIP3 (antipassive 3)	4.5.1
	/-'é'e/		CAUS (causative)	4.5.2
<b>Other suffixes</b>				
	/-māē/		COMPAR (comparative)	4.4.5.1
	/-nétà/		SUPERF (superficial)	4.4.5.2
	/-'kúrà'ü/		by.force.of.circumstance	4.4.5.3
	/-mārē/		just	4.4.5.4
	/-chíre/	?	admittedly	4.4.5.5
	/-ámá/		even.so	4.4.5.6
	/-(?)tūmā'ü/		?	4.4.5.7
<b>Predic. relat. nouns</b>				
	/-'chà'ü/	+	VOL (volitive)	4.4.6.1
	/-'wāē, -wāē, -'we'e/	+	APPREC (appreciative)	4.4.6.2

**Key:**

MA trigger trigger of Pattern 2 morphotonological alternations (see SECTION 2.6.2.2; suffixes for which no indication is provided in this column do *not* trigger these alternations)  
n/a not applicable (the corresponding suffix never occurs in a context where it could trigger Pattern 2 morphotonological alternations)

**TABLE 38.** *Derivational suffixes of the predicative phrase*

grouped into homogeneous semantic categories. The two derivational suffixes of the predicative phrase that are **predicative relational nouns** are dealt with in SECTION 4.4.6. The function of the **last two suffixes, finally, is to manipulate the valency** of predicative phrases. These are treated separately within a section dedicated to valency operations at the end of this chapter (SECTION 4.5).

There does not seem to be, in principle, **any limitation as to the number of derivational suffixes of the predicative phrase that can occur within a single predicative phrase** (while, by contrast, verb roots appear to only feature a single slot for a derivational suffix of the verb root; see SECTION 4.2.2). In practice, however, sequences of more than two derivational suffixes of the predicative phrase are rare in spontaneous speech (for an instance of a sequence of three such suffixes, see e.g. /ǵú-ē-é'e-tāē/ [learn-INTR.PL-CAUS-ANTIP3] 'to teach' [lit. 'to cause people to know'] in example (432) below).

On the **morphotonological alternations** /<sup>43</sup>/→/<sup>31</sup>/ **and** /<sup>MC</sup>/→/<sup>36</sup>/ undergone by monosyllabic verb roots whose lexical form features a toneme /<sup>43</sup>/ or /<sup>MC</sup>/, respectively, when they are attached with certain bound morphemes (among which those marked with a plus sign < + > in TABLE 38), see SECTION 2.6.2.2.

## 4.4.2 *Aktionsart*, aspect, and mood

### 4.4.2.1 /-èchà/ 'PERSIST'

The suffix /-èchà/ 'PERSIST' encodes the **persistive *Aktionsart***.<sup>241</sup> Its presence indicates that the process is one that occurs in a persistent fashion, *i.e.* either again and again (in cases where the process referred to is telic, as in example (368)) or continuously (in cases where the process referred to is atelic, as in (369–372)). The resulting predicative phrase can be correspondingly translated into English as 'to always/often X, to X all the time/continuously/a lot, to keep X-ing, to spend one's time X-ing', among others. Note, by contrast, that /-èchà/ 'PERSIST' may not by itself convey notions of phasal polarity like those expressed by English 'still' or 'yet' (such notions are conveyed in SMAT by the enclitic /=tāā/ 'itself'). That is, /-èchà/ encodes semantic properties of the process itself; it cannot by itself give an

<sup>241</sup>For similar uses of the term "persistive", see Lichtenberk (2002:274–280) and Brill (2016:93).

indication as to how the process relates temporally to other processes.<sup>242</sup>

Instances of use of /-èchà/ are provided in the following examples (see also (T92) and (T125)):

(368) “*Mā nūchārū-chàu ná’a chàyā-ǔ’ǔgúèchā’ǔ!*”

*mā = nū = chā = rū = chàu* *ná’a*  
PRF = 3M/N/NS.ACC = 1SG.SBJ = PCrū = be.fed.up.with CONJ

*chà = yā = ǔ’ǔ-gú-èchā-’ǔ*  
1SG.SBJ\SBJV = PCĪ.3M/N/NS.OBJ = cure-PL-PERSIST\SBJV-SUB

“[Stop harming my animals!] I’m tired of curing them over and over again!” [GRA 277–278]

(369) *Tūmàkq ná-āu’èchà. Tǎ’úgù gá yà-gū’ǔ.*

*tū-mà-kq* *ná = āu’-èchà* *tǎ’ú-gù = gá*  
3S-ANAPH-CAUSE 3M/N/NS.SBJ = cry-PERSIST be.absent\SBJV?-PLOC = PST

*yà = gū-’ǔ*  
PCĪ.3M/N/NS.SBJ\SBJV = reach\SBJV-SUB

‘[The wife of the legendary figure Moe had left him.] He kept crying for her. He wouldn’t stop [lit. ‘He was never done.’].’ [JSG B295–296]

(370) *Námá’a ná-gū’chà gá ná’a yà-ǔ’ǔ ērú ná-kāèchà.*

*ná-má’a* *ná = gū’chà* *gá = ná’a*  
3N/NS-COM 3M/N/NS.SBJ = be.difficult LK.PST = CONJ

*yà = ǔ-’ǔ* *ērú* *ná = kā-èchà*  
PCĪ.3M/N/NS.SBJ\SBJV? = go.SG\SBJV-SUB because 3M/N/NS.SBJ = lie-PERSIST

‘[A friend and I once left the school’s pigsty open and one of the pigs came out.] It had a hard time walking because it kept lying all the time [*i.e.* it wasn’t used to walking]!’ [IGV 419]

(371) Como media hora *mé’e gá ngě’má chà-chièchā’ǔ nû-ĩ àità nà-ǔgú’ǔ* [...]. *Tá’a nágù chārū-ĩnūèchà* [...].

<sup>242</sup>The “persistent” *Aktionsart* encoded by /-èchà/ in SMAT is therefore not equivalent to the grammatical category widely referred to as “persistent” aspect in the Bantuist linguistic tradition (see *e.g.* Nurse 2008:145–146). I label the SMAT equivalent of the Bantuist “persistent” aspect as the “continuative” aspect.

como media hora = *mé'e* = *gá ngě'-má*  
 like.half.an.hour = DUB = PST MED.PLOC-ANAPH

*chà* = *chì-èchā-’ú* *nî.î* *àità*  
 1SG.SBJ\SBJV = stand-PERSIST\SBJV-SUB CONJ yell

*nà* = *ǔ-gú-’ú* *tá'a* = *ná-gù*  
 3M/N/NS.SBJ\SBJV = make-PL\SBJV-SUB FRUSTR = 3N/NS-PLOC

*chā* = *rū* = *ĩnū-èchā*  
 1SG.SBJ = PCrū = think-PERSIST

‘[I was supposed to sing a traditional song at an inauguration but didn’t know what to sing.] I stayed there standing for like half an hour while [people] were yelling [...]. I kept thinking hard [...].’ [IGV 670–673]

(372) “*Ákúrū dùú-’ú mé'e nî-î {ì} ngémà nūchà-dāu-’ú ì ngémà gú-’úgù chībù-èchā-’ú*  
 [...]?”

*ákú-rū* *dùú-’ú = mé'e* *nî = î*  
 what?.NS-kind.of be.a.human\SBJV-REL.NS = DUB 3M/N/NS.SBJ.PCì = be

*{ì = }ngě-mà* *nū = chà = dāu-’ú*  
 LK.NS = MED.ALOC-ANAPH 3M/N/NS.ACC = 1SG.SBJ\SBJV = see\SBJV-REL.NS

*ì = ngě-mà* *gú-’ú-gù* *chībù-èchā-’ú*  
 LK.NS = MED.ALOC-ANAPH finish\SBJV-REL.NS-PLOC eat-PERSIST\SBJV-REL.NS

“What kind of human could he be whom I have seen there and who is always there eating [...]?” [LAR E118]

The suffix /-èchà/ is **not subject to any morphosyntactic restrictions and does not bring about any morphosyntactic effects**. In particular, it may be attached to both intransitive (as in (369–372)) and transitive (as in (368)) predicative phrases and does not entail any valency effects. It may further be attached to predicative phrases belonging lexically to any predicative class; when /-èchà/ is attached to a given predicative phrase, the latter systematically retains its original predicative class (see (371), for instance, where /-èchà/ occurs once on a PCØ predicative phrase and a second time on a PCrū predicative phrase, without affecting the predicative class of either predicative phrase).

#### 4.4.2.2 /-tā'a/ ‘with.a.tendency’

The suffix /-tā'a/ ‘with.a.tendency’ indicates that the referent corresponding to the subject has a **tendency or a propensity to perform the process** denoted by the

base predicative phrase. Although /-tə'a/ may convey a habitual reading, it does not properly qualify as a habitual aspect marker as it does not necessarily imply that the process repeats itself over a certain period of time, or even occurs at all. Possible English renderings for /-tə'a/ include 'to tend to X, to be inclined/disposed/prone to X, to usually/frequently X'. Occurrences of /-tə'a/ are shown in examples (373–604).

(373) *Tǎu nǐ-dé'ətq'a. 'Ná-tímido' ñâ'ú ì kōrígàwǎ.*

*tǎu nǐ = dé'ətq'a* *ná-tímido*  
NEG 3M/N/NS.SBJ.PCÌ = speak-with.a.tendency 3M/N/NS.SBJ = shy

*ñâ-ú* *ì = kōrígà-wǎ*  
do.thus.3M/N/NS.SBJ.SBJV-SUB LK.NS = White-sound-ALOC

‘[When the tourists they’ll work as guides for arrive, my colleagues suddenly feel embarrassed.] They won’t speak [lit. ‘They don’t have a tendency to speak.’]. That is, they are *tímidos* [‘shy’], in Spanish.’ [JGS 463]

(374) *Tǎ gá fènūēwǎ ì-ú'gù rù tǎu ì-âirúĩtq'ǎ, chàu'rú'ú.*

*tǎ gá = fènūē-wǎ ì = ú'gù = rù tǎu*  
ASSERT.EXPL if = hunt-ALOC PCØ.SBJV = go.SG-CIRC = TOP NEG

*ì = âirú-ĩ-tq'ǎ chàu-rú'ú*  
PCØ.SBJV = dog-POSS-with.a.tendency\SBJV 1SG-like

‘[The hunter set off leaving his dog behind.] Because you know, when you go hunting, you don’t usually take a dog along [lit. ‘... you don’t tend to have a dog with you, ...’], like me.’ [JSG22–23]

(375) *Tǎu ā'a ñumárú'ú tî-ĩ gá nǔ'kúmá gá pǎátá rù ā'a ẽ'úwǎ ā'a tárū-yùētq'a [...].*

*tǎu = ā'a ñumá-rú'ú tî = ĩ gá = nǔ'kúmá*  
NEG = QUOT present.time-like 3S.SBJ.PCÌ = be LK.F/M/S/NS.PST = past.time

*gá = pǎ-á-tá rù = ā'a*  
LK.F/M/S/NS.PST = be.nubile-REL.S.PL-COLL and = QUOT

*ẽ-ú-wǎ = ā'a tá = rú = yù-ē-tq'a*  
be.dark\SBJV-REL.NS-ALOC = QUOT 3S.SBJ = PCrú = wake.up-INTR.PL-with.a.tendency

‘In ancient times young women were not like now, they were early risers [lit. ‘... they tended to wake up early in the morning.’] [...].’ [LAR 244–245]

The suffix /-tə'a/ has **no effect on the predicative class** of the predicative phrase it is attached to (in (604), for instance, the PCrú verb root yù ‘to wake up’

retains its lexical predicative class when /-tə'a/ is attached to it). It only occurs on **intransitive predicative phrases** in my data (this is probably due to chance, however, and should not be taken as evidence for /-tə'a/ not being compatible with transitive predicative phrases).

#### 4.4.2.3 /-V'ũ/ 'at.intervals'

The suffix /-V'ũ/ 'at.intervals' indicates that the process referred to by the predicative phrase it is attached to occurs **at intervals on a relatively regular basis**. Instances of use of this suffix are provided in examples (376–377) (see also (T82) and (T77)).

(376) *Nánā-dêgùú'ũ, námá'a ñnà-gũú'ũ'ũ gá nũmà gá chó'nĩ.*

<i>ná = nā = dê-gù-ũ'ũ</i>	<i>ná-má'a</i>
3M/N/NS.SBJ = 3M/N/NS.OBJ = collect-PLURAC-at.intervals	3N/NS-COM
<i>ĩ = nà = gũ-ũ'ũ-ũ</i>	<i>gá = nũ-mà</i>
3ALOC = 3M/N/NS.SBJ\SBJV = reach-at.intervals\SBJV-SUB	LK.PST = 3M-ANAPH
<i>gá = chó'nĩ</i>	
LK.PST = fish	

‘[Any time the legendary figure Moe hit the Onane tree with his axe, the bits of wood that chipped off the trunk would turn into fish.] He would pick them up and come back [to the village] with the fish.’ [JSG B307]

(377) *Ngēmàwǎ nũ-ĩ ì Leticiawǎ tã-ĩgũú'ũ'ũ ì tōmà.*

<i>ngē-mà-wǎ</i>	<i>nũ = ĩ</i>	<i>ì = Leticia-wǎ</i>
MED.NS-ANAPH-ALOC	3M/N/NS.SBJ.PCì = be	LK.NS = Leticia-ALOC
<i>tã = ĩ-gũ-ũ'ũ-ũ</i>	<i>ì = tō-mà</i>	
1PL.SBJ.SBJV = go.PL-PL-at.intervals\SBJV-SUB		

‘[The reason we go to Leticia is there’s stuff we can only buy there.] That’s what we regularly go to Leticia for.’ [JSG B518]

This suffix is attested with apparently **irregular phonological shapes** (relative to the morphophonological rules stated in SECTION 2.6.1.1 regarding the realization of its initial unspecified vowel /V/) in the combinations /kà-ǎ'ũ/ (ask-at.intervals) ‘to ask on a regular basis’ (instead of the expected form \*/kà-ũ'ũ/; see (T106)) and /ñâ-á'ũ-ũ/ (do.thus-at.intervals\SBJV-SUB) ‘she/he does thus on a regular basis’ (instead of the expected form \*/ñâ-ũ'ũ-ũ/; see (T77)).

The semantics of this suffix are to be **contrasted, in particular, with the pluractional derivational suffix of the verb root /-gù/ ‘PLURAC’**, which likewise indicates that the process repeats itself, but in this case on a single occasion and more or less in a row (on /-gù/ ‘PLURAC’, see SECTION 4.2.4.1). The suffix /-V<sup>̃</sup>ú<sup>̃</sup>/ may be further **contrasted with the distributive derivational suffix of the predicative phrase /-chìgù, -ètānù/ ‘DISTR.SG, DISTR.PL’** (SECTION 4.4.2.4) in that /-chìgù, -ètānù/, in cases where it implies a notion of repetition of the process over time, entails that the various repetitions of that process are to be conceived of as steps towards the completion of a global process they are part of.

#### 4.4.2.4 /-chìgù, -ètānù/ ‘DISTR.SG, DISTR.PL’

On the distributive suffix /-chìgù, -ètānù/ ‘DISTR.SG, DISTR.PL’, which, alone among the derivational suffixes of the predicative phrase, features a singular and a plural allomorph, see SECTION 5.10, p.494.

#### 4.4.2.5 /-éǵà/ ‘INTENT’

The suffix /-éǵà/ ‘INTENT’ is an **intentional mood marker**. It may indicate either that the referent corresponding to the subject has the intention to carry out the process, or that a process that is not controlled by any referent is imminent. Possible English translations include ‘intend to X, be about to X’. Examples (378–379) feature intentional uses of /-éǵà/, while (380) illustrates its imminent use.

(378) *Ngēmà gá ná’a nágù chàrū-īnù’ú gá ná’a chàgù tá’a chī-mǵǵā’ú gá desde muy joven.*

*ngē-mà*      *gá = ná’a*      *ná-gù*      *chà = rū = īnù-’ú*  
MED.NS-ANAPH    LK.PST = CONJ    3N/NS-PLOC    1SG.SBJ\SBJV = PCrū = think\SBJV-SUB

*gá = ná’a*      *chà-gù = tá’a*  
LK.PST = CONJ    1SG-REFL = FRUSTR

*chī = mǵ-éǵā-’ú*      *gá = desde*      *muy*  
1SG.SBJ.PCì\SBJV = kill.SG-INTENT\SBJV-SUBLK.PST = since    very      young

*joven*

‘That’s how I reflected on the fact that I’d been intending to commit suicide since I was very young.’ [ANO1 31–33]

(379) *Chàuǎ̀'è chí ná'a [...] chò'rũ tà chà-ũ'égā-ũ'.*

*chàu-ǎ̀'è = chí ná'a chò-'rũ = tà chà = ũ-'égā-ũ'*

1SG-mind = IRR CONJ 1SG-GEN = ADD 1SG.SBJ\SBJV = make-INTENT\SBJV-SUB

'My intention would be to [...] do my own project too [lit. '... would be that I also intend to do my own thing.']. [JGS 539–541]

(380) *Kũ mārũ horawǎ nà-ǧũ'égàgù tà ì, ngémà ì tàyà-wò'ègũ'ũ námá'a.*

*Kũ mārũ hora-wǎ*

I.mean PRF hour-ALOC

*nà = ǧũ-'égà-gù = tà = ì*

3M/N/NS.SBJ\SBJV = reach-INTENT-CIRC = ADD = CONTR.TOP

*ngé-mà = ì*

*tā = yà = wò-'ègũ-ũ'*

*ná-má'a*

MED.ALOC-ANAPH = CONTR.TOP 1PL.SBJ = AM = drop.PL-INV\SBJV-SUB 3N/NS-COM

'So, when it's almost time again [lit. '... when it's already about to reach the hour too, ...'], then we go back with them.' [JGS 266–267]

The suffix /-égà/ has **no effect on the predicative class** of the predicative phrase it is attached to (in example (378), for instance, the PCì verb root *mǎ* 'to kill (sg.)' retains its lexical predicative class when /-égà/ is attached to it). It may occur on **both intransitive and transitive predicative phrases** (as in (378–379) and (380), respectively), without exerting any effect on their valency.

This suffix is **homonymous with the bound noun /-égà/ 'name'**, with which it might have a semantically non-straightforward cognacy relationship (based, perhaps, on the conception that somebody's name is related to their mindset, the latter being in its turn related to their intentionality).

The verb "stems" *chiégà* 'be appealing to the taste', *méégà* 'be appealing to the mind', and *ôégàǎ̀'è* 'be worried' are obviously derived historically from the verb roots *chĩ* 'be tasty', *mé* 'be good', and *ô* 'be unwilling', respectively, by suffixation of a hypothetical morpheme \*/-égà/. However, because there is no straightforward semantic match between the hypothetical \*/-égà/ that these verb "stems" contain and the suffix /-égà/ 'INTENT' (nor with the bound noun /-égà/ 'name'), I prefer to treat them as synchronically unanalyzable morphemes.

#### 4.4.2.6 /-áchí/ 'TEL'

The suffix /-áchí/ 'TEL' is a telic *Aktionsart* marker. It typically occurs attached to predicative phrases with stative or dynamic semantics to convert them into telic



predicates. Its semantic contribution can be roughly glossed in English as ‘to start (or resume) to X’. Instances of use of this suffix are provided in examples (381) and (382) (see also (T14) and (T90)).

(381) *Tûmà gá mārī... piezawá tà-ǵū'gù yì-ì'ú gá nû'nà tà-faáčí'ú.*

*tû-mà = gá mārī pieza-wá tà = ǵū-'gù*  
3S-ANAPH = PST PRF room-ALOC 1PL.SBJ.SBJV = reach-CIRC

*yì = ì-'ú gá = nû-'nà*  
PCì.3F/M/N/NS.SBJ.SBJV = be\SBJV-SUB LK.PST = 3N/NS-DAT

*tà = fa-áčí-'ú*  
3S.SBJ\SBJV = know-TEL\SBJV-SUB

‘[While getting off the tuk-tuk in the street, she inadvertently dropped her bag. The tuk-tuk left.] And the moment she realized it was once she had arrived to [her] room.’ [JSG B489–490]

(382) *Ngē'gù má nû-ì rù ná'kq tī-āu'áčí'ú gá yī'è má téré [...].*

*ngē'gù má nû = ì rù ná-'kq*  
ANAPH.CIRC 3M/N/NS.SBJ.PCì = be and 3N/NS-CAUSE

*tī = āu'-áčí-'ú gá = yī'è-má téré*  
3S.SBJ.PCì\SBJV = cry-TEL\SBJV-SUB LK.PST = MED.S-ANAPH téré.parrot

‘[A woman erroneously believed that her daughter-in-law—a parrot—had spent her day idling and threw her out of her house.] And so, the *téré* parrot got sad [lit. ‘... started to feel depressed ...’] about it.’ [JSG B266–267]

This derivational suffix of the predicative phrase is **homonymous with the derivational suffix of the verb root /-áčí/ ‘upslope’** (on which see SECTION 4.2.3.4). Note, however, that the telic suffix /-áčí/ ‘TEL’, by contrast with its homonym /-áčí/ ‘upslope’, never triggers the Pattern 2 morphotonological alternations in cases where it is suffixed to a monosyllabic verb root (contrast, for instance, the predicative phrase /ú-áčí/ [be.there.SG-TEL] ‘to suddenly get to be somewhere’, where no morphotonological alternation occurs, with the verb stem /ú-áčí/ [be.there.SG-upslope] ‘to go up (a slope)’, which features the morphotonological alternation /<sup>43</sup>/→/<sup>31</sup>/ in its first syllable; on the Pattern 2 morphotonological alternations, see SECTION 2.6.2.2).

## 4.4.2.7 /-kú'ü/ 'INTENS.ITER'

The suffix /-kú'ü/ 'INTENS.ITER' can be characterized as an **intensive-iterative marker**. It indicates that the process consists of a **series of small, short, swift, tense sub-events**. It is typically left untranslated in consultants' free translations into Spanish, and its English rendering relies on case-by-case lexical selection rather than on the regular use of an equivalent construction. Contrast for instance the translations of examples (383a), without /-kú'ü/, and (383b), including /-kú'ü/. Instances of /-kú'ü/ in spontaneous speech are featured in examples (384–385).

(383) a. *Chī-dé'à.*

*chī = dé'à*  
1SG.SBJ.PCĪ = speak  
'I speak.'

b. *Chī-dé'àkú'ü.*

*chī = dé'à-kú'ü*  
1SG.SBJ.PCĪ = speak-INTENS.ITER  
'I chatter.' [JSG elic.]

(384) [...] *téré náy{ā}-ngogú, mú'úchī'ú gá wē'úgú. Náyā-ngokú'ügú.*

*téré*      *ná = y{ā} = ngo-gú*  
*téré.parrot*    3M/N/NS.SBJ = PCĪ.3M/N/NS.OBJ? = bite-PL

*mú-úchī-ú*      *gá = wē'ú-gú*  
be.several-genuinely\SBJV-REL.NS    LK.PST = amazon.parrot-PL

*ná = yā = ngo-kú'ü-gú*  
3M/N/NS.SBJ = PCĪ.3M/N/NS.OBJ = bite-INTENS.ITER-PL

'[...] [a woman had a lot of corn, but it would never bear fruit because] *téré* parrots ate it, multitudes of parrots. They pecked it up grain after grain.'  
[JSG B197–198]

(385) *Nánā-mā'gú rù t̃yà-yâu'ütānùkú'üà'ü.*

*ná = nā = mā'-gú*      *rù*  
3M/N/NS.SBJ = 3M/N/NS.OBJ = shoot.with.an.arrow-PL    and

*t̃ = yà = yâu'-ü-tānù-kú'ü-à-ü*  
3ALOC = PCĪ.3M/N/NS.SBJ\SBJV = seize-off.PL?-group-INTENS.ITER-3M/N/NS.OBJ\SBJV-SUB

'They shot a volley of arrows at him but he caught them all in midair in a flash.' [AMB 71]

The use of /-kú'ü/ is **lexicalized in a few predicative phrases**, including at least /ã-ěgà-kú'ü/ [have-name-INTENS.ITER] ‘be called’. This predicative phrase is obviously derived by suffixation of /-kú'ü/ on the semantically equivalent one /ã-ěgà/ [have-name] ‘be called’. As shown in examples (386) and (387), the former only differs from the latter in terms of the predicative class to which it belongs (*ã-ěgà* inflects for PCØ, while *ã-ěgà-kú'ü* inflects for PCī) and the syntactic function of the obligatory complement it takes (the equivalent of the X complement in English ‘be called X’ is expressed as a locative argument in /-gũ/ ‘PLOC’ with *ã-ěgà*, while it is expressed as a comitative argument in /-má'a/ ‘COM’ with *ã-ěgà-kú'ü*). Beyond these purely morphosyntactic differences, however, *ã-ěgà-kú'ü* does not seem to differ semantically from *ã-ěgà*, so that it is unclear what the semantic contribution of /-kú'ü/ might be in this particular predicative phrase.

(386) *gê-ã-gù ã-ěgà-kū gá má'è*

*gê-ã-gù*                                      *ã-ěgà-kū*                      *gá = má'è*  
be.a.female-REL.S.PL-PLOC    have-name-REL.F    LK.F/M/S/NS.PST = wasp

‘a wasp called “woman” [LAR T50]

(387) *Ĝũ'tàpǝmá'a ī-ã-ěgà-kú'ükū*

*Ĝũ'tàpǝ-má'a*    *ī = ã-ěgà(-)kú'ü-kū*  
Ngutapa-COM    PCī = have-name(-)INTENS.ITER\SBJV-REL.M

‘a [man] called Ngutapa’ [LAR D6]

The suffix /-kú'ü/ **systematically shifts to PCī** the predicative class of the predicative phrases it is attached to. It may further occur on **both intransitive and transitive predicative phrases** (as shown in examples (383b) and (384–385), respectively). Due to its iterative semantics, /-kú'ü/ is typically not suffixed to predicative phrases with a stative *Aktionsart*.

On the semantically unclear suffix /-né/ ‘repeatedly?’, with which /-kú'ü/ occasionally co-occurs, see SECTION 4.2.4.4, p.315.

### 4.4.3 Intensity

#### 4.4.3.1 /-'ǚchì/ ‘genuinely’

The suffix /-'ǚchì/ ‘genuinely’ broadly indicates that the process is characterized by a **remarkable intensity**. It frequently occurs on predicative phrases featuring

a stative *Aktionsart*, as in (388) (see also (173) and (332)), but may also occur on predicative phrases with a non-stative *Aktionsart*, as in (389).

(388) *Ngēmà kūchì mé'e ná-tāiyà'úchì! Nà-chì'ú!*

*ngē-mà*            *kūchì = mé'e*    *ná = tāiyà-'úchì*  
MED.NS-ANAPH    pork=DUB        3M/N/NS.SBJ = be.hungry-genuinely

*nà = chì-'ú*  
3M/N/NS.SBJ\SBJV = stand\SBJV-SUB

‘[We once went to the school’s pigsty to feed the pigs.] That pig must have been very hungry! It stood up on its hind legs!’ [IGV 404]

(389) *Mārū tāmā nū'nà nà-dāugú'úchì'ú.*

*mārū tāmā*            *nū-'nà*    *nà = dāu-gú-'úchì-'ú*  
PRF    NEG.precisely    3M-DAT    3M/N/NS.SBJ\SBJV = see-PL-genuinely\SBJV-SUB

‘[A man was held captive by an isolated group. Six years passed and he was now allowed to go hunting wherever he wanted.] They no longer watched him that much.’ [AMB 119]

Note that /-'Vchì/ ‘genuinely’, apart from occurring within predicative phrases, **may also occur suffixed to virtually any part of speech** to convey similar notions of remarkable intensity.

#### 4.4.3.2 /-'Vrà/ ‘slightly’

The suffix /-'Vrà/ ‘slightly’ broadly indicates that the process is characterized by a **not particularly remarkable intensity**. It frequently occurs on predicative phrases featuring a stative *Aktionsart*, as in (390) (see also (249)), but may also occur on predicative phrases with a non-stative *Aktionsart*, as in (391).

(390) *Tâ'ūrā'è tî-î gá dīērù gá tūtā-pierdegú'è.*

*tâ-'ūrā-'è*                            *tî = î*                            *gá = dīērù*  
be.big-slightly\SBJV-REL.S    3S.SBJ.PCI = be    LK.PST = money

*gá = tū = tā = pierde-gú-'è*  
LK.PST = 3S.ACC = 1PL.SBJ.SBJV = loses-PL\SBJV-REL.S

‘[My wife recently lost a bag with money in it.] It was quite some money that we lost [lit. ‘The money we lost was [money] that was a bit big.’].’ [JSG B471]

(391) [...] *ngē'gùmá gá mārū nà-ǔgúà'ǔ gá ná'a fènūēwǎ nà-û'ùrā'ǔ, nāwēmùàrū fè.*

*ngē'gùmá = gá mārū nà = ǔgú-à-'ǔ*

ANAPH.CIRC = PST PRF 3M/N/NS.SBJ\SBJV = start-3M/N/NS.OBJ\SBJV-SUB

*gá = ná'a fènūē-wǎ nà = û-'ùrā-'ǔ*

LK.F/M/S/NS.PST = CONJ hunt-ALOC 3M/N/NS.SBJ\SBJV = go.SG-**slightly**\SBJV-SUB

*nā-wēmù-àrū fè*

3N/NS-food-GEN shoot

‘[A man was held captive by an isolated group. Three years passed, and] at that point, he started to [be allowed to] go hunting a bit [lit. ‘... to go a bit for hunting, ...’], hunting game.’ [AMB 57–58]

This suffix displays an **irregular phonological form** /-'rà/ (instead of its regular form /-'Vrà/, which features an initial unspecified vocalic position) when it is attached to a number of verb roots predicating color properties (e.g. *chǒ* ‘be white’ > /chǒ-'rà/ ‘be a bit white’, *dǎu* ‘be red’ > /dǎu-'rà/ ‘be a bit red, be orange/pink’, *dě'e* ‘be yellow’ > /dě-'rà/ ‘be a bit yellow’), as well as in the synchronically unanalyzable verb root *ĩ'rà* ‘be small’ (< *ĩ* ‘be small’ + /-'rà/, lit. ‘be a bit small’, with a completely irregular tonological alternation of *ĩ* to /ĩ-/).

Note that /-'Vrà/ ‘slightly’, apart from occurring within predicative phrases, **may also occur suffixed to virtually any part of speech** to convey similar notions of not particularly remarkable intensity.

#### 4.4.4 Number

The suffixes /-ē/ ‘INTR.PL’, which pluralizes the subject participant of certain intransitive predicative phrases, and /-gǔ/ ‘PL’, which conveys a notion of plurality that may be associated with either a subject participant, an object participant, or a participant in the accusative, are discussed in SECTION 5.10, on pp.492 and 495, respectively.

## 4.4.5 Other suffixes

### 4.4.5.1 /-māē/ ‘COMPAR’

The suffix /-māē/ ‘COMPAR’ derives **stative comparative predicative phrases** (e.g. ‘be bigger (than ...)’) from PCØ<sup>243</sup> intransitive stative predicative phrases (in most cases a verb stem predicating a quality, e.g. ‘be big’). Suffixing /-māē/ to a given predicative phrase systematically **shifts the latter’s predicative class to Pcrū**. Contrast in the following example the Pcrū form /ná = rū = mũ-māē/ [3M/N/NS.SBJ = Pcrū = be.several-COMPAR] ‘they are more’ to the corresponding non-comparative PCØ form /ná = mũ/ [3M/N/NS.SBJ = be.several] ‘they are many’:

(392) *Hmmm, nárū-mũmāē ì buenogũ’ũ.*

*ngû ná = rū = mũ-māē ì = bueno-gũ’ũ*  
 yes 3M/N/NS.SBJ = Pcrū = be.several-COMPAR LK.NS = good-PL-REL.NS

‘Yeah, the good ones [*i.e.* memories] are more.’ [IGV 483]

By definition, the valency of PCØ intransitive stative predicative phrases only features a single position, namely for a subject argument. When these are suffixed with /-māē/, although they remain morphosyntactically intransitive, they get the ability to take an **additional complement in the accusative**. This complement is optional. If present, its semantic role is that of **standard of comparison** (‘than ...’). In the following example, the complement in the accusative is indexed (as /chā = / ‘1SG.ACC’) on the inflected predicative phrase:

(393) [...] *dǎ chàuéŋ’e rù chānárū-bũmāē* [...]

*dǎ-à chàu-éŋ’e = rù chā = ná = rū = bũ-māē*  
 PROX.M-EXO 1SG-brother = TOP 1SG.ACC = 3M/N/NS.SBJ = Pcrū = be.young-COMPAR

‘[...] this brother of mine is younger than me [...].’ [JGS 722]

For more instances of use of /-māē/ ‘COMPAR’, see examples (228) and (519).

<sup>243</sup>My data only contain instances of /-māē/ suffixed to predicative phrases belonging lexically to PCØ. This does not discard the possibility that /-māē/ might also be able to be attached to certain predicative phrases belonging lexically to other predicative classes than PCØ.

## 4.4.5.2 /-nétà/ ‘SUPERF’

The suffix /-nétà/ ‘SUPERF’ broadly indicates that the **process is carried out in an incomplete or superficial way**. The suffix may be more or less rendered in English by constructions such as ‘to half X, to kind of X, to seem to X, to pretend to X’. Its function occasionally seems to be that of encoding that the **process is not occurring in a full-fledged fashion**, compared to the process denoted by the same predicative phrase without /-nétà/ (contrast example (394a) with (394b) and (395a) with (395b)).

- (394) a. *Chānā-ngo*.  
*chā = nā = ngo*  
 1SG.SBJ = 3M/N/NS.OBJ = bite  
 ‘I eat/bite it.’
- b. *Nūchā-ngonétà*.  
*nū = chā = ngo-nétà*  
 3M/N/NS.ACC = 1SG.SBJ = bite-SUPERF  
 ‘I taste it.’ [JSG? elic.]
- (395) a. *Īchānā-tq*.  
*ī = chā = nā = tq*  
 3ALOC = 1SG.SBJ = 3M/N/NS.OBJ = drop.SG  
 ‘I throw it.’
- b. *Nūchā-tqnetà*.  
*nū = chā = tq-nétà*  
 3M/N/NS.ACC = 1SG.SBJ = drop.SG-SUPERF  
 ‘I push it.’ [JSG elic.]

However, /-nétà/ is more typically used to imply that, **in spite of fully convincing appearances, the process is not truly, genuinely occurring**, as illustrated in examples (396–398):

- (396) *Gá {i}de buen corazón-ā-gú-’íká nū-î ì yôî tūî-yâu’-nétā-’ū wâ’î dōrā nū-î rù tūtī-gāmārē*.
- gá = {i} = }de buen corazón-ā-gú-’íká*    *nū = î*    *ì = yôî*  
 if = PCØ.SBJV = good.hearted-POSS-CIRC-only    3M/N/NS.SBJ.PCì = be    LK.NS = constrictor
- tūî = î = yâu’-nétā-’ū*    *wâ’î*    *dōrā*    *nū = î*  
 4ACC = PCī = seize-SUPERF\SBJV-SUBCONTR    tell.lies    3M/N/NS.SBJ.PCì = be    and
- rù*    *tūî = tūî = gā = mārē*  
 4ACC = 3S.SBJ.PCī = lead-just

‘[When you reach the sacred place called Moruapü,] If you’re good-hearted, then and only then a constrictor does as though it were carrying you away but it’s not for real and all it does is take you somewhere.’ [JSG B390–391]

- (397) [...] *nūnā-dāu rù ā’a nà-chi’kā-’ū ā’a* <gá...> *gá* <n...> *nǎǎpü’ü gá Ğü’tàpá*,  
*gá nõ’rū máǎpü’inétà*.

*nū* = *ná* = *dāu* *rù* = *ā’a*  
3M/N/NS.ACC = 3M/N/NS.SBJ = see and = QUOT

*nà* = *chi’kā-’ū* = *ā’a* <gá = ...>  
3M/N/NS.SBJ\SBJV = be.transparent\SBJV-SUB = QUOT LK.F/M/S/NS.PST =

*gá* = <n...> *nǎ-ǎpü’ü* *gá* = Ğü’tàpá  
LK.F/M/S/NS.PST = 3M-knee LK.F/M/S/NS.PST = Ngutapa

*gá* = nõ’rū *má-ǎpü’ü-nétà*  
LK.F/M/S/NS.PST = 3M-GEN have.a.tumor-knee-SUPERF

‘[...] he looked at it: Ngutapa’s knees, what looked like tumors in his knees [but weren’t: Ngutapa was actually pregnant in the knees], were translucent.’ [LAR T68]

- (398) [...] *nūwǎ ā’a yěà ā’a nūnā-dāu-’ū ā’a gá* <námāgù ā’a...> *námāgù ā’a kàkū*  
*gá dùù yá yě’má ā’a pūnétākū ā’a* <gá...> *gá ġâu-kū*.

*nūwǎ* = *ā’a* *yě-à* = *ā’a*  
well.M/N/NS = QUOT DIST.ALOC-EXO = QUOT

*nū* = *nà* = *dāu-’ū* = *ā’a*  
3M/N/NS.ACC = 3M/N/NS.SBJ\SBJV = see\SBJV-SUB = QUOT

*gá* = <námā-gù = ā’a...> *námā-gù* = ā’a  
LK.F/M/S/NS.PST = 3N/NS-path-PLOC = QUOT 3N/NS-path-PLOC = QUOT

*kà-kū* *gá* = dùù *yá* = *yě’má* = *ā’a*  
lie\SBJV-REL.M LK.F/M/S/NS.PST = be.a.human LK.M/S = DIST.PLOC-ANAPH = QUOT

*pū-nétā-kū* = ā’a <gá = ...>  
be.filled.with.air-SUPERF\SBJV-REL.M = QUOT LK.F/M/S/NS.PST =

*gá* = ġâu-kū  
LK.F/M/S/NS.PST = cover.with.feathers\SBJV-REL.M

‘[...] then, he saw a man lying there on the... on the path, who was blown up like a balloon [lit. ‘... who looked like he was inflated, ...’], covered with... with down.’ [LAR E35–37]

The use of /-nétà/ ‘SUPERF’ seems to have been lexicalized in a few predicative phrases, including at least *ānétà* ‘to shoo away’, which is apparently a synchronically unanalyzable form.



Although my data do not allow me to state it with certainty, it seems that the suffix /-nétà/ **does not affect the predicative class** of the predicative phrase it is attached to (see e.g. example (396), where the PCĭ verb root *yâ'u* ‘seize’ retains its predicative class when /-nétà/ is attached to it). It may further be attached to **both intransitive and transitive predicative phrases** (as in (397–398) and (396), respectively).

When /-nétà/ is attached to a transitive predicative phrase, **the latter becomes intransitive**.<sup>244</sup> The expression of the patient-like referent remains obligatory as in the /-nétà/-less transitive construction, but that referent is now encoded as an **extended core argument in the accusative**, rather than as a core object in the zero-case (or indexed on the predicative phrase as an accusative argument rather than as a core object; contrast the syntactic encoding of the patient-like referent as /nā = / ‘3M/N/NS.OBJ’ in (394a) and (395a) with its encoding as /nū = / ‘3M/N/NS.ACC’ in (394b) and (395b)). The syntactic demotion of the patient-like referent from being expressed as a core argument to being expressed as an extended core argument can be interpreted as reflecting the semantic fact that the patient-like referent is less directly affected in the construction including /-nétà/ than in the plain, /-nétà/-less construction.

Interestingly, in Cushillococha Tikuna as described by D. and L. Anderson, the suffix /-nétà/ ‘SUPERF’ is also used for nominal derivation with the meaning ‘image of X’ or ‘fake X’ (contrast *Tūpānà* ‘God’ with /tūpānà-nétà/ ‘image of a god, idol’; Anderson & Anderson 2016:222–223, transcription adapted to SMAT standards).

#### 4.4.5.3 /-’kūrà’ū̃/ ‘by.force.of.circumstance’

The suffix /-’kūrà’ū̃/ seems to indicate that the **process essentially occurs by force of circumstance**, *i.e.* that it follows to a certain extent mechanically from the situation, that it arises as a side-effect, **without full (but potentially with partial) control, awareness, or expectation of the referents involved**. Often, although not necessarily, the process is to some degree detrimental to those referents. The subtle effect of /-’kūrà’ū̃/ is typically left untranslated in consultants’

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<sup>244</sup>This rule minimally applies when /-nétà/ fulfills the first of its two functions described above (*i.e.* when it encodes that the process does not occur in a full-fledged way). I do not have clear data on /-nétà/’s valency effects in its other function (*i.e.* when it encodes that the process is not genuinely occurring despite appearances).

free translations into Spanish. Possible renderings into English include ‘to find oneself X-ing, to end up X-ing, to happen to X, to somehow/accidentally X, to X by chance/automatically’. The use of this suffix is illustrated in examples (399–403).

- (399) [...] *gǔrúáčhí, ákú chā-gǔpétùgù rù, ngémà tá-chì'è-mārēkúrà'ù* [...].

*gǔrúáčhí ákú chā = gǔ-pétù-gù = rù ngé-mà*  
maybe what?.NS 1SG.ACC = reach-across-CIRC = TOP MED.ALOC-ANAPH

*tá = chì'è-mārē-kúrà'ù*  
3S.SBJ = be.bad-just-by.force.of.circumstance

‘[...] [I want to be well prepared before starting a family, otherwise] if something happens to me, they may find themselves in trouble [...].’ [JGS 615–617]

- (400) *Nô'rí'úchì ùkú gá, guíawǎ chí-úkùgù rù, chàu'kǎ ná-gù'chàkúrà'ù. Ná-gù'chà ùkú ērú* [...].

*nô'rí'úchì ùkú = gá guíawǎ*  
beginning-genuinely I.mean = PST guide-ALOC

*chí = ú-kù-gù = rù chàu-'kǎ*  
1SG.SBJ.PCÌ.SBJV = be.there.SG-in.PL-CIRC = TOP 1SG-CAUSE

*ná = gù'chà-kúrà'ù ná = gù'chà*  
3M/N/NS.SBJ = be.difficult-by.force.of.circumstance 3M/N/NS.SBJ = be.difficult

*ùkú ērú*  
I.mean because

‘At the very beginning, when I started [working] as a guide, the fact is I found it hard [lit. ‘... I found myself having a hard time.']. I mean, it was hard because [...].’ [JGS 380–382]

- (401) *Ngēmàkǎ nî-ì ì < táu... > tá'ú'ú'ù chà-fǎ'kúrà'ù'ù ì chòmà.*

*ngē-mà-kǎ nî = ì ì = < táu... >*  
MED.NS-ANAPH-CAUSE 3M/N/NS.SBJ.PCÌ = be LK.NS = NEG

*tá'ú-'ù-'ù chà = fǎ-'kúrà'ù-'ù*  
be.absent\SBJV-REL.NS-ACC 1SG.SBJ\SBJV = know-by.force.of.circumstance\SBJV-SUB

*ì = chò-mà*  
LK.NS = 1SG-ANAPH

‘[I didn’t have enough opportunities to learn stories and wasn’t really interested.] That’s why I don’t know any [lit. ‘... I find myself knowing none.’ or ‘... I’ve ended up knowing none.].’ [GRA 184]

- (402) [...] *tûmàârû b'ái'áchímá'a gá gû'émá fènüè'è ā'a gá ítānā-tá'û ā'a gá tûmàârû ïē. [Í]tānā-ǵē'kúrà'û'û gá tûmàârû ïē gá ngě'ákúnà.*

*tû-mà-ârû b'ái'áchí-má'a = gá gû'è-má*  
3S-ANAPH-GEN get.frightened-COM = PST DIST.S-ANAPH

*fènüè-'è = ā'a = gá*  
hunt\SBJV-REL.S = QUOT = PST

*í = tà = nā = tá-'û = ā'a*  
3ALOC = 3S.SBJ\SBJV = 3M/N/NS.OBJ = drop.SG\SBJV-SUB = QUOT

*gá = tû-mà-ârû ïē*  
LK.F/M/S/NS.PST = 3S-ANAPH-GEN blowgun

*[í = ]tà = nā = ǵē-'kúrà'û-'û*  
3ALOC = 3S.SBJ\SBJV = 3M/N/NS.OBJ = drop-by.force.of.circumstance\SBJV-SUB

*gá = tû-mà-ârû ïē*  
LK.F/M/S/NS.PST = 3S-ANAPH-GEN blowgun

*gá = ngě-'ákúnà*  
LK.F/M/S/NS.PST = MED.ALOC-APPROX.ALOC

‘[...] [because a jaguar was attacking him,] the hunter threw his blowgun aside out of fear. He dropped [*i.e.* unintentionally] his blowgun to the ground.’ [LAR D136–137]

- (403) *Nûmà gá tǎu mǎ nà-nù'û <ērú...> ērú chí ēgá nà-nū'gù rù ngě'má náyà-mǎ'kúrà'û.*

*nû-mà = gá tǎu = mǎ nà = nù-'û <ērú...>*  
3M-ANAPH = PST NEG = precisely 3M/N/NS.SBJ\SBJV = get.mad\SBJV-SUB because

*ērú = chí ēgá nà = nū-'gù = rù ngě-'má*  
because = IRR if 3M/N/NS.SBJ\SBJV = get.mad-CIRC = TOP MED.PLOC-ANAPH

*ná = yà = mǎ-'kúrà'û*  
3M/N/NS.SBJ = PCÌ.3M/N/NS.OBJ = kill.SG-by.force.of.circumstance

‘[Their captors were offending his girlfriend before his very eyes.] He didn’t lose his temper because... because if he had, they would automatically have killed him on the spot.’ [AMB 31–32]

The use of /-'kúrà'û/ seems to have been **lexicalized in a few predicative phrases**. These include at least *mé'kúrà'û*, whose typical meaning ‘be beautiful’ cannot be straightforwardly derived from the combination of *mé* ‘be good’ with /-'kúrà'û/ in its productive uses.

The suffix /-'kúrà'û/ **does not affect the predicative class** of the predicative phrase it is attached to (see *e.g.* example (403), where the PCÌ verb root *mǎ* ‘to

kill (sg.)’ retains its predicative class when /-’kúrà’ù/ is attached to it). It further occurs on **both intransitive and transitive predicative phrases** (as in (399–401) and (402–403), respectively).

#### 4.4.5.4 /-mārē/ ‘just’

The suffix /-mārē/ ‘just’ contributes subtle meanings that can roughly be rendered in English as ‘**just, simply, casually, with no particular effort, by nature**’, among others.<sup>245</sup> Instances of use of this suffix are provided in the following examples (see also (396), (192), and (212)).

(404) *Ngě’má nà-ǵumārè’ù gá nûmà.*

*ngě’-má*                      *nà = ǵu-mārè-’ù*  
 MED.PLOC-ANAPH    PCrũ.3M/N/NS.SBJ\SBJV = stay.SG-just\SBJV-SUB  
*gá = nû-mà*  
 LK.F/M/S/NS.PST = 3M-ANAPH

‘[A man was captured by an isolated group. They hold him captive in their *maloca*.] He found himself blocked there [lit. ‘He just stayed there.’].’ [AMB 38]

(405) *Námá’a tî-dé’àchìgùmārē ñyáchí wénà tá-táègù rù ngēmà nî-ì ì pūrākú.*

*ná-má’a*    *tî = dé’à-chìgù-mārē*                      *ñyáchí*    *wénà*    *tá = tá-ègù*                      *rù*  
 3N/NS-COM    4SBJ.PCì = speak-DISTR.SG-just    and                      again    4SBJ = drop.SG-INV    and  
*ngē-mà*                      *nî = ì*    *ì = pūrākú*  
 MED.NS-ANAPH    3M/N/NS.SBJ.PCì = be    LK.NS = work

‘[Guiding tourists is not a heavy job.] You just chat with them along the way and then you come back and that’s it.’ [JGS 518–519]

#### 4.4.5.5 /-chíre/ ‘admittedly’

The suffix /-chíre/ ‘admittedly’ operates at the level of the organization of discourse. It gives a **concessive discursive function** to the clause in which it occurs

<sup>245</sup>The functional equivalent of /-mārē/ ‘just’ in local Spanish (often offered as a translation for it by my transcription collaborators), and in other Spanish-speaking regions of South America, is *nomás*, as in e.g. *Son pequeños nomás* ‘They’re not very big’.

relative to surrounding clauses, *i.e.* it indicates that the predicative phrase to which it is attached refers to a circumstance such that it might have led to expect processes referred to in the surrounding context not to have occurred. An instance of use of this suffix is provided in the following example, where the speaker is signaling an apparent contradiction between the fact that he enjoys playing soccer (expressed with a PP marked with /-chíre/) and the fact that he is no longer playing because he is afraid of the risks it entails (see also (192)):

(406) *Chǒná-méégàchíre ná'a chà-ĩnũkã'ũ wã'í mārũ chã-múũ.*

*chǒ* = *ná* = *méégà-chíre* *ná'a*  
1SG.BEN = 3M/N/NS.SBJ = be.appealing.to.the.mind-admittedly CONJ

*chà* = *ĩnũkã-'ũ* *wã'í* *mārũ* *chã* = *múũ*  
1SG.SBJ\SBJV = play\SBJV-SUB CONTR PRF 1SG.SBJ = be.afraid

‘[So many people have hurt themselves playing soccer, including myself...]  
I do enjoy playing but I’m afraid now.’ [IGV 632]

The derivational suffix of the PP /-chíre/ ‘admittedly’ is **homonymous with the antiperfect enclitic / = chíre/ ‘APRF’**, a clause-level aspectual marker that “mark[s] a situation as past with respect to some reference time, but has the more important function of negating that situation’s connection with [that reference time]” (Spears 1993:262).<sup>246</sup> The suffix /-chíre/ ‘admittedly’ is likely to be historically derived from grammaticalized uses of the enclitic / = chíre/ ‘APRF’ in which the initially aspectual notion of lack of relevance of a past process at reference time conveyed by / = chíre/ was reinterpreted as a pragmatic notion of lack of relevance of a proposition with respect to surrounding propositions.

#### 4.4.5.6 /-ãmá/ ‘even.so’

The suffix /-ãmá/ ‘even.so’ operates at the level of the organization of discourse. It indicates that the process occurs **regardless of circumstances** referred to in the

<sup>246</sup>The antiperfect aspect can be viewed as the opposite of the perfect aspect inasmuch as the latter characterizes a situation as both past with respect to some reference time *and still relevant* in a way or another at that reference time. On the grammatical category I identify as an antiperfect aspect, see two case studies by Spears (1993) on Haitian Creole and Soto & Hasler (2015) on Mapudungun, and a typological survey by Plungian & van der Auwera (2006), who analyze essentially the same category as a tense category they label as “discontinuous past”.

surrounding context and which might have led to expect that the process would not occur. An instance of use of this suffix is provided in the following example:

(407) [...] *tûmàmá'a yà-nà-úámá'ú nûwǎ ērú tá'ú'ũ tá-fǎ gá tûmà.*

*tû-mà-má'a*    *yà = nà = ú-ámá-ú*  
 3S-ANAPH-COM    AM = PCrũ.3M/N/NS.SBJ\SBJV = go.SG-even.so\SBJV-SUB  
*nûwǎ*        *ērú*        *tá'ú-ũ*                      *tá = fǎ*        *gá = tû-mà*  
 well.M/N/NS    because    be.absent\SBJV?-ACC    3S.SBJ = know    LK.PST = 3S-ANAPH

‘[The legendary figure Daiyae challenged a hunter to go and hide somewhere in the jungle the best he could. Daiyae gave him time but] he found him anyway given that he [*i.e.* the hunter] was ignorant [*i.e.* had no shamanic powers and couldn’t transform himself].’ [JSG B84]

The derivational suffix of the PP /-ámá/ ‘even.so’ is **homonymous with the suffix /-ámá/ ‘DIR’**, whose function is essentially to convert a ALOC or PLOC NP encoding a ground referent for itself (*e.g.* *yé* ‘around there (ALOC)’ or /chàu-kūwā-gù/ [1SG-side-PLOC] ‘in/on/at my side’) into a NP that no longer refers to that ground G itself but to a distinct ground G’ located in a direction defined by means of ground G (*e.g.* /yě-ámá/ [DIST.ALOC-DIR] ‘from/at/to a ground located towards around there’ or /chàu-kūwā-gù-ámá/ [1SG-side-PLOC-DIR] ‘in/on/at a ground located towards my side’).

#### 4.4.5.7 /-(?)tûmā'ũ/ ‘?’

The meaning and potential morphosyntactic effects of this **probably non-productive suffix are unclear**. It is only attested in the following predicative phrases in my data:<sup>247</sup>

- (408) a. *āu'-áchí-tûmā'ũ*        cry-upslope-?        ‘feel desperate’  
 b. *fǎ-(?)tûmā'ũ*            know-?            ‘be recognized, be identified’  
 c. *wǎ-(?)tûmā'ũ*            ?-?            ‘be annoying’

<sup>247</sup>D. and L. Anderson additionally report the predicative phrase /nû'ũ ná = gēchà'ũ-tûmũ'ũ/ [3N/NS-BEN 3M/N/NS.SBJ = love-?] ‘he shows mercy to him’ in Cushillococha Tikuna (2016:190). Note the slight difference between the Cushillococha form of this suffix, /-(?)tûmũ'ũ/, and its SMAT form, /-(?)tûmā'ũ/ (Anderson & Anderson 2016:9, 190, 193).

The following is an instance of use of /-(?)tūmā'ū̃/ in spontaneous speech (see also (366)):

(409) *Ngēmà nî-ĩ gá chǎ-watūmā'ū̃'ū̃ gá chòmà.*

*ngē-mà*      *nî = ĩ*      *gá = chǎ = wǎ-(?)tūmā'ū̃-ū̃*  
 MED.NS-ANAPH 3M/N/NS.SBJ.PCī = be LK.PST = 1SG.BEN-?-?\SBJV-REL.NS

*gá = chò-mà*  
 LK.PST = 1SG-ANAPH

‘[My father didn’t pay much attention to me.] This is what annoyed me.’  
 [ANO1 123]

## 4.4.6 Predicative relational nouns

### 4.4.6.1 /-'chà'ū̃/ ‘VOL’

The predicative relational noun /-'chà'ū̃/ ‘VOL’, when attached to predicative phrases, contributes meanings such as ‘**to want, to feel like (performing the process denoted by the rest of the predicative phrase)**’, as shown in the following two examples (see also (637)):

(410) *Ngũ, ñumá chā-chíbùchà'ū̃.*

*ngũ ñumá*      *chā = chíbù-chà'ū̃*  
 yes present.time 1SG.SBJ = eat-VOL

‘Yes, I’d like to eat now.’ [ANO1 183]

(411) *Mārū tǎu íchī-û'chà'ū̃.*

*mārū tǎu*      *í = chī = û-'chà'ū̃*  
 PRF NEG 3ALOC = 1SG.SBJ.PCī = go.SG-VOL

‘I no longer wanted to leave.’ [JSG B668]

On the use of /-'chà'ū̃/ ‘VOL’ in combination with an NP to form non-verbal predicative phrases, see SECTION 4.3.3.4.

#### 4.4.6.2 /-'wǎē, -wǎē, -'wǎ'e/ 'APPREC'

The predicative relational noun /-'wǎē, -wǎē, -'wǎ'e/ 'APPREC', when attached to predicative phrases, contributes meanings such as **'to like, to be inclined to (performing the process denoted by the rest of the predicative phrase)'**, as shown in the following example:

(412) [...] *ngěmà tà gá, dùǎ < gá... > gá nǎ'chì tá-âiē ērú < nà-... > ná-à'ēwǎē.*

*ngě-mà* = *tà* = *gá*      *dùǎ* < = *gá... >* = *gá* *nǎ-'chì*  
 MED.ALOC-ANAPH = PST    human = PST      = PST    3M-with.hate.toward

*tá* = *âi-ē*      *ērú*      < *nà* = ... >  
 3S.SBJ = hate-INTR.PL    because    3M/N/NS.SBJ\SBJV =

*ná* = *à'-ē-wǎē*  
 3M/N/NS.SBJ = drink-ANTIP2-APPREC

'[...] there too people didn't like him because he... he liked drinking.' [AMB 185–187]

On the more frequent use of /-'wǎē, -wǎē, -'wǎ'e/ 'APPREC' in combination with an NP to form non-verbal predicative phrases, see SECTION 4.3.3.5.

## 4.5 Valency operations applied to the verb root and the predicative phrase

SMAT features **three antipassive suffixes**, *i.e.* valency-decreasing suffixes associated with the loss of an object argument position corresponding to the deletion or demotion of a referent with a patient-like semantic role. These are discussed in SECTION 4.5.1.

SECTION 4.5.2 discusses the **causative suffix** /-'é'e/, a valency-manipulating morpheme whose main effect is that of allowing for the additional expression of a causer referent in the syntactic position of a subject.

The **passive and factitive constructions** are two valency-manipulating constructions that do not involve the use of any dedicated derivational morphology. The former allows for the deletion of the agent referent from transitive predicates. The occurrence of the latter is restricted to stative intransitive predicative phrases and—similarly to the causative suffix /-'é'e/—allows for the additional expression



of a causer referent in the syntactic position of a subject. These two constructions are discussed in SECTION 4.5.3.

On core argument incorporation, which has the effect of decreasing the valency of predicative phrases, see SECTION 4.2.5.2, p.321.

### 4.5.1 /-ètà/ ‘ANTIP1’, /-ē/ ‘ANTIP2’, and /-tàē/ ‘ANTIP3’

SMAT features **three functionally similar antipassive**<sup>248</sup> **suffixes**: /-ètà/ ‘ANTIP1’, /-ē/ ‘ANTIP2’,<sup>249</sup> and /-tàē/ ‘ANTIP3’. The former two are derivation suffixes of the verb root and as such derive intransitive verb stems exclusively from lexically transitive verb roots, while /-tàē/, a derivational suffix of the predicative phrase, derives intransitive predicative phrases from, in principle, any kind of initially transitive predicative phrase. The distribution of /-ètà/ and /-ē/, which both occur in the same morphological slot, is unclear. I tentatively hypothesize that the former is rather used in the expression of solitary activities (e.g. writing, weaving, or committing a murder) and the latter in the expression of typically social, collective activities (e.g. planting manioc, toasting manioc flour, or drinking manioc beer). In the resulting constructions, the more patient-like referent (initially the object argument) is dropped and only the more agent-like argument is retained (keeping its function of subject argument). The effects of these suffixes are illustrated in the following three examples, respectively:

(413) a. **Transitive construction:**

*Chānā-bú.*

*chā = nā = bú*

1SG.SBJ = 3M/N/NS.OBJ = split

‘I split it.’

b. **Antipassive construction in /-ètà/ ‘ANTIP1’:**

*Chā-bûètà.*

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<sup>248</sup>On the relevance of using the term “antipassive” in the description of a language with nominative-accusative alignment like SMAT, see Creissels (2006a:89–93).

<sup>249</sup>This suffix /-ē/ should not be confused with any of the three homonymous suffixes /-ē/ ‘off.SG’ (on which see SECTION 4.2.3.5), /-ē/ ‘EVENT.PRED’ (SECTION 4.3.2), and /-ē/ ‘INTR.PL’ (SECTION 4.4.4).

*chā = bū-ètà*  
 1SG.SBJ = split-ANTIP1  
 ‘I split stuff.’ [JSG elic.]

(414) a. **Transitive construction:**

*Chānā-be.*  
*chā = nā = be*  
 1SG.SBJ = 3M/N/NS.OBJ = uproot  
 ‘I uproot it.’

b. **Antipassive construction in /-ē/ ‘ANTIP2’:**

*Chā-bēē.*  
*chā = bē-ē*  
 1SG.SBJ = uproot-ANTIP2  
 ‘I uproot stuff [typically manioc].’ [LAR elic.]

(415) a. **Transitive construction:**

*Chānā-póná.*  
*chā = nā = pō-ná*  
 1SG.SBJ = 3M/N/NS.OBJ = knock-open  
 ‘I smash it.’

b. **Antipassive construction in /-tāē/ ‘ANTIP3’:**

*Chā-pónátāē.*  
*chā = pō-ná-tāē*  
 1SG.SBJ = knock-open-ANTIP3  
 ‘I smash stuff.’ [LAR elic.]

The following example features a **spontaneous case of alternation between an antipassive construction in /-tāē/ ‘ANTIP3’ and a transitive construction involving the same predicative phrase** (see also example (421) below):

(416) *Yě̀à ì-gũ rù nā-cobratàè'ũ. Ngĩ'rũ tà gá tũnā-cobra'ũ ná'a CDIwá nā-pũrākũ'ũ.*

*yě̀-à*            *ì = gũ*            *rù*    *nā = cobra-tàè-ũ*  
 DIST.ALOC-EXO    3F.SBJ = reach    and    3F.SBJ.SBJV = collect-ANTIP3\SBJV-SUB

*ngĩ-'rũ = tà = gá*    *tũ = nā = cobra-ũ*                    *ná'a*    CDI<sup>250</sup>-wá  
 3F-GEN = ADD = PST    4ACC = 3F.SBJ.SBJV = collect\SBJV-SUB    CONJ    CDI-ALOC

*nā = pũrākũ-ũ*  
 3F.SBJ.SBJV = work\SBJV-SUB

‘She arrived there and she collected our wages [lit. ‘... and she collected.’]. She also collected hers, for working at the Early Childcare Center.’ [JSG B444–446]

Unexpectedly, /-tāē/ ‘ANTIP3’ is **also occasionally suffixed to intransitive predicative phrases**, which never occurs to the other two antipassive suffixes. This is illustrated in example (417b) (example (417a), with a related but different meaning, is intended to demonstrate that the predicative phrase /i-ā̀’è/ [be.small-mind] ‘to play turbulently’ may be used intransitively on its own):

(417) a. **Plain intransitive construction:**

*Chā-īā̀’è.*

*chā = i-ā̀’è*

1SG.SBJ = be.small-mind

‘I’m bothering people [e.g. a kid playing turbulently].’

b. **Intransitive construction involving /-tāē/ ‘ANTIP3’:**

*Chā-īā̀’ètāē.*

*chā = i-ā̀’è-tāē*

1SG.SBJ = be.small-mind-ANTIP3

‘I’m playing games [with other children].’ [LAR elic.]

These few occurrences, where /-tāē/’s exact effect is unclear, indicate that **strict antipassivization may not be its only function**. Very hypothetically, I suggest that /-tāē/’s function in these cases **might be to allow for the omission of an extended core argument**, *i.e.* a non-core argument required by the predicative phrase’s lexical valency. This hypothesis seems especially plausible in view of an example such as (418b). In this example, /-tāē/ is suffixed to a verb stem (/ú-ā/ [put.SG-mouth] ‘to rebuke’) that normally requires a complement in the accusative, as in (418a). In (418b), /-tāē/’s function thus seems to be that of allowing for the absence of a non-core argument whose presence would otherwise be made obligatory by the verb stem in question.

(418) a. **Plain intransitive construction (with an extended core argument):**

*Nūchā-ūq.*

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<sup>250</sup>CDI is the initialism of Spanish *Centro de Desarrollo Infantil* (lit. ‘Child Development Center’, in reference to an early childcare center).

*nū̄ = chā = ú̄-g*  
 3M/N/NS.ACC = 1SG.SBJ = put.SG-mouth  
 ‘I rebuke him.’

b. **Intransitive construction involving /-tā̄/ ‘ANTIP3’:**

*Chā-ú̄qtā̄.*  
*chā = ú̄-g-tā̄*  
 1SG.SBJ = put.SG-mouth-ANTIP3  
 ‘I rebuke people.’ [LAR elic.]

The fact that the semantic interpretation of example (417b) above implies the presence of an unmentioned referent (‘I’m playing games [*with other children*].’) could be accounted for along the same line. The predicative phrase /i-ǎ̄’è/ [be.small-mind] ‘play turbulently’ in (417a), with no extended core argument, really means ‘to act as a small child’, with only a subject referent involved. The predicative phrase from which /i-ǎ̄’è-tā̄/ [be.small-mind-ANTIP3] ‘to play games [*with other children*]’ in (417b) is derived is probably, in fact, another, lexicalized use of *ǎ̄’è* with an obligatory complement in the comitative, then meaning ‘to play children games *with someone*’. It would then be expected for the interpretation of (417b)—which features /-tā̄/—to involve an unmentioned referent (in this case, an unmentioned playmate), as opposed to the interpretation of (417a)—without /-tā̄/.

If these analyses are correct, then /-tā̄/’s function could be described as that of generally allowing for the omission of an argument required by the predicative phrase’s valency, with that argument typically being the core object (strict antipassivization), but also occasionally an obligatory argument with other syntactic functions.

My data do not allow me to tell **whether the patient referent of the initial transitive construction may be expressed as an oblique argument in the antipassive construction** obtained by suffixation of /-ètà/<sup>251</sup> or /-tā̄/. This option is minimally available in antipassive constructions in /-ē/ ‘ANTIP2’. The patient

<sup>251</sup>This option is likely to be available for /-ètà/ ‘ANTIP1’ in SMAT, however, given that it is attested in Cushillococha Tikuna as described by D. and L. Anderson. See for instance the following Cushillococha Tikuna sentence, glossed according to SMAT standards:

- (i) *Guitaramaxā napaxeta.*  
 guitarra-má’a ná = pā’-ètà  
 guitar-COM 3M/N/NS.SBJ = play-ANTIP1  
 ‘He plays the guitar.’ [Anderson & Anderson 2016:113]

referent is then typically expressed as a comitative argument, as in the following example:

(419) *Gú'ú-má'a tá-tóē: ìrú, pō'í, chí'nú [...]*...

*gú-'ú-má'a*                      *tá=tó-ē*                      *ìrú*                      *pō'í*                      *chí'nú*  
 finish\SBJV-REL.NS-COM    4SBJ=plant-ANTIP2    baby.banana    plantain    pineapple

'We plant all sorts of things: baby bananas, plantains, pineapples [...]'  
 [LAR D266–267]

Suffixing /-ètà/ and /-ē/ to a given verb root **systematically shifts the latter's predicative class to PCØ**. In the following example, for instance, the PCì verb root *mā* 'to kill (sg.)' shifts to PCØ when suffixed /-ètà/:

(420) [...] *yérú {ükú} ā'a ná-múú rù ná-ānē ā'a <nî-í gá... > nî-í gá nà-máètā'úka.*

*yérú*                      *{ükú} = ā'a*                      *ná=múú*                      *rù*  
 because.PST    I.mean=QUOT    3M/N/NS.SBJ=be.afraid    and

*ná=ānē=ā'a*                      *<nî.í gá=... >*                      *nî.í*  
 3M/N/NS.SBJ=be.ashamed=QUOT    CONJ    LK.F/M/S/NS.PST=    CONJ

*gá=nà=má-ètā-'ú-ka*  
 LK.F/M/S/NS.PST=3M/N/NS.SBJ\SBJV=kill.SG-ANTIP1\SBJV-SUB-CAUSE

'[...] because he was afraid and ashamed, as he... as he had committed the murder [lit. '... as he had killed (Ngutapa).']' [LAR C509–511]

Similarly, in the following example, the PCī verb root /gû/ 'to roast' (used transitively in the second half of the example) shifts to PCØ when suffixed with /-ē/ (in the first half of the example):

(421) *Después de eso gá, yî'émá tûmàmā tà-gûè'ú. Kōpīwāràmàchī tû-gû.*

*después de eso=gá*                      *yî'è-má*                      *tû-mà-mā*  
 after that=PST                      MED.S-ANAPH    3S-ANAPH-wife

*tà=gû-è-'ú*                      *kōpīwāràmàchī*                      *tû=gû*  
 3S.SBJ\SBJV=roast-ANTIP2\SBJV-SUB    capybara-meat                      3S.SBJ.PCī=roast

In this example, the guitar, which could have been referred to as the object of a transitive construction involving the verb root *pā'ū* 'to ring (a bell), to play (a musical instrument)' (see Anderson & Anderson 2016:95), is instead referred to as a comitative argument of the antipassivized verb stem /pā'-ètà/ 'to ring (bells), to play (music)'.

‘After that, his wife started the roasting [lit. ‘... his wife roasted.']. She roasted the capybara’s meat.’ [JSG C144–146]

Suffixing /-t̄ē/ seems to entail the same predicative class shift to PCØ, although my data are less clear on this specific point as far as this antipassive suffix is concerned.

The three antipassive suffixes only operate on predicative phrases’ valency and **do not involve systematic Aktionsart or referentiality effects**. Depending on the surrounding context, /-èt̄à/ ‘ANTIP1’, for instance, may convey a notion of stativity and unreferentiality to the process. Such an effect occurs in example (422), where /t̄á = ch̄ă-èt̄à-ḡú/ ‘they painted’ and /t̄à = w̄ü-èt̄à-ḡú-’ú/ ‘they wrote’ are to be interpreted as ‘they *knew how to paint in general*’ and ‘they *knew how to write in general*’):

(422) *Chí yí’è má b̄ū’è gá í-chó’ú’è r̄ù m̄ārū t̄á-ch̄ă-èt̄à-ḡú, ngě’-m̄á’è m̄ārū t̄à-w̄ü-èt̄à-ḡú-’ú.*

*chí yí’è-má b̄ū-’è*  
and MED.S-ANAPH be.young\SBJV-REL.S

*gá = í = chó-’ú-’è = r̄ù m̄ārū*  
LK.PST = 3ALOC = be.there.PL-out.PL\SBJV-REL.S = TOP PRF

*t̄á = ch̄ă-èt̄à-ḡú ngě’-m̄á-’è m̄ārū*  
3S.SBJ = anoint-ANTIP1-PL MED.PLOC-ANAPH\SBJV-REL.S PRF

*t̄à = w̄ü-èt̄à-ḡú-’ú*  
3S.SBJ\SBJV = scratch-ANTIP1-PL\SBJV-SUB

‘And the children who left from there [*i.e.* from day nursery], they already knew how to paint, some already knew how to write.’ [IGV 124–126]

Such effects are by no means automatic, however. In example (420) above, the process referred to by /n̄à = m̄á-èt̄à-’ú/ ‘he had killed’, with the suffix /-èt̄à/, has a telic *Aktionsart* (like the plain verb root *m̄q* ‘to kill (sg.)’) and its contextually understood object (Ngutapa, whose murder was previously referred to by the storyteller) is referential. The contrast between examples (419) and (421) above illustrates the same point with the suffix /-ē/ ‘ANTIP2’.

The homonymy of the antipassive suffix /-ē/ ‘ANTIP2’ with the functionally unrelated suffixes /-ē/ ‘off.SG’ (on which see SECTION 4.2.3.5), /-ē/ ‘EVENT.PRED’ (SECTION 4.3.2), and /-ē/ ‘INTR.PL’ (SECTION 4.4.4) is intriguing.<sup>252</sup> This **homony-**

<sup>252</sup>It is all the more intriguing as the suffixes /-ē/ ‘ANTIP2’, /-ē/ ‘off.SG’, and /-ē/ ‘INTR.PL’ all trigger the Pattern 2 morphotonological alternations (see TABLES 36 and 37), a process that bound

my suggests that some of these four morphemes might be cognates, least implausibly the antipassive suffix /-ē/ ‘ANTIP2’ and the intransitive plural marker /-ē/ ‘INTR.PL’, which occur in mutually exclusive contexts, with the former being suffixed only to transitive verb roots and the latter being suffixed only to intransitive predicative phrases. Note, in any case, that there is no language-internal synchronic evidence beyond phonological resemblance in support of such a hypothesis.

The synchronically unanalyzable (or only partially analyzable) intransitive verb stems *chǎgúē* ‘to fish with poison’, *fènūē* ‘to hunt’, *tǎ’ē* ‘to trade’, and *wīyāē* ‘to sing’ might have been historically antipassive derivations in /-ē/ ‘ANTIP2’ from transitive verb roots that seem to no longer be in use (*\*chǎgú*, *\*fènū*, *\*tǎ’i*, *\*wīyā?*).

#### 4.5.2 /-’é’e/ ‘CAUS’

The suffix /-’é’e/ is a **causativizer suffix**. It derives transitive predicative phrases from either intransitive or transitive predicative phrases of any kind, and allows for the introduction into the resulting construction of an additional referent which occupies the syntactic function of subject and whose semantic role is that of a causer. As a rule, the referent that initially had the syntactic function of subject in the non-causative construction (*i.e.* the referent whose semantic role is that of a causee in the resulting construction) takes on the **syntactic function of object in the causative construction** if the initial predicative phrase was intransitive (compare examples (423a) and (423b)).

(423) a. *Ōtǎ ná-chíbù.*

*ōtǎ*            *ná = chíbù*  
chicken(SBJ) 3M/N/NS.SBJ = eat  
‘The chicken eats.’

b. *Ōtǎ chā-chíbù’é’e.*

*ōtǎ*            *chā = chíbù-’é’e*  
chicken(OBJ) 1SG.SBJ = eat-CAUS

‘I feed the chicken [lit. ‘I cause the chicken to eat.’]’ [JSG elic.]

If the initial predicative phrase was transitive, however, that referent is **demoted to the status of oblique argument in the accusative**, while the referent that was ini-

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morphemes with a lexical toneme /<sup>3</sup>/ in their first syllable only exceptionally cause (see SECTION 2.6.2.2).

tially the object retains the function of object (compare (424a) and (424b)).<sup>253</sup> Note that predicative phrases derived with /-'é'e/ 'CAUS' are thus always monotransitive—not ditransitive—as they never feature more than one position for an object argument, even when derived from predicative phrases that were already initially transitive.<sup>254</sup>

(424) a. *Ōtǎ tǔ'è ná-ngo.*

*ōtǎ*            *tǔ'è*            *ná = ngo*  
chicken(SBJ) manioc(OBJ) 3M/N/NS.SBJ = bite

'The chicken eats manioc.'

b. *Ōtǎ'ũ tǔ'è chā-ngo'é'e.*

*ōtǎ-'ũ*            *tǔ'è*            *chā = ngo-'é'e*  
chicken-ACC manioc(OBJ) 1SG.SBJ = bite-CAUS

'I feed the chicken manioc [lit. 'I cause the chicken to eat manioc.'],'  
[JSG elic.]

The following examples feature spontaneous occurrences of causative constructions involving the suffix /-'é'e/ based on an initially intransitive predicative phrase (425) and an initially transitive predicative phrase (426). In these examples, the causee and patient referents are syntactically treated according to the general rules stated above.

(425) *Ngēmààkù gá chānā-gu'é'è'ũ gá chō'rī bachillerato.*

*ngē-mà-àkù = gá*            *chā = nā = gu-'é'è-'ũ*  
MED.NS-ANAPH-MAN = PST 1SG.SBJ\SBJV = 3M/N/NS.OBJ = finish-CAUS\SBJV-SUB

*gá = chō-'rī*            bachillerato  
LK.PST = 1SG-GEN high.school.education

'That's how I finished high school [lit. 'That's how I caused my high school education to end.'],' [JSG A392]

(426) [...] *tǎu <tūnà-... > <tà-... > tūnà-chí'èwēgǔ'ũkq ā'a nū-ĩ gá... [...]* *tūmànetū ā'a nūitā-tū'é'è'ũ.*

<sup>253</sup>SMAT's causative constructions in /-'é'e/ involving an initially transitive predicative phrase thus fall within the Type (v) of Dixon's (2000:54–56) syntactically-based typology of morphologically-derived causative constructions ('original O stays as O, original A moves out of the core').

<sup>254</sup>SMAT does not allow ditransitive predicates of any kind, more generally.



*tāu* < *tū̄ = nà = ...* > < *tà = ...* >  
 NEG 3S.ACC = 3M/N/NS.SBJ\SBJV = 3S.SBJ\SBJV =

*tū̄ = nà = chí'è-wē-gú-ú-ká = ā'a*  
 3S.ACC = 3M/N/NS.SBJ\SBJV = be.bad-convenience-PL\SBJV-SUB-CAUSE = QUOT

*nî = î* *gá = [tū̄-mà-nētū̄ = ā'a*  
 3M/N/NS.SBJ.PCì = be LK.F/M/S/NS.PST = [3S-ANAPH-plant = QUOT

*nū̄ = tà = tū̄-é'è-ú*  
 3M/N/NS.ACC = 3S.SBJ\SBJV = fell-CAUS\SBJV-SUB]

‘[...] it was [just] to get rid of... of them that [...] she had asked them to cut down her tree.’ [LAR T134]

The general syntactic rules stated above do not always apply, however. Causee arguments in causative constructions based on initially intransitive predicative phrases **may be treated as oblique arguments in the accusative**—instead of core objects, as expected—when specific syntactic and semantic conditions are met, namely 1) when such causee arguments are represented by a full NP preceding the predicative phrase and 2) when the corresponding referent is animate. This is shown in example (427). This additional rule, while optional in most cases, seems to be obligatory, at least for certain speakers, in the specific case where the causee argument belongs to the salientive nominal class: contrast the ungrammatical sentence in example (428a) to its corrected form—with the salientive causee argument in the accusative—in example (428b).

(427) *Gú'ú gá gùnē'úgù gá < tānā... > kūchì'ú t̄ā-chíbù-é'egú'ú.*

*gú-ú* *gá = gùnē-ú-gù = gá*  
 finish\SBJV-REL.NS LK.PST = get.light\SBJV-REL.NS-PLOC = PST

< *tā = nā = ...* > [*kūchì-ú t̄ā = chíbù-é'e-gú-ú*]  
 1PL.SBJ.SBJV = 3M/N/NS.OBJ = [pork-ACC 1PL.SBJ.SBJV = eat-CAUS-PL\SBJV-SUB]

‘We... We fed the porks [lit. ‘... caused the porks to eat ...’] every day.’  
 [IGV 394–395]

(428) a. \**Bū'è chā-chíbù-é'e.*

*bū-è* *chā = chíbù-é'e*  
 be.young\SBJV-REL.S(OBJ) 1SG.SBJ = eat-CAUS

‘I cause the child to eat.’

b. *Bū'è'ú chā-chíbù-é'e.*

*bū-è-ú* *chā = chíbù-é'e*  
 be.young\SBJV-REL.S-ACC 1SG.SBJ = eat-CAUS

‘I cause the child to eat.’ [JSG elic.]

Occurrences of /-’é’e/ ‘CAUS’ in my corpus are rather **frequent on initially intransitive predicative phrases, while they are rare on initially transitive predicative phrases**. In the latter cases, a causee referent is always morphosyntactically present, whether as a syntactically explicit NP or as an index procliticized to the predicative phrase. My data do not allow me to tell whether the causee referent (which is in this case an oblique complement in the accusative) may be left out from a causative construction derived from an initially transitive predicative phrase.

The suffix /-’é’e/ ‘CAUS’ **does not alter the predicative class of the predicative phrases it attaches to**. The causative constructions featured in examples (423–428) above are all based on predicative phrases that initially belong to PCØ and thus all display derived predicative phrases inflecting in PCØ. The causative constructions in (429) and (430) are based on predicative phrases that initially belong to PCrū and PCì, respectively, and therefore display derived predicative phrases inflecting in these same predicative classes.

(429) *Tá’a náyànā-ó’é’e gá grado quinto [...].*

*tá’a ná=yà=nā=ó-’é’e*

FRUSTR 3M/N/NS.SBJ = AM = PCrū.3M/N/NS.OBJ = disappear-CAUS

*gá = grado quinto*

LK.PST = fifth.grade

‘He almost suppressed [lit. ‘... caused to disappear ...’] the fifth grade [...].’

[JSG A378]

(430) “*Ákú [ì] ñómá’ù nûwá kû-ì’é’è-’ú?*”

*ákú [ì] = ñó-má-’ù nûwá*

what?.NS LK.NS = PROX.NS-ANAPH-STATE well.M/N/NS

*kû = ì = ì-’é’è-’ú*

2SG.ACC = PCì = be-CAUS\SBJV-REL.NS

“‘Who put you in this situation [lit. ‘What is it that caused you to be this way?’]?’” [LAR T17]

The ordering of /-’é’e/ ‘CAUS’ relative to other non-inflectional morphological components of the predicative phrase seems to generally entail **scope effects**, with morphemes preceding /-’é’e/ usually falling under its scope and morphemes following /-’é’e/ usually extending their scope over it. This hypothesis requires further

research, however, as in many cases such scope effects cannot be easily tested. On the other hand, the scope relationship between /-'é'e/ 'CAUS' and the feature of associated motion—an inflectional feature in SMAT, only available in finite forms of predicative phrases (see SECTION 5.8)—is grammatically unspecified and its interpretation relies on context. In other words, whether a predicative phrase simultaneously featuring /-'é'e/ 'CAUS' and associated motion is to be interpreted as meaning '[cause to [go/come and ...]]' (involving motion of the causee) or '[go/come and [cause to ...]]' (involving motion of the causer) is context-dependent. The following example may thus be interpreted as involving motion of either the causee or the causer, or even motion of both participants:

(431) *Chāyà-pé'é'e.*

*chā = yà = pé-'é'e*

1SG.SBJ = AM.3M/N/NS.OBJ = sleep-CAUS

'I cause him to go and sleep [e.g. I tell my son to go to bed without moving myself.]'

'I go and cause him to sleep [e.g. I go back home from fishing and rock my baby to sleep.]'

'I go with him and cause him to sleep [e.g. I walk my drunk husband back home after a party and put him to bed.]' [JSG elic.]

My data do not allow me to tell whether the stacking of /-'é'e/ 'CAUS', *i.e.* the suffixation of /-'é'e/ to a predicative phrase that already contains an occurrence of it, is grammatical. Interestingly, however, the antipassivization of a causative construction in /-'é'e/ by suffixing it with /-tàè/ 'ANTIP3' is attested, as shown in the following example:

(432) *Yá'gùǎ nî-í {gá} tà-ǵúē'é'etàè'ú rù yì'kùámá tûmààrû pūrākúwǎ ítà-ǵūgúgù, yáuànèkù [...]*

*yá'gùǎ nî.í {gá = }tà = ǵú-ē-'é'e-tàè-'ú = rù*

ancestor CONJ PST = 3S.SBJ\SBJV = learn-INTR.PL-CAUS-ANTIP3\SBJV-SUB = TOP

*yì'kù = ámá tûmà-àrû pūrākú-wǎ í = tà = ǵū-gú-gù*

later = DIR 3S-GEN work-ALOC 3ALOC = 3S.SBJ\SBJV = reach-PL-CIRC

*yáuànèkù*

late.afternoon.time

'The moment when the elders would share their knowledge [lit. '... when the elders caused to learn ...'] was some time after they came back from their work, in the late afternoon [...]' [LAR D206–207]

The semantics of causative constructions derived with /-'é'e/ 'CAUS' cover a **very wide array of causation situations**.<sup>255</sup> Depending on the context, causative constructions in /-'é'e/ may thus be varyingly translated in English as e.g. 'cause to do' or 'induce to be', 'make do, order to do, force to do' or 'allow to do, let do, put in conditions to do', etc. In particular, the occurrence of /-'é'e/ is **not restricted to predicative phrases with specific semantic characteristics** (e.g. only stative or only dynamic predicative phrases). Its occurrence does not specify—or is not constrained by—whether the causee is **animate or inanimate** (contrast (427) and (429) respectively), whether it **has or does not have control** (contrast (426) and (433)), or whether it is **willing or unwilling** (contrast (434) and (430)).

(433) [...] *gú'ú-rú'ù'ú gá cuento'ú tōmá'a tī-ù'ú gá tô'ú námá'a tà-múú'é'è'ú... gá yá'gùã.*

*gú'ú-rú'ù'ú* *gá = cuento-'ú* *tō-má'a*  
finish\SBJV-REL.NS-sort\SBJV-REL.NS LK.F/M/S/NS.PST = tale-ACC 1PL-COM

*tī = ù-'ú* *gá = [tô-'ú* *ná-má'a*  
3S.SBJ.PCĪ\SBJV = say\SBJV-SUB LK.F/M/S/NS.PST = [1PL-ACC 3N/NS-COM

*tà = múú-'é'è]-'ú* *gá = yá'gùã*  
3S.SBJ\SBJV = be.afraid-CAUS\SBJV]-REL.NS LK.F/M/S/NS.PST = ancestor

'[...] they would tell us all sorts of stories with which they frightened us  
[lit. '... caused us to be afraid ...']... the elders.' [LAR D210–211]

(434) “[...] *kú nûwǎ êkà tōpī-chópétù'é'e-ètānū, ērú tǎu mā tōmà pētā-tà'kú!*”

*kú = nûwǎ = êkà*  
come.on = well.M/N/NS = who.knows?

*tō = pī = chó-pétù-'é'e-ètānū* *ērú*  
1PL.ACC = 2PL.SBJ.PCĪ.SBJV = be.there.PL-across-CAUS-DISTR.PL\SBJV because

*tǎu = mā* *tō-mà* *pē = tā = tà'kú*  
NEG = precisely 1PL-ANAPH 2PL.ACC = 1PL.SBJ = be.an.orphan

“[...] please let us move on, because we didn't orphan you!” [LAR T159]

As for the causer argument, it may be acting both **directly or indirectly** (contrast (427) and (426)). A spontaneous example such as (435), where the causer and the causee (a reflexive pronoun) are coreferential, as well as the third translation

<sup>255</sup>On the set of semantic properties of causative constructions in /-'é'e/ discussed in this paragraph, see Dixon (2000:61-74).

option for the elicited utterance in example (431), suggest that the causer may be itself physically involved in the process carried out by the causee, although in most cases it is not. My data do not, however, allow me to tell whether the causer may be inanimate (as opposed to animate, which it always is in my data) or whether the causer's action may be accidental (as opposed to intentional, which it always is in my data).

(435) *Òwúpá'ù'ù nûgù ā'a ngě'má nà-ú'è'è'ù.*

*òwú-pá'ù-ù*    *nû-gù = ā'a*    *ngě'-má*  
 older.chambira.palm-spine-STATE    3N/NS-REFL=QUOT    MED.PLOC-ANAPH

*nà = ú-è-è-ù*  
 3M/N/NS.SBJ\SBJV = be.there.SG-CAUS\SBJV-SUB

'He transformed himself into chambira palm spines and lay there [lit. 'He caused himself to be there under the shape of chambira palm spines.']. ' [JSG B93]

In one example in my corpus, a causative construction with coreferential causer and causee arguments (with the latter represented by a reflexive pronoun) is used to express that **the process is artificially simulated** (with lit. 'to cause oneself to ...' conveying the meaning of 'to pretend to ...'). The jaguar who killed the mythical hero Ngutapa pretends he cannot speak at the moment so as to elude questions by Ngutapa's sons:

(436) [...] *nûgù ā'a nà-ǔ'pùtá'è'è'ù ā'a* [...].

*nû-gù = ā'a*    *nà = ǔ-pùtá-è'è-ù = ā'a*  
 3N/NS-REFL=QUOT    3M/N/NS.SBJ\SBJV = hurt-tooth-CAUS\SBJV-SUB = QUOT

'[...] [he] was pretending to [lit. '... causing himself to ...'] have a toothache [...]. ' [LAR C502]

The /-è'e/-causative form of the verb root *ngù* 'rest'—/*ngù-è'e*/, lit. 'to cause someone to rest'—has the lexicalized meaning 'to help (someone)'. The synchronically unanalyzable verb stem *ǔ'è'e* 'to wait for someone' was most likely historically derived as the /-è'e/-causative form of a former verb root *\*ǔ* no longer existing in today's SMAT.

On the rarer **factitive construction**, whose functions partially overlap with those of the causative construction in /-è'e/, see the end of the next section.

### 4.5.3 Valency operations with no dedicated exponence

#### 4.5.3.1 Passive construction

In SMAT, the more patient-like argument of a transitive predicate (syntactically represented as a core object in the transitive construction) may by no means be omitted from an utterance without the simultaneous addition of dedicated derivational morphology to the predicative phrase (on the antipassive suffixes /-ètà/, /-ē/ and /-tàē/, which allow such an omission, see SECTION 4.5.1). By contrast, the more agent-like argument of a transitive predicate (syntactically represented as a subject in the transitive construction) may be omitted from an utterance without the addition of any specific derivational morphology to the predicative phrase. When this occurs, **the predicate merely becomes intransitive and the more patient-like argument is promoted to the syntactic function of subject**, *i.e.* the only core argument position left in the resulting utterance. I call “**passive construction**” this intransitive use of typically transitive predicative phrases with no derivational morphology involved. Contrast the ordinary transitive construction in example (437a), where both agent and patient referents are overtly mentioned, with the passive construction in (437b), where only the patient referent is retained:

(437) a. **Transitive construction:**

*Chānā-chă.*  
*chā = nā = chă*  
 1SG.SBJ = 3M/N/NS.OBJ = paint  
 ‘I paint it.’

b. **Passive construction:**

*Ná-chă.*  
*ná = chă*  
 3M/N/NS.SBJ = paint  
 ‘It is painted.’ [JSG elic.]

Examples (438a) and (438b) illustrate the exact same contrast in spontaneous textual examples:

(438) a. *Mā kùnā-ǵũ̀ègũ̀’ú? – Mārũ̀!*

*mā = kù = nā = ǵũ̀-ègũ̀-’ú* *mārũ̀*  
 PRF = 2SG.SBJ\SBJV = 3M/N/NS.OBJ = slant?-INV\SBJV-SUB PRF

‘[Put the plate with its mouth up! (Short pause)] Have you flipped it over yet? – Yes!’ [RCA & JCA E12–13]

b. *Platomàwǎ?* – *M̄mm*, *platomàwǎ wâ’í ná-ǵũègù ì plato*.

*plato-mà-wǎ n̄mm plato-mà-wǎ wâ’í ná = ǵũ-ègù*  
plate-cavity-ALOC yes plate-cavity-ALOC CONTR 3M/N/NS.SBJ = slant?-INV

*ì = plato*  
LK.NS = plate

‘[As for the pen, it’s in, uh... –] In the plate? – Yeah, in the plate but the plate is upside down [lit. ‘... is flipped over.’].’ [RCA & JCA E34]

Examples (439) and (440) feature both a passive construction and an ordinary transitive construction involving the same verb, specifically the verb root *wũ* ‘to scratch, to write’ in (439) (with the passive construction coming first and the transitive construction coming next) and the verb root *yě* ‘to chop down (smaller trees)’ in (440) (with the two constructions occurring in the reverse order; note that the verb root *tũ’u* ‘to fell (bigger trees)’ at the end of (440) also appears in a passive construction):

(439) *Ná-nũ’à, chô’rũ pōpēràgú. Mā ná-wũ ì especie. Especie de plátano—pō’ĩ—yuca—tũ’è-àrũ... Ná-nũ’u, mā chānā-wũ.*

*ná = nũ’-à chô-’rũ pōpērà-gú mā = ná = wũ*  
3M/N/NS.SBJ = PROX.PLOC-EXO 1SG-GEN paper-PLOC PRF = 3M/N/NS.SBJ = scratch

*ì = especie especie de plátano pō’ĩ yuca tũ’è-àrũ*  
LK.NS = species species of plantain plantain manioc manioc-GEN

*ná = nũ’u mā = chā = nā = wũ*  
3M/N/NS.SBJ = PROX.PLOC PRF = 1SG.SBJ = 3M/N/NS.OBJ = scratch

‘It’s here, in my notebook. They’re written down, the species. Species of plantain—*pō’ĩ* [in Tikuna]—of manioc—*tũ’è*... It’s here, I’ve written them down.’ [JSG A272–275]

(440) *Mārũ kũ-chě’tũ ì, nâi kũ-yě’ũ ì ngémà. Mārũ <ná...> nũ-yě yà nâi ì, eh... un mes kùnā-ũ’ũ nũ-ĩ yà-pâ’ũ ēgá mā nà-tũ’ugú.*

*mārũ kũ = chě’-tũ = ì nâi kũ = yě-’ũ*  
PRF 2SG.SBJ = chop-weed = CONTR.TOP tree 2SG.SBJ.PCī = chop.down\SBJV-SUB

*ì = ngě-mà mārũ <ná = ... > nũ = yě*  
LK.NS = MED.ALOC-ANAPH PRF 3M/N/NS.SBJ = 3M/N/NS.SBJ.PCī = chop.down

*yà = nâi = ì un mes kù = nā = ũ-’ũ*  
LK.N = tree = CONTR.TOP one month 2SG.SBJ\SBJV = 3M/N/NS.OBJ = put.SG\SBJV-SUB

*nî.î* *yâ = pâ-'î* *ēgá*  
 CONJ PCì.3F/M/N/NS.SBJ.SBJV = be.dry\SBJV-SUB if

*mā = nà = tū'y-gú*  
 PRF = 3M/N/NS.SBJ\SBJV = fell\CIRC-CIRC

‘[On how to make a swidden:] Once you’ve cleared it [*i.e.* the patch of jungle you’ve selected] from its undergrowth, then you cut down the smaller trees. Once the smaller trees have been cut down, uh... you leave it [all] to dry for one month, once they [*i.e.* the bigger trees] have been cut down [too].’ [LAR D230–233]

The passive construction in SMAT **does not seem to allow for the overt expression of an agent participant** (*e.g.* as an oblique equivalent to English ‘by ...’).

The passive construction **does not affect the predicative class of the predicative phrase it is applied to**. In examples (438a) and (438b) above, for instance, the predicative phrase /*ǵũ-ègù*/ (slant?-INV) ‘to flip over’ is inflected in the predicative class PCØ in both its ordinary transitive and its passive uses. Similarly, in the following example, /*dâ-yé*/ (chop-in.the.middle) ‘to cut in halves’ is inflected in PCī in a passive construction, in the same way as when it occurs in a transitive construction<sup>256</sup> (compare also the two occurrences of the verb root *yě* ‘to chop down’ in (440), which both feature PCī inflection):

(441) *Nî-dâyé gá tûmàârû ná'î*

*nî = dâ-yé* *gá = tû-mà-ârû*  
 3M/N/NS.SBJ.PCī = chop-in.the.middle LK.F/M/NS.PST = 3S-ANAPH-GEN  
*ná'î*  
 younger.chambira.palm

‘Her chambira fiber [skein] was cut in halves.’ [IGS 14]

Although the passive construction gets a **stative-resultative reading in most of its uses**, this *Aktionsart* feature is only implied as a **tendency rather than being intrinsic to that construction**. The following example displays a case of passive construction with a telic reading, which is evidenced by the presence of an adjunct providing a punctual temporal reference for the event referred to:<sup>257</sup>

<sup>256</sup>On the suffix /-yé/ ‘in.the.middle’, which typically reassigns to PCī the predicative phrases it is attached to, see SECTION 4.2.3.11.

<sup>257</sup>Note that in example (442), the passive construction /*nà = ũ-'î*/ (3M/N/NS.SBJ\SBJV = make\SBJV-SUB) ‘it is made’ (where /*nà =*/ ‘3M/N/NS.SBJ\SBJV =’ in-



(442) *Yěmà, námá'a chī-dé'ā'ǔ ÿkú, [...] ġè'kūrū tàunēkūgù yì-ì'ǔ gá nà-ǔ'ǔ gâ dââ ïànè [...]*...

*yě-mà*                      *ná-má'a*      *chī = dé'ā-'ǔ*                                      *ÿkú*  
DIST.ALOC-ANAPH    3N/NS-COM    1SG.SBJ.PCī = speak\SBJV-SUB    I.mean

*ġè'kūrū*                      *tàunēkū-gù*      *yì = ì-'ǔ*  
which?.M-kind.of    year-PLOC      PCì.3F/M/N/NS.SBJ.SBJV = be\SBJV-SUB

*gá = nâ = ǔ-'ǔ*    *gâ = dâ-â*  
LK.F/M/NS.PST = 3M/N/NS.SBJ\SBJV = make\SBJV-SUB    LK.N/S.PST = PROX.N-EXO

*ï-ànè*  
building-space

'And then, I talked with them, [I told them] [...] in what year this community was created [...]...' [JGS 355–358]

So far, I have referred to the phenomenon discussed in this section as a morphologically unmarked passive construction allowing intrinsically transitive predicative phrases to be used intransitively. The same phenomenon could be described as a case of radical ambitransitivity of the predicative phrases in question. These could be said to be intrinsically unspecified for transitivity, *i.e.* to be just equally available for the realization of both intransitive and transitive constructions, with essentially the same semantic content. These predicative phrases would feature a property only recently recognized in an explicit way in typological literature and characterized by Creissels as **active-passive patient-preserving lability** (Creissels 2016:110–113).

From my point of view, such an analysis, while essentially correct, can misleadingly suggest 1) that the ability of a given predicative phrase to be used both

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dexes a subject argument) is homonymous with the ordinary transitive construction /nâ = ǔ-'ǔ/ (3M/N/NS.OBJ\SBJV = make\SBJV-SUB) 'we (incl.) make it, people make it' (where /nâ = /'3M/N/NS.OBJ\SBJV = ' indexes an object argument, and a fourth person subject argument is to be contextually understood). In practice, ambiguity between passive constructions and transitive constructions resulting from cases of homonymy among inflectional proclitics of the predicative phrase is frequent in the Subjunctive Inflectional Type. In (442), however, although a transitive interpretation remains available, the immediate context makes an passive reading far more plausible. A transitive reading would imply that a fourth person subject is to be understood, but fourth person subjects either refer to an inclusive first person plural (which is obviously not the case here, as neither speaker nor hearer took part in the process referred to), or are typically found in generic discourse genres (*e.g.* in procedural discourse), and not in reference to specific historical events like here. The subject of *nâ-ǔ'ǔ* in (442) is therefore much more likely to be an indefinite but specific third person, rather than a generic fourth person.

intransitively and transitively derives from a specific lexical property of that predicative phrase, namely its lability, and 2) that there is no directionality of any kind between the intransitive uses and the transitive uses of such predicative phrases, which tend to indiscriminately occur in both intransitive and transitive constructions. However, although the passive construction is in practice relatively rare in discourse, it seems that at least a vast majority of transitive predicative phrases may be submitted to it. Its **high productivity** inclines me to treat it as a morphosyntactic construction typically available to any transitive predicative phrase, rather than as an alternative use of particular predicative phrases allowed by specific properties of the latter. On the other hand, **predicative phrases that may occur in the passive construction are in practice used transitively in the vast majority of their occurrences in discourse.** This significant differential in frequency between transitive (frequent) and passive (rare) uses of these predicative phrases suggests some sort of directionality between the two uses, with transitive uses being more primary and passive uses being more secondary. This is why I have opted for treating the passive construction as a morphosyntactic operation that derives intransitive constructions from predicative phrases that are intrinsically transitive.

#### 4.5.3.2 Factitive construction

Although of much more limited use than the passive construction, a converse phenomenon also occurs, whereby predicative phrases usually employed intransitively are occasionally used transitively with no derivational morphology involved. I call “**factitive construction**” the transitive use of a predicative phrase more typically used intransitively. The meaning of this construction can be roughly glossed as ‘to cause or induce something to be in the state denoted by the predicative phrase’. Only intransitive predicative phrases with a stative *Aktionsart* may be submitted to it. When this occurs, the **single argument of the intransitive construction takes on the syntactic function of core object in the resulting construction, but retains its semantic role of theme.** The **subject position** of the resulting construction is occupied by an **extra argument whose referent is semantically the agent that causes the object argument to be the theme of the predicate.** Contrast the ordinary intransitive construction in example (443a) with the factitive construction in (443b), both involving the predicative phrase /*ǵě-nátū*/ (not.have-father) ‘not to have a father’:

(443) a. **Intransitive construction:**

*tā-gēnátūē*

*tā = gē-nátū-ē*

1PL.SBJ = not.have-father-INTR.PL

‘we were orphans’ [GRA 161]

b. **Factitive construction:**

*yěmá âi gá nā-gēnátū’ú*

*yě-má            âi*

DIST.NS-ANAPH    wild.felid

*gá = nā = gē-nátū-’ú*

LK.F/M/S/NS.PST = 3M/N/NS.OBJ = not.have-father\SBJV-REL.NS

‘the jaguar who had orphaned them’ [LAR C523–524]

Contrast, in the same way, examples (444a) and (444b), which likewise feature the same verb root *tà’kú* ‘be an orphan’ used in an intransitive and a factitive construction, respectively:

(444) a. “[...] *mārū pē-tà’kūē*.”

*mārū pē = tà’kū-ē*

PRF    2PL.SBJ = be.an.orphan-INTR.PL

“[...] you are orphans now.” [LAR T142]

b. [...] *ná-múú <nū-ĩ gá... > nū-ĩ gá nūmà yì-’ú gá nà-tà’kú’ú gá yěmá bū’úgú, gá Yó’í rù Ìpí rù năēyātágú.*

*ná = múú*

*< nū.ĩ gá = ... >*

*nū.ĩ*

3M/N/NS.SBJ = be.afraid    CONJ    LK.F/M/S/NS.PST =    CONJ

*gá = nū-mà*

*yì = ì-’ú*

LK.F/M/S/NS.PST = 3N/NS-ANAPH    PCì.3F/M/N/NS.SBJ.SBJV = be\SBJV-SUB

*gá = nā = tà’kú-’ú*

LK.F/M/S/NS.PST = 3M/N/NS.SBJ\SBJV = be.an.orphan-3M/N/NS.OBJ\SBJV-SUB

*gá = yě-má*

*bū-’ú-gú*

LK.F/M/S/NS.PST = DIST.NS-ANAPH    be.young\SBJV-REL.NS-PL

*gá = Yó’í*

*rù Ìpí rù nă-ēyā-tá-gú*

LK.F/M/S/NS.PST = Yoi and Ipi and 3M-sister-COLL-PL

‘[The jaguar was reluctant to come closer to the mythological brothers Yoi and Ipi, because] he was afraid because... because he was the one who had orphaned the children, Yoi and Ipi and their sisters.’ [LAR C486–490]

Likewise, **non-verbal possessive predicative phrases in /-ã/**, although they are mostly used intransitively (with the meaning ‘to have X’, as in *e.g.* /chā = dīērù-ã/ [1SG.SBJ = money-POSS] ‘I have a dog/dogs’), may regularly be used transitively with no morphological modification (with the meaning ‘to give X, to provide with X’, as in *e.g.* /chā = nā = dīērù-ã/ [1SG.SBJ = 3M/N/NS.OBJ = money-POSS] ‘I gave her/him money’). On the non-verbal predicative phrases in /-ã/ ‘POSS’, see SECTION 4.3.3.6.

Just like the passive construction, the factitive construction **does not affect the predicative class of the predicative phrase it is applied to.**

The factitive construction seems to stand in **functional overlap with the causative construction in /-’é’e/ ‘CAUS’ in cases where the latter is derived from an initially intransitive predicative phrase with a stative *Aktionsart*** (on /-’é’e/ ‘CAUS’, see SECTION 4.5.2). Thus, for instance, the meaning of the intransitive verb root *tà’kú* ‘be an orphan’ used transitively in a factitive construction as in example (444a) above (‘to cause or induce to be an orphan’) is essentially identical to the meaning of the same intransitive verb root when it is used in a causative construction derived with /-’é’e/ ‘CAUS’ (‘to cause to be an orphan’), as in the following example:

(445) “*Âi nû-î yá pē-tà’kú-ē-’é-è-kū.*”

*âi*            *nû=î*  
wild.felid 3M/N/NS.SBJ.PCì = be

*yá = pē = tà’kú-ē-’é-è-kū*  
LK.M/S = 2PL.ACC = be.an.orphan-INTR.PL-CAUS\SBJV-REL.M

“‘It’s a jaguar that has orphaned you.’” [LAR T143]



# Chapter 5

## Inflection of the predicative phrase

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This chapter describes the inflectional morphology of the finite predicative phrase. Nearly all of the morphemes under study here are **proclitics** that immediately precede the predicative phrase. The only exception to this generalization is a **suffix** that is immediately attached to the right edge of the predicative phrase. The function of many of these morphemes is to **index participants** with various syntactic functions: subjects, objects, accusative participants (which are morphosyntactically and, to a certain extent, semantically distinct from (core) objects), benefactive(-malefactive) participants, locative participants, and partitive object participants. Other morphemes are **markers of the predicative class** (or “conjugation class”, so to say) of the predicative phrase they precede. Still others encode that the predicative phrase features **associated motion**. A number of these morphemes are **portmanteau morphemes** that realize several of these functions simultaneously. These contribute to make the predominantly agglutinative morphology of SMAT fusional to a certain extent. Finally, one specific inflectional value (the Subjunctive Inflectional Type) involves **tonological alternations** among its phonological exponents and thus constitutes a case of partially suprasegmental morphology.

Crucially, note that the inflectional morphology of the predicative phrase **does not directly encode any notions of tense, aspect, mood, or evidentiality** (to the exception—arguably—of the progressive aspect, on which see SECTION 5.7.2.1, p.462). Such notions are mostly encoded by means of derivational suffixes of the predicative phrase (see SECTION 4.4), clause-level enclitics and particles, or, in the

case of tense specifically, within nominal constituents via the inflection of certain word classes for nominal tense.

The following two examples **illustrate part of these introductory observations** about the formal and functional properties of the inflectional morphology of the predicative phrase in SMAT:

(446) *í'gù tūnárū-chó'é'e*

*í'-gù*                    *tū = ná = rū = chó-'é'e*  
 building-PLOC    3S.ACC = 3M/N/NS.SBJ = PCrū = be.there.PL-CAUS

‘he had them stay home’ [LAR T96]

(447) *yànà-kâwē-à'ú'ã'a*

*yà = nà = kâwē-à-'ú'ã'a*  
 AM = 3M/N/NS.SBJ\SBJV = pluck.SG-3M/N/NS.OBJ(\SBJV)-SUB = QUOT

‘he went and plucked it’ [LAR T43]

Example (446) displays a predicative phrase inflected in the Indicative Inflectional Type. The Indicative Inflectional Type can be considered, from a morphological perspective, as the unmarked Inflectional Type (by contrast with the other two Inflectional Types of the language, specifically the Subjunctive Inflectional Type and, to a certain extent, the Imperative Inflectional Type). That is why this feature is not included in the example’s gloss. The inflectional proclitics in this example, whose sequence represents a typical case of agglutinative morphology, successively index a participant in the accusative (/tū = / ‘3S.ACC’) and a subject participant (/ná = / ‘3M/N/NS.SBJ’), and encode the predicative class (or “conjugation class”) of the predicative phrase (/rū = / ‘PCrū’). This predicative class is in this case inherited by the predicative phrase /chó-'é'e/ (be.there.PL-CAUS) ‘to cause to be somewhere (pl.)’ from the lexical predicative class of the verb root *chó* ‘be there (pl.)’ from which it is derived. Example (447) displays a predicative phrase inflected in the Subjunctive Inflectional Type. This manifests itself suprasegmentally on one of the inflectional proclitics (in this case, the third person subject index /nà = / ‘3M/N/NS.SBJ\SBJV’, whose toneme /<sup>1</sup>/ can be interpreted as an exponent of the Subjunctive Inflectional Type) as well as—in principle—on the last syllable of the predicative phrase itself (in this case, the third person object index /-ã/ ‘3M/N/NS.OBJ’, *i.e.* the unique inflectional suffix of the predicative phrase, which happens not to shift toneme under the effect of the morphotonological alternations that regularly affect the last syllable of predicative phrases in the Subjunctive Inflectional Type, hence the parentheses



in its gloss ‘3M/N/NS.OBJ(\SBJV)’). Note, importantly, that in glosses features with an exclusively suprasegmental exponent are preceded by a backslash <\>. Finally, the inflectional proclitic /yà= / ‘AM’ in (447) indicates that the main process (‘he plucked it’) is preceded by an associated motion event (‘he *went and* plucked it’).

This chapter is organized as follows. SECTION 5.1 gives a general **overview of the entire inflectional template** of the finite predicative phrase and of the various morphosyntactic categories that its 8 morphological slots allow to encode. SECTION 5.2 introduces, from both a formal perspective and a functional perspective, the major distinction that obtains between what I label the **three Inflectional Types** (or “moods”, as a very first approximation) of the language, specifically the Indicative Inflectional Type (IND), the Imperative Inflectional Type (IMP), and the Subjunctive Inflectional Type (SBJV). Although the morphology of all three Inflectional Types roughly operates within the same inflectional template, their specific paradigms differ within slots 4 to 8 of that template. SECTIONS 5.3, 5.4, and 5.5 successively describe the **specific inflectional morphology of IND, IMP, and SBJV** occurring in these slots. SECTION 5.6 displays a series of **inflectional charts** that summarize the detailed descriptions given in SECTIONS 5.3–5.5. SECTION 5.7 proceeds to describe the **inflectional morphology that occurs in slots 1 to 3** of the inflectional template of the predicative phrase, which remains identical across the three Inflectional Types. SECTIONS 5.3 through 5.7 thus provide a complete description (slots 1 through 8)—but to a large extent a formal one—of the morphological material that contributes the encoding of inflectional features of the predicative phrase in SMAT. SECTIONS 5.8 and 5.9 respectively focus, from a chiefly functional perspective, on two of the grammatical categories that are encoded by this morphological material, specifically **associated motion** (encoded in slot 5) and **predicative class** (encoded in slot 6). Finally, SECTION 5.10 discusses the various morphological strategies available in the language for the encoding of the **number feature of participants** within the predicative phrase itself, whether these strategies involve strictly inflectional morphological material from slots 1–8 or other morphological material.

## 5.1 Introduction to the inflectional template of the finite predicative phrase

A general **overview of the inflectional template of the finite predicative phrase** is provided in the following figure:

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<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>PP</b>	<b>8</b>
BEN =	ACC =	LOC/PART =	SBJ =	AM =	PC =	3 =	...	-3M/N/NS.OBJ

The first row in the figure assigns a specific number to each of the **eight morphological slots in the template**, from 1 to 8 (PP stands for “predicative phrase”). This numeration will be kept throughout this chapter. The paradigms of morphemes available in slots 4 to 8 display slight variations depending on which of the three Inflectional Types (or “moods”, so to say) the predicative phrase is inflected in. Those in slots 1 to 3, by contrast, are identical across the three Inflectional Types. All the morphemes that belong in slots 1 to 7 are **proclitics** that immediately precede the predicative phrase. By contrast, the one and only morpheme available in slot 8 is a **suffix** that is immediately attached to the right edge of the predicative phrase. Note that in a number of cases, within the domain of slots 4 to 7, a single **fusional (or portmanteau) morpheme** simultaneously fills two of the slots, or, in other words, encodes the combination of the features belonging functionally to two distinct slots.

The second row in the figure above is roughly devised like a gloss. To each slot corresponds an abbreviation that refers to the **main function fulfilled by that slot**. These abbreviations are to be understood as follows:

- BEN: indexation of a **benefactive participant**;
- ACC: indexation of an **accusative participant**;
- LOC/PART: indexation of a **locative or partitive object participant**;
- SBJ: indexation of the **subject argument**;
- AM: encoding of **associated motion**;
- PC: encoding of the **predicative class** (or “conjugation class”);
- 3: indexation of a **third person (masculine, neuter, non-salientive, or feminine) subject or (core) object argument**;
- 3M/N/NS.OBJ: indexation of a **third person (masculine, neuter, or non-salientive) (core) object argument**.

Importantly, recall that, as this list suggests, the inflectional template of the predicative phrase in SMAT does not directly encode any notions of tense, aspect, mood,

or evidentiality (see the introduction to this chapter for a brief discussion of this point).

Note that the figure above is meant to be **no more than a practical summary**. As such, it assembles within a single template morphological **slots that may rarely, or never, co-occur within a single inflected predicative phrase**. In fact, the eight slots in this figure can never be filled simultaneously, although all of them can be argued to constitute separate slots. In practice, inflected predicative phrases with more than four of these slots filled are rarely to be found in spontaneous speech, and under certain conditions it may even happen that a given inflected predicative phrase has none of these slots filled. Note also, importantly, that in the figure above the major distinction between the three Inflectional Types of the language is ignored. This is because the category of Inflectional Type is not straightforwardly encoded by a particular slot within the inflectional template of the predicative phrase, but by a complex combination of factors that may operate in one or several of slots 4 to 8, and/or in the predicative phrase itself. The formal and functional characteristics of the three Inflectional Types are introduced in the next section.

TABLES 39 and 40 provide the **detailed set of the values that can be encoded in each of slots 1 to 3 (TABLE 39) and slots 4 to 8 (TABLE 40)** of the inflectional template of the predicative phrase. Note that TABLE 40 puts together all of the values that are found across the three Inflectional Types. In fact, **none of the Inflectional Types allows to encode that complete set of values**, although each does allow to encode most of them. By contrast, **all of the values listed in TABLE 39 can be encoded in all three Inflectional Types**. Note also that the morpheme shapes listed in TABLE 40 for each value are only indicative. In fact, only one of them (/ -ã / '3M/N/NS.OBJ') stands in a strict bijective relation with respect to the value that corresponds to it in TABLE 40. But the rest of these **morpheme shapes can be said to be "basic"** inasmuch as they are relatively frequent exponents of their corresponding values and can be argued to be the etymological building blocks of all of the other existing exponents of these values described in detail in SECTIONS 5.3 through 5.5. By contrast, **all of the morpheme shapes listed in TABLE 39 stand in an essentially bijective relation with their corresponding values**.

As shown in these tables, the values that can be encoded by the benefactive participant index (**slot 1**), the accusative participant index (**slot 2**), and the subject index (**slot 4**) are identical sets of combinations of person & number features or person & nominal class features. The third person index in **slot 3** may either stand for a locative participant (in the areal locative or in the punctual locative syntactic

1 BEN =		2 ACC =		3 LOC/PART =	
1SG	<i>chǎ= /chǒ=</i>	1SG	<i>chā= /chō=</i>	3ALOC	<i>í=</i>
1PL	<i>kú=</i>	1PL	<i>kū=</i>	CTRPET.3ALOC	<i>ně= /nú=</i>
2SG	<i>tǒ=</i>	2SG	<i>tō=</i>	3PLOC	<i>ì=</i>
2PL	<i>pě=</i>	2PL	<i>pē=</i>	3M.PART.OBJ	<i>nè=</i>
3F	<i>í=</i>	3F	<i>ī=</i>	3N.PART.OBJ	<i>ně= (/nú= ?)</i>
3M/N/NS	<i>nú=</i>	3M/N/NS	<i>nī=</i>	3NS.PART.OBJ	<i>tà=</i>
3S	<i>tú=</i>	3S	<i>tū=</i>		
4	<i>tú=</i>	4	<i>tū=</i>		

**TABLE 39.** Set of values of the morphosyntactic categories encoded in slots 1 to 3 of the inflectional template of the predicative phrase with their corresponding morpheme shapes

4 SBJ =		5 AM =		6 PC =		7 3 =		PP		8 -3M/N/NS.OBJ	
1SG	<i>chā=</i>	$\pm y\grave{a}=$	PC $\emptyset$	$\emptyset$	F	<i>nā=</i>	...			$\pm -\grave{a}$	
1PL	<i>kū=</i>		PC $\bar{i}$	$\bar{i}=$	3M/N/NS	<i>nā=</i>					
2SG	<i>tā=</i>		PC $\grave{i}$	$\grave{i}=$							
2PL	<i>pē=</i>		PC $r\bar{u}$	$r\bar{u}=$							
3F	$\bar{i}=$		PC $n\grave{a}$	$n\grave{a}=$							
3M/N/NS	<i>ná=</i>										
3S	<i>tá=</i>										
4	<i>tá=</i>										

**TABLE 40.** Combined set of values of the morphosyntactic categories encoded in slots 4 to 8 of the inflectional template of the predicative phrase in *IND*, *IMP*, and *SBJV*, with their corresponding “basic” morpheme shapes

function), in which case it makes no distinction of nominal class, or it may stand for a partitive object participant, in which case it differs whether it stands for a participant in the masculine, neuter, or non-salientive nominal class (partitive objects in the feminine or salientive nominal class can never, for their part, be indexed on the predicative phrase). The third person index in **slot 7**, which may stand for a subject or an object argument depending on the context, may only take the values masculine/neuter/non-salientive (M/N/NS) or feminine (F). Incidentally, this implies that salientive (S) third person subject or object arguments can never be indexed in slot 7 and that their indexation, in contexts where they would be indexed in slot 7 if they belonged to another nominal class, therefore has to occur in other slots (specifically in slot 4 in cases where they stand for a subject argument, and—by a phenomenon of differential object marking—in slot 2 in cases where they stand for an object argument, in which case they are encoded morphologically as an accusative participant). The third person (masculine, neuter, or non-salientive) object index in **slot 8** is simply either present or absent. Likewise, the feature of associated motion encoded in **slot 5** is simply either present or absent. Finally, the values encoded in **slot 6** straightforwardly correspond to each of the five predicative classes of the language (note that PCØ, by contrast with the other predicative classes, is morphologically unmarked in most cases, and that in such cases I do not, accordingly, state its presence explicitly in glosses).

The following examples (repeated from (446) and (447) above) provide the **mapping of actual occurrences of inflected predicative phrases with the templatic analysis** just put forward (the first row of these examples is repeated from the first row of the figure provided above at the beginning of this section):

(446')	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>PP</b>	<b>8</b>
		<i>tũ</i> =		<i>ná</i> =		<i>rũ</i> =		<i>chó-’é’e</i>	
		3S.ACC =		3M/N/NS.SBJ =		PC <i>rũ</i> =		be.there.PL-CAUS	

‘he had them stay home’ [LAR T96]

(447')	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>PP</b>	<b>8</b>
				<i>yà</i> =		<i>nà</i> =		<i>kâwē</i>	<i>-ã</i>
				AM =		3M/N/NS.SBJ\SBJV =		pluck.SG	-3M/N/NS.OBJ\SBJV (-SUB)

‘he went and plucked it’ [LAR T43]

## 5.2 Functional distribution of the three Inflectional Types: Indicative, Imperative, Subjunctive (and Subjunctive + -'ŭ́ 'SUB')

### 5.2.1 Overview

I use the terminologically neuter label “Inflectional Types” to refer to the three values of a major inflectional category of the predicative phrase that can be **relatively easily defined from a strictly formal perspective**, but two of which prove extremely **uneasy to define in a unified fashion from a functional perspective**.<sup>258</sup> These three values are the **Indicative Inflectional Type (IND)**, the **Imperative Inflectional Type (IMP)**, and the **Subjunctive Inflectional Type (SBJV)**. In some of its uses, the Subjunctive Inflectional Type occurs in combination with the subordinator suffix /-'ŭ́/ ‘SUB’. Because this **combination (SBJV-'ŭ́)** is extremely frequent and displays a wide array of functions, it is treated on a par with the three Inflectional Types proper whenever a functional perspective is adopted in this chapter (and in particular throughout the present section) although SBJV-'ŭ́ is to be understood, from a strictly morphological perspective, as a subtype of SBJV. Note that whenever convenient, I refer to any instance of SBJV that does not involve the morpheme /-'ŭ́/ ‘SUB’ as a case of “bare” SBJV, as opposed to cases of SBJV-'ŭ́.

Morphologically speaking, each of the three Inflectional Types proper displays a **slightly different inflectional template**, involving a specific subset of the slots introduced at the beginning of SECTION 5.1 above, a specific subset of the values listed in TABLE 40, and a partially specific set of morpheme shapes.

**IND** does not feature a slot 8. In slot 7, IND cannot encode the value F (*i.e.* feminine). For practical purposes at least (but probably also from a diachronic perspective), IND can be seen as the **default or unmarked Inflectional Type** on which IMP and part of SBJV are based morphologically. This is why the inflectional morphology of IND is treated first in this chapter (SECTION 5.3), before those of IMP (5.4) and SBJV (5.5). This is also why throughout this grammatical description only the explicit morphological marking of IMP and SBJV is reflected in the glosses

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<sup>258</sup>The French terminological tradition has coined the deliberately vague phrase *tiroir verbal* (lit. ‘verbal drawer’) to neutrally refer to such functionally blurry—but formally rather clearcut—inflectional categories of the verb (see *e.g.* Creissels 2006b:181–182).

(as ‘.IMP’, ‘.SBJV’, or ‘\SBJV’—the latter when the phonological exponent of ‘SBJV’ is tonological). By contrast, where inflectional morphological material of IND is used, no Inflectional Type gloss is featured (compare the glosses in examples (448a) and (448c) below, for instance).

**IMP is essentially identical to IND**, except that it further lacks a slot 4.

**SBJV**, by contrast with both IND and IMP, does feature a slot 8, and does feature the value F in slot 7. In slot 4, however, SBJV does not feature the values 3M/N/NS, 3F, and 4. Subjects in these person & nominal class combinations are indexed in slot 7 instead. The morphemes used as explicit exponents of SBJV in slots 4 to 7 typically—but not systematically—involve a **tonological deviation** from their default shape used in IND, namely a shift to toneme /<sup>1</sup>/ (as in e.g. /chā = / ‘1SG.SBJ(.IND)’ featuring toneme /<sup>3</sup>/ vs /chà = / ‘1SG.SBJ\SBJV’, with /<sup>1</sup>/; or /tá = / ‘3S.SBJ(.IND)’ with /<sup>4</sup>/ vs /tâ = / ‘3S.SBJ\SBJV’ with /<sup>1</sup>/; but contrast these indexes, whose toneme shifts to /<sup>1</sup>/ in SBJV, with the index /pē = / ‘2PL.SBJ(.IND)’, whose toneme remains identical in SBJV, /pē = / ‘2PL.SBJ(.SBJV)’).

The specific inflectional morphology of each of the three Inflectional Types is described at length in SECTIONS 5.3–5.5.

Examples (448a–448d) **illustrate the kind of morphological distinctions** that obtain between IND, IMP, and SBJV. They are also intended to briefly **exemplify the kind of functional contrasts** that obtain between IND (448a), IMP (448b), SBJV (448c), and the latter’s frequent combination SBJV-’*û* (448d), here comparing their uses in main clauses (note that out of context, the translations provided in (448a–448d) are no more than indicative translations among several other possibilities; the function exemplified by each example is indicated in parentheses in the terms of the functional distribution of the Inflectional Types outlined below in TABLE 41).

(448) a. **IND (Declarative–Non-sequenced):**

*Tárū-ngù.*  
*tá = rû = ngù*  
 3S.SBJ = PCrû = rest  
 ‘She’s resting/She rested.’

b. **IMP (2SG imperative):**

*Rû-ngù!*  
 (∅ = )rû = ngù  
 (IMP = )PCrû = rest  
 ‘Rest!’

c. **SBJV (Assertion):***Tàrū-ng'ǔ nǎ!**tà = rū = ng'ǔ = nǎ*

3S.SBJ\SBJV = PCrū = rest\SBJV = ASSERT

‘She’s resting/She rested, you know!’

d. **SBJV-’ǔ (Declarative–Sequential step):***Tàrū-ng'ǔ’ǔ.**tà = rū = ng'ǔ-’ǔ*

3S.SBJ\SBJV = PCrū = rest\SBJV-SUB

‘[At that point,] she rests/she rested [specifically in a series of sequenced processes].’

Note that the IMP predicative phrase in (448b) only differs from the IND predicative phrase in (448a) by lacking a subject index in slot 4 (this informative absence of marking is exceptionally materialized and glossed in this example as /( $\emptyset$ ) / ‘(IMP)’). On the other hand, the bare SBJV predicative phrase in (448c) only differs from the IND predicative phrase in (448a) at the tonological level. The default subject morpheme /tá = / ‘3S.SBJ(.IND)’ in (448a) is replaced by /tà = / ‘3S.SBJ\SBJV’ in (448c). Note also that the lexical form of the verb *ngù* ‘to rest’ (with a lexical toneme /<sup>21</sup>/) in (448a) undergoes a morphotonological alternation process operating as a further exponent of SBJV and becomes *ng'ǔ* (with a derived toneme /<sup>CM</sup>/) in (448c). Importantly, the encoding of SBJV at a tonological level only occurs once among the inflectional proclitics of the predicative phrase. This is why the predicative class morpheme /rū = / ‘PCrū’ in (448c) remains identical as in (448a), as SBJV in (448c) is already encoded tonologically on /tà = / ‘3S.SBJ\SBJV’. Finally, as is self-evident, the SBJV-’ǔ predicative phrase in (448d) further differs from (448a) by the addition of the subordinator suffix /-’ǔ / ‘SUB’ to the SBJV predicative phrase as it stands in (448c).

The general **functional distribution of the three Inflectional Types proper and SBJV-’ǔ** is summarized in TABLE 41 ([ $\pm$ ANT] in the first rows of this table stands for presence or absence of advancement of narrative time; on these notions, see next section). In this table, syntactic, semantic, and pragmatic functions are listed together. As this table shows, only IMP has a single, easily identifiable function. IND, SBJV, and SBJV-’ǔ occur in a variety of contexts with a variety of functions and display some functional overlap in main clauses. All of these functions are extensively exemplified and commented upon in the following five sections (5.2.2–5.2.6).



5. INFLECTION OF THE PREDICATIVE PHRASE

	IND	IMP	SBJV	
			Bare SBJV	SBJV-'ú
<b>IN MAIN CLAUSES</b>				
Declarative—Non-sequenced ([-ANT])	✓			
Declarative—Sequential step ([+ANT])				✓
Assertion (... = <i>nǎ</i> or <i>tǎ</i> ...)			✓	
Polar interrogative	✓			✓
Content interrogative	✓			
2SG imperative		✓		
4th person exhortative ( <i>ngì'ā</i> ...)	✓		✓	
Directive with other subject persons			✓	
Curse ( <i>tá</i> = <i>tà</i> ...)			✓	
Deontic				✓
<b>IN DEPENDENT CLAUSES</b>				
<i>Adverbial clauses</i>				
'when/if' (...-'gǔ), 'while' (...-yàné), 'while' ( <i>rù</i> ...), 'until' ( <i>n̄umá</i> = <i>tà</i> ...), 'in this or that manner' (...-àkù)			✓	
'it being the case that' ( <i>ná'a/nû-î</i> ...), 'in order to' (...-'kǎ), 'so that, while' ( <i>ēkǎ/kǎ</i> ...)				✓
'because' ( <i>ērú/yêrú</i> ...)	✓			
<i>Complement clauses</i>				
General case ( <i>ná'a/nû-î</i> ...)				✓
(Indirect polar interrogative ( <i>nǎ</i> ... or <i>rù</i> ...))			✓	
(Indirect command ( <i>rù</i> ...))			✓	
<b>NOT RELATED TO CLAUSE TYPE</b>				
Relativization and subject/object focalization (...-REL)			✓	
Non-subject/object focalization				✓

TABLE 41. Summary of the functional distribution of the Inflectional Types including SBJV-'ú (the Tikuna forms in parentheses are morphemes obligatorily or typically associated with the corresponding functions)

As a caveat, let me make clear that the terms Indicative, Imperative, and Subjunctive used to refer to the three Inflectional Types are to be understood as little more than **practical, mnemonic labels**. Although they are borrowed from the terminological tradition related to the grammatical category of mood, these labels are **by no means intended to suggest that the categories referred to here as Inflectional Types can be, beyond a first approximation, identified and adequately described as moods**. The functional distribution of IND, IMP, and SBJV, however, is vaguely reminiscent of that of the categories traditionally labeled as indicative, imperative, and subjunctive “moods” in the Romance languages. Because many readers will presumably be familiar with that somewhat arbitrary terminological tradition, I have opted for applying it to SMAT’s Inflectional Types (rather than arbitrarily labeling them as *e.g.* Inflectional Type 1, Inflectional Type 2, etc.) with the practical purpose of making it easier for these readers to recognize and distinguish them.

### 5.2.2 Indicative Inflectional Type (IND) and Subjunctive Inflectional Type + -’ $\acute{u}$ ‘SUB’ (SBJV-’ $\acute{u}$ ) in declarative main clauses

In declarative main clauses, IND contrasts with SBJV-’ $\acute{u}$  in a way that is fairly subtle and hard to capture. The interpretation provided here of the functional distribution of IND and SBJV-’ $\acute{u}$  in this context should be seen as tentative and could without doubt be improved. Unfortunately, although this interpretation does **account for a great majority of their occurrences, it also leaves unexplained a number of instances** of predicative phrases in IND and SBJV-’ $\acute{u}$  in declarative main clauses in my corpus. Note, additionally, that because this interpretation heavily relies on discursive factors, it cannot be straightforwardly tested.

As shown in TABLE 41 above, both IND and SBJV-’ $\acute{u}$  occur in declarative main clauses. **IND can be said to be the default, unmarked Inflectional Type in this context**. Its use is general in any declarative context where the processes referred to are not felt to require explicit temporal sequencing in order to be correctly interpreted. This implies that **IND is found in main clauses in a wide and largely heterogeneous array of declarative contexts**, which will be exemplified below. In fact, in the speech of some speakers (*e.g.* IGS), IND is pervasive in declarative main clauses—regardless of the (ir)relevance of explicit temporal sequencing for their interpretation—and only rarely contrasts with SBJV-’ $\acute{u}$ . For these speakers,

the discussion that follows is mostly irrelevant, and as far as they are concerned IND can be simply said to be the regular Inflectional Type found in declarative main clauses of any kind.

However, in the speech of most speakers, **SBJV-’*ú*** is regularly used in declarative main clauses to present a process as constituting a **new, salient step within a temporal sequence of processes**. SBJV-’*ú* is then resorted to as a discursive device that allows the speaker to explicitly construct a clear temporal axis along which major steps are grammatically signaled as such as they are being mentioned. Such uses of SBJV-’*ú* in declarative main clauses could be roughly glossed by ‘at that point, ...’, as was done in the translation of example (448d) above. By contrast, **non-sequential processes, or minor sequential processes** that the speaker does not want to present as sequenced, are referred to with **predicative phrases in IND**. In other words, predicative phrases in SBJV-’*ú* essentially correspond to those that **involve what I call advancement of narrative time ([+ANT])**, while predicative phrases in IND essentially correspond to those that **do not involve advancement of narrative time ([-ANT])**. An important consequence is that predicative phrases in SBJV-’*ú* in declarative main clauses may not be uttered in a different order without typically implying a different sequence for the processes referred to, *i.e.* the ordering of [+ANT] forms conditions the semantic interpretation of the processes referred to. By contrast, predicative phrases in IND in declarative main clauses may be uttered in a different order with no direct implication as to the sequence of the processes referred to, *i.e.* the ordering of [-ANT] forms has no effect on the semantic interpretation of the processes referred to. Note that the ordering of [-ANT] forms does, by contrast, condition the discursive—more specifically, the rhetorical—interpretation of utterances, as it obviously has direct effects on the order in which the information is delivered and construed and the way it is rhetorically organized.<sup>259</sup>

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<sup>259</sup>Thus in example (451) below, which contains three main clauses in IND, the enacted speaker chooses to first make a more generic announcement (‘I’m going to go hunting!’) and then proceeds to make a more specific elaboration on it in the next two utterances (‘I’ll shoot some brown woolly monkeys. I’ll go woolly-monkey-hunting.’). With the exact same semantic meaning, the first utterance (‘I’m going to go hunting!’) could presumably have been uttered last, but then that semantically more generic utterance would have been construed as a summary restatement of the more specific announcement made in the previous two utterances, yielding a different rhetorical structure from the one actually at play in (451). Likewise, in (450) below, the ordering of the three clauses in IND in the answer (‘I’ve shot a beautiful *téré* parrot, it has fallen down here but I can’t find it.’) could in principle be altered (as in *e.g.* ‘A beautiful *téré* parrot has fallen down here, but I can’t find it, [in fact] I’ve shot it.’) with no consequences as to their semantic interpretation, but

Typical discourse genres where the **IND vs SBJV-’ $\ddot{u}$**  contrast is exploited are **narratives** (whether set in a remote past and unrelated to the discourse participants—myths, legends, tales, etc.—or set in a relatively recent past and related to the discourse participants—life stories, anecdotes, etc.) and **procedural discourse** (cooking recipes, descriptions of craft techniques, chronologically-ordered descriptions of the typical activities carried out in a given period of time, etc.). In these discourse genres, while predicative phrases in SBJV-’ $\ddot{u}$  are used to orderly unroll the series of major events (or steps to be conducted), predicative phrases in IND are generally employed with one or several of the following six main discursive functions (the simple illustrative contexts of use in parentheses are made up examples that parallel actual occurrences in my corpus; actual examples are provided below):<sup>260</sup>

- **locating a major event** in space or time (e.g. ‘The next day came.IND. Then he went.SBJV-’ $\ddot{u}$  into the jungle.’);
- mentioning **preliminary minor events** (e.g. ‘He eventually spotted.SBJV-’ $\ddot{u}$  a monkey. He came closer.IND and he shot.SBJV-’ $\ddot{u}$  it.’);
- **recapitulating** a previous major event (e.g. ‘And then he came down.SBJV-’ $\ddot{u}$ . So, he came down.IND, and then he started.SBJV-’ $\ddot{u}$  to speak.’);<sup>261</sup>

such alterations would affect the rhetorical relations that bind them into a small discourse unit. In practice, in (450), the rhetorical principle that guides the ordering of the clauses in IND under scrutiny is temporal iconicity, but the use of IND in these clauses indicates that establishing a clear temporal axis is not essential to the purposes of the enacted speaker at that moment.

<sup>260</sup>Interestingly, when they fulfill one of the first three functions in this list, main declarative clauses containing a predicative phrase in IND are often explicitly topicalized by means of a topic marker (/ =  $\dot{i}$ / ‘CONTR.TOP’ in non-past contexts or / =  $\dot{g}\acute{a}$ / ‘PST’ in past contexts) attached at their right edge (as in examples (454a) and (455e) below). This clause-level topicalization process could in fact be argued to turn these clauses into near-dependent clauses (as opposed to genuinely independent main clauses). Note further that all of the six functions in this list are somehow related to topical (*i.e.* already known or backgrounded) information, as opposed to the more focal (*i.e.* unknown or foregrounded) information typically conveyed by declarative main clauses containing a predicative phrase in SBJV-’ $\ddot{u}$ .

<sup>261</sup>The use of such recapitulating clauses for discourse cohesion is frequent in narratives and procedural discourse in SMAT. These recapitulating clauses are of two major formal and functional types. Some include the predicative phrase of the recapitulated clause more or less *verbatim* (“recapitulating linkage” proper in Aikhenvald (2019)’s terminology). These *verbatim* (or specific) recapitulating clauses typically provide linkage from one sentence to the next within a single paragraph and often imply that the two main processes referred to are temporally close to each other (see e.g. examples (454a–454b) below). Other much more formulaic recapitulating clauses feature an anaphoric word referring to the processes to be recapitulated (/ngē-mà/ ‘MED.NS-ANAPH’ in past or non-past

- **initiating a series** of major events (e.g. ‘Once upon a time, a man went.IND into the jungle. There he found.SBJV-’ú a deer.’);
- **elaborating** on specific aspects of a major event occurring at the same reference time (e.g. ‘And then they had.SBJV-’ú dinner. They chatted.IND, they drank.IND [i.e. while eating]. Then they went.SBJV-’ú to bed.);
- **describing** participants of a major event (e.g. ‘The canoe was large.IND.’).

On the other hand, the **IND vs SBJV-’ú** contrast is typically deactivated in **ordinary conversation** with reference to recent past, present, or future processes, i.e. any time the processes referred to are tightly related to the utterance situation and their temporal order is deemed irrelevant or contextually obvious. Predicative phrases in declarative main clauses then tend to **all be inflected in IND**. IND is also virtually systematic in non-temporally-ordered descriptions of events, e.g. in a description of the various activities one carries out or may carry out (in any order) on a given occasion or more generally in one’s daily life. Crucially, **IND is also the default Inflectional Type for predicative phrases in declarative main clauses elicited from speakers out of context**.

Examples (449–453) illustrate uses of IND in contexts where it does not contrast with SBJV-’ú. Examples (449–451), firstly, exemplify the default use of IND in **daily conversation strongly anchored in the utterance situation** (for a good understanding of the examples in this section, recall that the glosses of predicative phrases in IND do not comprise the explicit mention ‘IND’, by contrast with those of predicative phrases in SBJV(-’ú), which comprise the mention ‘SBJV’):

(449) [Ñù’gù?]*—Ñàà gá rù... Nùà chò’rī pōpēràwǎ tá nūchā-dǎu. {Nū}chāyàrū-  
gǔmā ì fecha. Marzogú!*

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contexts indifferently, or /yě-má/ ‘DIST.NS-ANAPH’ in past contexts exclusively) in position of subject of the verb /nî=î/ ‘3M/N/NS.SBJ.PCì = be’, the whole clause ending with a topic marker (lit. ‘This was, and ...’; “summary linkage” in Aikhenvald (2019)’s terminology). These formulaic (or generic) recapitulating clauses often—but not always—provide linkage not between sentences, but between entire paragraphs of discourse and not infrequently involve a temporal gap between the two (sequences of) processes referred to (see e.g. (T7) and (T38)). Occasionally, both a formulaic and a *verbatim* recapitulating clauses occur consecutively (as in e.g. (T136), where it could be that a paragraph break is implied by the formulaic recapitulating clause, while actual temporal contiguity between the preceding and the new paragraph is highlighted by the *verbatim* recapitulating clause). For typological discussions and case studies of the use of specific or generic recapitulation clauses for discursive purposes—a strategy referred to as “tail-head linkage” or “bridge linkage”, among others—see Guillaume (2011) and Aikhenvald (2019).

## 5.2. Functional distribution of the Inflectional Types

*ñù'gù ñâ-à = gá = rù nù-à chò-'rī pōpērà-wá = tá*  
 when? PROX.NS-EXO = PST = TOP PROX.ALOC-EXO 1SG-GEN paper-ALOC = FUT

*nũ = chā = dāu {nũ = }chā = yà = rũ = ġũmā*  
 3M/N/NS.ACC = 1SG.SBJ = see 3M/N/NS.ACC = 1SG.SBJ = AM = PCrũ = forget

*ì = fecha marzo-gú*  
 LK.NS = date March-PLOC

‘[(Denis Bertet:) When [was that first meeting]?]—This one was... I’ll look it up here in my notebook. I’ve forgotten the date. [The speaker thinks for a few seconds.] In March!’ [JSG A209–212]

(450) “*Ákúíkq kũ-dāu?*” *ñâ'ũ*. “*Tāu, téré í mé'kúrà'ũkũ ichā-fè rù nũ'à chíre ĩ-ġũ rù tāu ichā-dāu.*”

*ákú-íkq kũ = dāu ñâ-'ũ tāu téré*  
 what?.NS-CAUSE 2SG.SBJ = see do.thus.3M/N/NS.SBJ.SBJV-SUB NEG *téré*.parrot

*í = mé-'kúrà'ũ-kũ ĩ = chā = fè rù*  
 LK.F = be.good-by.force.of.circumstance\SBJV-REL.F 3F.ACC = 1SG.SBJ = shoot and

*nũ'-à = chíre ĩ = ġũ rù tāu ĩ = chā = dāu*  
 PROX.PLOC-EXO = APRF 3F.SBJ = fall.SG and NEG 3F.ACC = 1SG.SBJ = see

“‘What are you looking for?’ [she]<sup>262</sup> asked. “Well, nothing special, I’ve shot a beautiful *téré* parrot, it has fallen down here but I can’t find it.” [JSG B220–222]

Note that in the answer in example (450), although the events referred to (*i.e.* the three coordinated clauses) are iconically ordered according to a chronological sequence, the use of IND indicates that their pragmatic relevance applies in practice to the utterance situation. That is, the speaker Moe (here enacted by the storyteller) is not telling an orderly story about events that happened independently from the utterance situation (which would have entailed the use of SBJV-’ũ). He is in effect commenting on the utterance situation itself.

(451) “*Fèñũewá tá chā-ũ!* [...] *Ómé tá nèchānā-fè. Óméàrũ fègũwá tá chā-ũ,*” *ñâ'ũ ã'a.*

<sup>262</sup>The speaker mistakenly uses /ñâ-'ũ/ (do.thus.3M/N/NS.SBJ.SBJV-SUB) ‘he said’ instead of /ngí-'ũ/ (do.thus.3F.SBJ.SBJV-SUB) ‘she said’ here.

*fènūē-wá* = *tá*    *chā* = *ú*    *ómé* = *tá*  
 hunt-ALOC = FUT 1SG.SBJ = go.SG brown.woolly.monkey = FUT

*nè* = *chā* = *nā* = *fè*    *ómé-ārū*  
 3M.PART.OBJ = 1SG.SBJ = 3M/N/NS.OBJ = shoot brown.woolly.monkey-GEN

*fè-gù-wá* = *tá*    *chā* = *ú*    *ñâ-’ú* = *ā’a*  
 shoot-PLURAC-ALOC = FUT 1SG.SBJ = go.SG do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT

‘[Ngutapa is telling his plans to his mother:] “I’m going to go hunting! [...] I’ll shoot some brown woolly monkeys. I’ll go woolly-monkey-hunting,” he said.’ [LAR T98–T101]

Examples (452–453), secondly, exemplify the default use of IND in **non-temporally-ordered description**:

- (452) *Nò-rī* objetivo *ì ngēmà rù ná-mé’èchì ērú mārū mǔ’úchì’ú tò-rī* semilla—*nábù*—*náyàrū-táú’ēgú*. *Ngě’mánè yá* especie, *tù’è rù mā náyàrū-ó*, *pō’ígú rù mā náyàrū-ógú*, *gǔ’ú náyàrū-ógú*. *Historia gá núa dâà* escuelawá *nūi-dqu’gú rù*, <*mā tá’ú’ú* *ì* niño... > *wí’á bū’è rù táú mā nūtá-fq*.

*nò-’rī* objetivo *ì = ngē-mà = rù*  
 3N/NS-GEN purpose LK.NS = MED.NS-ANAPH = TOP

*ná = mé-’èchì*    *ērú*    *mārū*  
 3M/N/NS.SBJ = be.good-genuinely because PRF

*mǔ-’úchì-’ú*    *tò-’rī* semilla *ná-bù*  
 be.several-genuinely\SBJV-REL.NS 4-GEN seed 3N/NS-edible.plant

*ná = yà = rū = táú-’ē-gú*    *ngě-’má-nè*  
 3M/N/NS.SBJ = AM = PCrū = be.absent-INTR.PL-PL MED.PLOC-ANAPH\SBJV-REL.N

*yá = especie*    *tù’è = rù*    *mā = ná = yà = rū = ó*  
 LK.M/N/S = species manioc = TOP PRF = 3M/N/NS.SBJ = AM = PCrū = disappear

*pō’ígú = rù*    *mā = ná = yà = rū = ó-gú*    *gǔ-’ú*  
 plantain-PL = TOP PRF = 3M/N/NS.SBJ = AM = PCrū = disappear-PL finish\SBJV-REL.NS

*ná = yà = rū = ó-gú*    *historia = gá núa*  
 3M/N/NS.SBJ = AM = PCrū = disappear-PL story = if PROX.ALOC-EXO

*dâ-à*    *escuela-wá* *nūi = ì = dqu-’gú = rù*  
 PROX.N-EXO school-ALOC 3M/N/NS.ACC = PCØ.SBJV = see\CIRC-CIRC = TOP

<*mā = tá’ú-’ú*    *ì = niño... >*    *wí’á bū-’è = rù*    *táú*  
 PRF = be.absent\SBJV-REL.NS LK.NS = child one? be.young\SBJV-REL.NS = TOP NEG

*mā = nūi = tá = fq*  
 PRF = 3M/N/NS.ACC = 3S.SBJ = know

‘The purpose of that [project] is very important because many of our *semillas*—our varieties—have gone lost. Some species [of] manioc are already

disappearing, banana [species] are disappearing, [species of] everything are disappearing. If you inquire about [traditional] stories here in this school, no child... a child no longer knows them.’ [JSG A161–168]

- (453) *Kú Nariñowá námá’a chà-ú’gù rù, ngémà rù tà, námá’a chānā-ûànè Nariñowá, chíbùpátā’úwá rù námá’a chā-ú, ngémà ì—wí’á ì torremá’a nà-úgú’ú, ngémàwá dāu’nà námá’a chā-ĩ.*

*kú* Nariño-wá *ná-má’a* *chà = ú-’gù = rù*  
I.mean Puerto Nariño-ALOC 3N/NS-COM 1SG.SBJ\SBJV = go.SG-CIRC = TOP

*ngé-mà = rù = tà* *ná-má’a* *chā = nā = û-ànè*  
MED.ALOC-ANAPH = TOP = ADD 3N/NS-COM 1SG.SBJ = 3M/N/NS.OBJ = go.SG-space

Nariño-wá *chíbù-pátā’ú-wá = rù* *ná-má’a* *chā = ú*  
Puerto Nariño-ALOC eat-building-ALOC = TOP 3N/NS-COM 1SG.SBJ = go.SG

*ngé-mà = ì* *wí’á ì = torre-má’a*  
MED.ALOC-ANAPH = CONTR.TOP INDF LK.NS = tower-COM

*nà = ū-gú-’ú* *ngé-mà-wá* *dāu’nà*  
3M/N/NS.SBJ\SBJV = say-PL\SBJV-REL.NS MED.NS-ANAPH-ALOC upper.part

*ná-má’a* *chā = ĩ*  
3N/NS-COM 1SG.SBJ = climb

‘So when I go to [Puerto] Nariño with them [*i.e.* any tourist I guide], well then, I walk them around [Puerto] Nariño, I go to the restaurant with them, or then—a thing they call a tower, I climb to its top with them.’ [JGS 93–97]

Note that in this last example, the speaker is outlining the array of possible activities he may carry out in any relative order in a given situation. He is not describing a schedule with a planned temporal order, in which case predicative phrases in SBJV-’ú would have been expected where this example features predicative phrases in IND.

By contrast with the examples just discussed (which illustrate the default use of IND in contexts where it does not contrast with SBJV-’ú), the following two pieces of sustained speech provide good illustrations of the **typical contrastive uses of IND and SBJV-’ú**, specifically in **narrative discourse** (454) and in **procedural discourse** (455). The respective discursive functions (as identified above on p.401) of predicative phrases in IND in these examples are indicated in the translation line. Note that these examples include two occurrences (in (454c) and (455d), specifically) of predicative phrases in IND and SBJV-’ú in declarative main clauses that can apparently not be properly accounted for by the distributional interpretation of IND and SBJV-’ú provided in the present section.



- (454) a. *Yéámá ná-gū ì, wí'á nátú'ākù-má'a yà-nà-ú'ú.*  
*yé-ámá ná = gū = ì wí'á ná-tú-'ākù-má'a*  
 DIST.ALOC-DIR 3M/N/NS.SBJ = reach = CONTR.TOP INDF 3N/NS-river-child-COM  
*yà = nà = ú-'ú*  
 AM = PCrú.3M/N/NS.SBJ\SBJV = go.SG\SBJV-SUB  
 'The speaker is in the middle of telling a hunting story.] He [*i.e.* the hunter] went further [IND: preliminary event] and found a creek [SBJV-'ú].'
- b. *Nátú'ākù-má'a náyà-rú-ú gá yǐmá yâtù rù ngémà nà-ú'ú.*  
*ná-tú-'ākù-má'a ná = yà = rú = ú gá = yǐ-má*  
 3N/NS-river-child-COM 3M/N/NS.SBJ = AM = PCrú = go.SG LK.PST = MED.M-EXO  
*yâtù rù ngé-mà nà = ú-'ú*  
 be.a.male and MED.ALOC-ANAPH 3M/N/NS.SBJ\SBJV = go.SG\SBJV-SUB  
 'The man found a creek [IND: recapitulation] and went to it [SBJV-'ú].'
- c. <Nò'rì...> *Nò'rì... gè'rí ná-ú, nò'rì mūkāwà nà-ú'ú rüáčhí nátú'ākù-wá*  
*ná-gū rù nà-à'è'ú gá nūmà.*  
 <nò-'rì...> *nò-'rì gè'rí ná = ú nò-'rì mūkāwà*  
 3M-GEN 3M-GEN bag 3M/N/NS.SBJ = put.SG 3M-GEN rifle  
*nà = ú-'ú rüáčhí ná-tú-'ākù-wá*  
 3M/N/NS.SBJ\SBJV = put.SG\SBJV-SUB and 3N/NS-river-child-ALOC  
*ná = gū rù nà = à'-è-'ú*  
 3M/N/NS.SBJ = reach and 3M/N/NS.SBJ\SBJV = drink-INTR.PL\SBJV-SUB  
*gá = nū-mà*  
 LK.PST = 3M-ANAPH  
 'He left his... his bag [IND: function?] and left his rifle [SBJV-'ú], and he reached the creek [IND: preliminary event] and drank [SBJV-'ú].'
- d. *Nà-à'è'ú, dè'á.*  
*nà = à'-è-'ú dè'á*  
 3M/N/NS.SBJ\SBJV = drink-INTR.PL\SBJV-SUB water  
 'He drank, water [SBJV-'ú].'
- e. *Dè'á{wá} nū-tāwà.*  
*dè'á{-wá} nū = tāwà*  
 water-ALOC 3M/N/NS.SBJ.PCī = be.thirsty  
 'He was thirsty [lit. '... thirsty for water.'] [IND: description].'
- f. *Mārū gá yà-gù'ú, nà-úáčhí'ú.*

*mārū = gá yà = gù-’ú*  
 PRF = PST PCĪ.3M/N/NS.SBJ\SBJV = reach\SBJV-SUB

*nà = ú-áchí-’ú*  
 3M/N/NS.SBJ\SBJV = go.SG-upslope\SBJV-SUB

‘He became satisfied [SBJV-’ú] and resumed his path [SBJV-’ú].’

g. *Nū-ûchìgù, más adelantewá.*

*nū = ú-chìgù* *más adelante-wá*  
 3M/N/NS.SBJ.PCĪ = go.SG-DISTR.SG further.on-ALOC

‘He continued walking, further [IND: elaboration].’

h. *Más adelantewá gá, gǐrú nūnà-ĩnù’ú gá algo.*

*más adelante-wá = gá gǐrú*  
 further.on-ALOC = PST suddenly

*nū = nà = ĩnù-’ú* *gá = algo*  
 3M/N/NS.ACC = 3M/N/NS.SBJ\SBJV = hear\SBJV-SUB LK.PST = something

‘Further on, he suddenly heard something [SBJV-’ú].’

i. *Algo’ú <nà-ĩn... > nà-dǎu’ú.*

*algo-’ú* *<nà = ĩn... >* *nà = dǎu-’ú*  
 something-ACC 3M/N/NS.SBJ\SBJV = 3M/N/NS.SBJ\SBJV = see\SBJV-SUB

‘He hea... he saw something [SBJV-’ú] [...].’ [JSG C48–62]

(455) a. *Pānéràgú kūnā-bā ì dé’á, ngā’ùgù, ǐrā’ú, tâ’ú ì ñù’gù’àkù.*

*pānérà-gú kū = nā = bā* *ì = dé’á* *ngā’ù-gù*  
 pot-PLOC 2SG.SBJ = 3M/N/NS.OBJ = pour LK.NS = water middle-PLOC

*ǐrā-’ú* *tâ-’ú* *ì = ñù’gù-’àkù*  
 be.small\SBJV-REL.NS be.big\SBJV-REL.NS LK.NS = when?-APPROX

‘[Oh, well, the recipe for fish porridge is pretty much the same as for fish broth:] you pour the water into the pot [IND: initiation of series of major events], half way, a little bit [of it], [or] a lot [of it] sometimes.’

b. *Ngémà kùnā-wòú’ú ì pō’í, mārū gàu’ùgú’ú.*

*ngé-mà* *kù = nā = wò-’ú-’ú*  
 MED.ALOC-ANAPH 2SG.SBJ\SBJV = 3M/N/NS.OBJ = drop.PL-off.PL\SBJV-SUB

*ì = pō’í* *mārū gàu-’ú-gú-’ú*  
 LK.NS = plantain PRF tear-out.PL-PL\SBJV-REL.NS

‘You throw in [i.e. into the pot] the plantains [SBJV-’ú], already peeled.’

c. *Kūnā-wòú... tū’è.*

*kū = nā = wò-ù* *tù'è*  
 2SG.SBJ = 3M/N/NS.OBJ = drop.PL-off.PL manioc

'You throw them in... [I mean] the manioc roots [IND: elaboration].'

- d. *Yǒ'ní yà-dōkā'ù* ì, {*ngēmà*} *mārū á kūnā-wòù* ì *ngēmà* <*ákú káná...*>  
*chó'ní*.

*yǒ'ní* *yà = dōkā-'ù = ì*  
 meanwhile PCĪ.3M/N/NS.SBJ\SBJV = boil\SBJV-SUB = CONTR.TOP

{*ngē-mà*} *mārū á*  
 MED.ALOC-ANAPH PRF MED.ALOC-ANAPH

*kū = nā = wò-ù* *ì = ngē-mà*  
 2SG.SBJ = 3M/N/NS.OBJ = drop.PL-off.PL LK.NS = MED.NS-ANAPH

<*ákú = káná...*> *chó'ní*  
 what?.NS = was.it.again fish

'While it's boiling [SBJV-'ù: function?], then you throw in the, uh...  
 the fish [IND: elaboration].'

- e. *Mārū á kūnā-wòù* ì, *kūnā-dū'ù* ì *ngēmà pō'í*.

*mārū á* *kū = nā = wò-ù = ì*  
 PRF MED.ALOC-ANAPH 2SG.SBJ = 3M/N/NS.OBJ = drop.PL-off.PL = CONTR.TOP

*kū = nā = dū-'ù* *ì = ngē-mà*  
 2SG.SBJ\SBJV = 3M/N/NS.OBJ = scrape\SBJV-SUB LK.NS = MED.NS-ANAPH

*pō'í*  
 plantain

'Once you've thrown them in [IND: location in time], you grate the  
 plantains [SBJV-'ù].'

- f. *Ñù'gù'àkù rù* <*tǎ'...*> *tōmáèpìj*, *tǎ're nū-í*.

*ñù'gù-'àkù = rù* <*tǎ'...*> *tōmáèpìj* *tǎ're nū = í*  
 when?-APPROX = TOP three two 3M/N/NS.SBJ.PCĪ = be

'Sometimes there's tw... three, or two of them [IND: description].'

- g. *Kūnā-dú*.

*kū = nā = dú*  
 2SG.SBJ = 3M/N/NS.OBJ = scrape

'You grate them [IND: recapitulation].'

- h. *Mêà mā kūnā-ñúmū'ù*.

*mêà = mā* *kū = nā = ñú-mū-'ù*  
 well = precisely 2SG.SBJ\SBJV = 3M/N/NS.OBJ = crush-paste\SBJV-SUB

'You knead the [plantain] paste well [SBJV-'ù].'

i. *Mêà mā kùnā-ñúmū'ú, kú'me'emá'a.*

*mêà = mā*      *kù = nā = ñú-mū-'ú*  
 well = precisely    2SG.SBJ\SBJV = 3M/N/NS.OBJ = crush-paste\SBJV-SUB

*kú-'me'e-má'a*  
 2SG-hand-COM

'You knead the [plantain] paste well [SBJV-'ú], with your hands [...].'  
 [TVJ B358–369]

A relatively obvious but important remark regarding the notion of advancement of narrative time encoded by predicative forms in SBJV-'ú is in order. The new reference time established by a given [+ANT] predicative phrase does not systematically follow the reference time of the *last* [+ANT] predicative phrase uttered by the speaker. As is to be expected, [+ANT] **predicative forms are not necessarily organized in linear and single-leveled chains**, although they often are (as in a piece of discourse such as 'An event A occurred. After A, an event B occurred. After B, an event C occurred. After C, an event D occurred, etc.'). As a consequence, the reference time of the process encoded by a given [+ANT] predicative form may in practice coincide with, be included within, or even precede, the reference time of the process encoded by the last [+ANT] predicative form uttered by the speaker.

In example (456), for instance, the processes encoded by two [+ANT] predicative forms uttered consecutively by the speaker (labelled processes B and C in the translation line) occur in practice at a single reference time RT2, because both are to be interpreted as advancing narrative time relative to the reference time RT1 of the process encoded by the first uttered [+ANT] predicative form (labelled process A). To put it more simply, the tourists' resting and the speaker's resting, which are in practice two parallel events that roughly coincide temporally (occurring at RT2), are both encoded with [+ANT] predicative phrases because they are conceived of as two distinct processes each of which occurs as a next step relative to the eating (which occurred at RT1).

(456) [...] *námá'a tā-chíbù-ē-gú'ú. Ngémà tā-chíbù-ē-gú-gù ìkú, pā'àáčí nàrū-ngùgú'ú ì nūmà, chòmà tà ìkú chàrū-ngú'ú.*

*ná-má'a*      *tā = chíbù-ē-gú-'ú*      *ngé-mà*  
 3N/NS-COM    1PL.SBJ.SBJV = eat-INTR.PL-PL\SBJV-SUB    MED.ALOC-ANAPH

*tā = chíbù-ē-gú-gù*      *ìkú*      *pā'àáčí*  
 1PL.SBJ.SBJV = eat-INTR.PL-PL-CIRC    I.mean    briefly

$nà = r\bar{u} = ng\bar{u}-g\bar{u}'\bar{u}$   $\grave{i} = n\bar{u}-m\grave{a}$   
 3M/N/NS.SBJ\SBJV = PCr $\bar{u}$  = rest-PL\SBJV-SUB LK.NS = 3N/NS-ANAPH

$ch\grave{o}-m\grave{a} = t\grave{a}$   $\ddot{u}k\bar{u}$   $ch\grave{a} = r\bar{u} = ng\bar{u}'\bar{u}$   
 1SG-ANAPH = ADD I.mean 1SG.SBJ\SBJV = PCr $\bar{u}$  = rest\SBJV-SUB

‘[And then] we eat with them [*i.e.* the tourists we guide] [**process A: +ANT, RT1**]. Then, so after eating, they take a quick rest [**process B: +ANT, RT2**] and so I also take some rest [**process C: +ANT, RT2**].’ [JGS 33–35]

**Mere repetition** (as in (455h–455i)) and **reformulation** (as in (454h–454i)) are frequent and simpler cases in which the processes encoded by two consecutive [+ANT] predicative phrases occur in practice at the exact same reference time. When a speaker repeats or reformulates an utterance containing a [+ANT] predicative phrase, they do not intend to refer to two distinct and temporally consecutive processes. In fact, they are referring twice to the same process, and the two [+ANT] predicative phrases referring to that single process equally signal that the process takes place at a reference time that follows the reference time of a previously mentioned process.

The reference times of the processes encoded by [+ANT] predicative phrases uttered consecutively within a given piece of discourse may thus relate with one another in **all kinds of complex discursive structures**. These will not be studied in detail here however, as they do not directly relate to the language’s morphosyntax, but rather to its discourse pragmatics.

In relation to the intricacies of the notion of advancement of narrative time, note also that **SBJV-’ $\bar{u}$**  occasionally replaces **IND** in the latter’s regular use to initiate a series of major events (on this use of IND, see (455a) above). In this particular case, a predicative phrase in SBJV-’ $\bar{u}$  does not—strictly speaking—*advance* narrative time relative to a previously established reference time (no such reference time having been established yet), but merely signals the start of a sequence involving narrative time, as in the following example, which occurs at the very beginning of a story:

(457) { $N\bar{u}w\acute{a}$ }  $y\acute{e}'g\bar{u}m\acute{a}r\bar{u}'\bar{u}$   $t\grave{a}\bar{a}$   $\bar{a}'a$   $t\bar{u}m\grave{a}k\grave{a}$   $\bar{a}'a$   $y\acute{e}m\grave{a}$   $n\grave{a}-\tilde{g}\acute{o}'\bar{u}$   $g\acute{a}$   $w\bar{a}'\acute{a}$   $g\acute{a}$   $d\bar{u}\bar{u}'\bar{u}$   $\bar{a}'a$   $g\acute{a}$   $n\bar{a}i't\acute{a}w\acute{a}$   $ch\bar{i}b\bar{u}'\bar{u}$   $\bar{a}'a$ .

{ $n\bar{u}w\acute{a}$ }  $y\acute{e}'g\bar{u}m\acute{a}-r\bar{u}'\bar{u}$  =  $t\grave{a}\bar{a}$  =  $\bar{a}'a$   $t\bar{u}-m\grave{a}-k\grave{a}$  =  $\bar{a}'a$   
 well.M/N/NS ANAPH.CIRC.PST-like = itself = QUOT 3S-ANAPH-CAUSE = QUOT

$y\acute{e}-m\grave{a}$   $n\grave{a} = \tilde{g}\acute{o}'\bar{u}$   
 DIST.ALOC-ANAPH 3M/N/NS.SBJ\SBJV = be.visible\SBJV-SUB

$gá = wí'á$                        $gá = dūū-ú̇ = ā'a$   
 LK.F/M/S/NS.PST = INDF    LK.F/M/S/NS.PST = be.a.human\SBJV-REL.NS = QUOT

$gá = nāi'tá-wá$                        $chībū-ú̇ = ā'a$   
 LK.F/M/S/NS.PST = tree.trunk-ALOC    eat\SBJV-REL.NS = QUOT

‘So, just like before [*i.e.* as in another story just told by the same speaker], there [once] appeared to them [*i.e.* the Tikuna people] a man who was eating [seated] on a tree trunk.’ [LAR E94–95]

The tentative interpretation put forward in this section to account for the functional contrast that occurs between IND and SBJV- $ú̇$  in declarative main clauses is admittedly framed in the terms of a typologically non-familiar contrast between non-advancement *vs* advancement of narrative time. An **alternative framing in terms of imperfective or unbounded aspect (IND) *vs* perfective or bounded aspect (SBJV- $ú̇$ )** would certainly give a more familiar look to this grammatical contrast from the perspective of most linguists.

However, note that processes that would **typically be expected to be encoded with perfective or bounded aspect in other languages are regularly inflected in IND** in SMAT, most noticeably in the following contexts (repeated from the list on p.401):

- when the speaker mentions preliminary minor events (*e.g.* ‘He eventually spotted.SBJV- $ú̇$  a monkey. He came closer.IND and he shot.SBJV- $ú̇$  it.’);
- when the speaker recapitulates a previous major event (*e.g.* ‘And then he came down.SBJV- $ú̇$ . So, he came down.IND, and then he started.SBJV- $ú̇$  to speak.’);
- when the speaker initiates a series of major events (*e.g.* ‘Once upon a time, a man went.IND into the jungle. There he found.SBJV- $ú̇$  a deer.’).

Conversely, processes that would **typically be expected to be encoded with imperfective or unbounded aspect in other languages are occasionally—although rarely—inflected in SBJV- $ú̇$**  in SMAT (as in (455d)). In view of these observations, I believe that a typologically more familiar interpretation of the IND *vs* SBJV- $ú̇$  contrast in SMAT declarative main clauses in terms of imperfective *vs* perfective aspects would in practice unduly obliterate a significant part of the specifics of that grammatical contrast.

### 5.2.3 Indicative Inflectional Type (IND) out of declarative main clauses

(i) **USES IN NON-DECLARATIVE MAIN CLAUSES.** In non-declarative main clauses, IND may be used with one of three different functions (on IND in declarative main clauses, see the preceding section):

- it is found in **polar interrogative** utterances (in apparent free variation with SBJV-’*ǔ*, see SECTION 5.2.6 below);
- it is regularly found in **content interrogative** utterances;
- it is commonly found in constructional association with *ngǐ’ā* ‘let’s go’ in (positive) **exhortative** utterances with a 4th person subject (bare SBJV is also occasionally found in this context, see SECTION 5.2.5 below).

As shown in examples (458) and (459), IND occurs in **interrogative utterances, whether polar questions** (as in (458)) **or content questions** (as in (459)). I have not been able to detect any significant semantic or pragmatic distribution between the use of IND and the equally frequent use of SBJV-’*ǔ* in polar interrogative utterances.

(458) Plato *mārū dāu’nà ná-dǎwēnū?*

plato *mārū dāu’nà ná = dǎwēnū*  
plate PRF upper.part 3M/N/NS.SBJ = watch

‘Is the plate with its mouth up already [lit. ‘Does the plate already look up?’]?’ [JCA D4]

(459) “*Ákú nǔà pē-ǔgú ì pēmà?*”

*ákú nǔ-à pē = ǔ-gú ì = pē-mà*  
what?.NS PROX.ALOC-EXO 2PL.SBJ = make-PL LK.NS = 2PL-ANAPH

“‘What are you guys doing here?’” [IGV 320]

The following example illustrates the regular use of IND in association with *ngǐ’ā* ‘let’s go’ in an **exhortative utterance with a 4th person subject**:

(460) “*Ngǐ’ā tá-wīyāēgú!*”

*ngǐ’ā tá = wīyāē-gú*  
let’s.go 4SBJ = sing-PL

“Let’s sing!” [JSG B332]

(ii) **USES IN DEPENDENT CLAUSES.** The use of IND is systematic in **explicative dependent clauses in *ērú* ‘because’ or *yêrú* ‘because.PST’**. This use is illustrated in the following example:

(461) Heike *gá tà-tâ’ú’ú* *yêrú* Leticia*wǎ tá-ú* [...].

Heike = *gá* *tà = tâ’ú’ú* *yêrú* Leticia-*wǎ*  
 Heike = PST 3S.SBJ\SBJV = be.absent\SBJV-SUB because.PST Leticia-ALOC

*tá = ú*  
 3S.SBJ = go.SG

‘Heike wasn’t there because she had gone to Leticia [...].’ [JGS 310–311]

## 5.2.4 Imperative Inflectional Type (IMP)

IMP is the most specialized of the three Inflectional Types. It is exclusively used in main clauses for the expression of **second person singular positive imperatives**, as in the following two examples (see also (448b) above):

(462) *Núà nà-ú!*

*nú-à* *nà = ú*  
 PROX.ALOC-EXO PCØ.IMP = go.SG

‘Come (sg.) here!’ [AMB 201]

(463) *Yéámá’ùrà rû-tǒ!*

*yé-ámá-’ùrà* *rû = tǒ*  
 DIST.ALOC-DIR-slightly PCrû\SBJV = sit

‘Sit a bit further!’ [GRA 37]

## 5.2.5 Bare Subjunctive Inflectional Type (SBJV)

(i) **USES IN MAIN CLAUSES.** Uses of bare SBJV in main clauses are comparatively rare in spontaneous speech. In this context, bare SBJV may fulfill one of two different functions:

- encoding of a general **positive directive** meaning;



- expression of **assertion** (in combination with the morphemes / = *nǎ*/ ‘ASSERT’ or *tǎ* ‘ASSERT.EXPL’).

The **directive** meaning of bare SBJV in main clauses is compatible with any person value of the subject. It is found with first and fourth person subjects with an **exhortative** meaning (as in examples (464–465)), with second person subjects with an **imperative** meaning (as in (466)), and with third person subjects with a **jussive** meaning (as in (467)).

(464) “[...] *ká’a pā’à chàyànā-kâwè!*”

*ká’a* = *pā’à*      *chà* = *yà* = *nā* = *kâwè*  
let’s.see = be.quick    1SG.SBJ\SBJV = AM = 3M/N/NS.OBJ = pluck.SG\SBJV

“[...] let me go and pluck it!” [LAR T41]

(465) “*Ngǐ’ā <rù... > rù tǎēyqyǎē <ì... > ì-wè’kùgǐ!*”

*ngǐ’ā* <*rù... >*    *rù*    *tǎ-ēyq-yǎē* <*ì... >*    *ì = wè’-kù-gǐ*  
let’s.go and                      and 4-sister-hair    PCØ.SBJV = PCØ.SBJV = bind-in.PL-PL\SBJV

“Let’s bind our sisters’ hairs together [one after the other]!” [LAR T145]

(466) “*Pēmà yéámá pē-îgǐ!*”

*pē-mà*      *yé-ámá*      *pē = î-gǐ*  
2PL-ANAPH    DIST.ALOC-DIR    2PL.SBJ.SBJV = go.PL-PL\SBJV

“Go (pl.) away!” [IGV 316]

(467) “[...] *tûgùnà tà-dǎu rù chîrúchìpǎwǎ tà-û rù tûgù’étù tá tànā-gǎgǐ’ú ì ngēmà chîrúchìpǎ!*”

*tû-gù-nà*      *tà = dǎu*                      *rù chîrú-chìpǎ-wǎ*  
3S-REFL-DAT    3S.SBJ\SBJV = see\SBJV and *matamatá*.tree-small.concave.shape-ALOC

*tà = û*                      *rù tû-gù-’étù = tá*  
3S.SBJ\SBJV = go.SG\SBJV and 3S-REFL-eye = FUT

*tà = nā = gǎ-gǐ-’ú*                      *ì = ngē-mà*  
3S.SBJ\SBJV = 3M/N/NS.OBJ = put.on-PL\SBJV-SUB    LK.NS = MED.NS-ANAPH

*chîrú-chìpǎ*  
*matamatá*.tree-small.concave.shape

“[Whoever wants to be safe,] let them take care of themselves, let them go for *matamatá* fruit shells, and they shall put those *matamatá* fruit shells on their eyes [to protect themselves from the coming attack of an evil ghost].” [LAR A34–36]

Of these associations, the one involving **bare SBJV and second person plural subjects (as in (466)) is probably the most common**, given that it is apparently the regular way to express a second person plural positive imperative. Bare SBJV in main clauses seems to be much less likely to occur with subjects in other person-number-nominal class combinations (as in (464–465) and (467)), at least in younger speakers, who in such contexts typically replace bare SBJV with IND (case of a fourth person subject, see SECTION 5.2.3 above) or with SBJV-*ǻ̀* in its deontic function (case of a first or third person subject, see SECTION 5.2.6 below; see example (467) for a case of vacillation between the use of bare SBJV and SBJV-*ǻ̀* for the expression of a jussive meaning).

A rare use of bare SBJV in main clauses, which is likely derived from its general directive meaning, is found in the expression of **wishes and curses**, as in examples (468–469). These interpretations of bare SBJV likely rely on the constructional co-occurrence of other markers associated to them, such as *nǻ̀'kǻ̀* 'soon; if only ...' (in wishes) or /*tá = tà*/ 'FUT? = ADD?' (in curses).

(468) *Tá tà wǻ̀irāwǻ̀ kǻ̀rǻ̀-ǻ̀!*

*tá = tà*      *wǻ̀irā-wǻ̀*      *kǻ̀ = rǻ̀ = ǻ̀*  
 FUT? = ADD?    açai-ALOC    2SG.SBJ\SBJV = PC*rǻ̀* = fall.SG\SBJV

'You shall fall from an açai tree!' [EAR elic.]

(469) “*Nǻ̀'kǻ̀ kǻ̀-dǻ̀, pà kǻ̀, rǻ̀ chā'ǻ̀ ǻ̀kǻ̀-ǻ̀gǻ̀ [...]*!”

*nǻ̀'kǻ̀*      *kǻ̀ = dǻ̀*      *pà = kǻ̀*      *rǻ̀*      *chā-ǻ̀*  
 if.only    2SG.SBJ\SBJV = be.a.human\SBJV    VOC = red.throated.caracara    and    1SG-ACC

*ǻ̀ = kǻ̀ = ǻ̀gǻ̀*  
 3ALOC = 2SG.SBJ.PC*ǻ̀*.SBJV = untie-PL\SBJV

“If only you turned into humans and untied me, caracaras [...]!” [LAR T15]

Bare SBJV is also used in the expression of **assertion**, *i.e.* the expression of information that the speaker thinks does not, or may not, match with the assumptions of the addressee or a third party ('you know, ...', 'this might not be what you/they think, but ...'). With this function, bare SBJV obligatorily co-occurs with the second position clitic / = *nǻ̀*/ 'ASSERT', as in example (470),<sup>263</sup> or the utterance-initial particle *tǻ̀* 'ASSERT.EXPL', as in (471). These two assertion markers have slightly

<sup>263</sup>A hapax morpheme / = *nǻ̀*/, which seems to be phonologically and functionally related to / = *nǻ̀*/ 'ASSERT', occurs in my corpus in the following utterance:

different meanings, with / = ná/ being of more general use and tá typically being associated with the assertion of an explanation provided to account for some other information present in the context.

(470) *Arroz ná nà-tá'yu gá nũ'kúmá!*

arroz = ná    nà = tá'yu    gá = nũ'kúmá  
rice = ASSERT 3M/N/NS.SBJ\SBJV = **be.absent**\SBJV LK.F/M/NS.PST = past.time

‘[(Denis Bertet:) Did people already eat rice in the old days?]-There was no rice in the old days, you know!’ [IGS 613]

(471) [...] *tá gá fènũēwá ì-ú'gù rù tãu ì-âirúãtã'ã, chàu'rü'ũ.*

tá    gá = fènũē-wá    ì = ú-'gù = rù    tãu  
ASSERT.EXPL if = hunt-ALOC PCØ.SBJV = go.SG-CIRC = TOP NEG

ì = âirú-ã-tã'ã    chàu-'rü'ũ  
PCØ.SBJV = dog-POSS-with.a.tendency\SBJV 1SG-like

‘[He didn’t take his dog, who might have bothered him,] because you know, when you go hunting, you don’t normally have a dog, like me.’ [JSG C22–23]

**(ii) USES IN DEPENDENT CLAUSES.** Apart from main clauses, bare SBJV is found in two major kinds of dependent clauses:

- it is regularly found in **circumstantial adverbial clauses** in /...-'gũ/ ‘CIRC’ (‘when/if ...’), /...-yãné/ ‘SIMULT.CIRC’ (‘while ...’), *rù* ... ‘and’ (‘while ...’),<sup>264</sup>

(i) *Dâà nà Leticia rù nô'rĩ rù nà-ĩrã!*

dâ-à = nà    Leticia = rù    nô'rĩ = rù    nà = ãrã  
PROX.N-EXO = ? Leticia = TOP beginning = TOP 3M/N/NS.SBJ\SBJV = **be.small**\SBJV

‘At the beginning, this [city of] Leticia was small, you know!’ [IGS 622]

<sup>264</sup>But not in the adverbial clauses in *rù* ... translatable as ‘because ...’ (or Spanish *que* as in e.g. *¡Cómetelo tú! que a mí no me gusta.*). These normally feature a predicative phrase in IND, not SBJV, as in the following example:

(i) *“Áh, mêà rù chãpē-chĩ'èwē!”*

áh mêà rù    chã = pē = chí'è-wē  
oh well and 1SG.ACC = 2PL.SBJ = **be.bad-convenience**

‘Come on, quiet, you’re bothering me [Sp. *¡Ah, cállense! que me están molestando.*]!’ [IGS 69]

/ñumá = tà .../ ‘present.time = ADD’ (‘until ...’), and /...-àkù/ ‘MAN’ (‘in this or that manner’);

- it is found in the **rare polar interrogative complement clauses** in *nǎ* ... ‘ASSERT’ or *rù* ... ‘and’ (‘whether ...’) and **command complement clauses** in *rù* ... ‘and’ (‘(tell) to ...’).

The various uses of bare SBJV in **circumstantial adverbial clauses** are illustrated in examples (472–477). The use of bare SBJV in association with /-’gǔ/ ‘CIRC’ in its temporal meaning ‘when ...’ is exemplified in example (472). Its use with /-’gǔ/ ‘CIRC’ in its hypothetical meaning ‘if ...’ is exemplified in (473). Its use with /-yǎné/ ‘SIMULT.CIRC’ (‘while ...’) is exemplified in (474). Its use with *rù* ... ‘and’ (‘while ...’) is exemplified in (475). Its use with /ñumá = tà/ ‘present.time = ADD’ (‘until ...’) is exemplified in (476). Finally, its use with /-àkù/ ‘MAN’ (‘in this or that manner’) is exemplified in (477).

(472) [...] *chà-bù’gù tǎ-yǔnátǔ, tǎ-tà’kúē.*

*chà = bù-’gù*                                      *tǎ = yǔ-nátǔ*                      *tǎ = tà’kú-ē*  
1SG.SBJ\SBJV = be.young-CIRC    1PL.SBJ = die-father    1PL.SBJ = be.an.orphan-INTR.PL

‘[...] our father died and we were orphaned when I was a child.’ [GRA 83]

(473) *Ēgá tǎ’ré yì-’gù rù mārū chàuēyǎ tàā tánā-atiende.*

*ēgá tǎ’ré yì = ’gù = rù*    *mārū chàu-ēyǎ = tàā*  
if    two    PCi.3F/M/N/NS.SBJ.SBJV = be-CIRC = TOP    PRF    1SG-sister = itself

*tá = nā = atiende*  
3S.SBJ = 3M/N/NS.OBJ = attend.to

‘If there’s two [lit. ‘If they are two ...’, i.e. two tourists], then my sister waits on them herself.’ [IGV 614]

(474) [...] *nà-yǔyáné gá nǔmà ā’a gá tà-ū’ūè’ū ā’a.*

*nà = yǔ-yáné*    *gá = nǔ-mà = ā’a = gá*  
3M/N/NS.SBJ\SBJV = die-SIMULT.CIRC    LK.F/M/S/NS.PST = 3M-ANAPH = QUOT = PST

*tà = ū-’ū-è-’ū = ā’a*  
3S.SBJ\SBJV = run.PL-?-COLL\SBJV-SUB = QUOT

‘[...] they ran around while he was unconscious.’ [LAR T91]

(475) “*Ākúrú’ū ì chǎpēnā-tū’ù’ū ì chàunētū rù <pē’... > tǎu pēchànā-tū’ē’ē [...] ...?*”

5. INFLECTION OF THE PREDICATIVE PHRASE

*àkú-rú'ú*      *ì = chá = pē = nā = tū'ù-ú*  
 what?.NS-PURP LK.NS = 1SG.BEN = 2PL.SBJ.SBJV = 3M/N/NS.OBJ = fell\SBJV-SUB

*ì = chàu-nētū*      *rù*      *<pê-'... >*      *tāu*  
 LK.NS = 1SG-plant and 2PL-                      NEG

*pē = chà = nā = tū'-é'e*  
 2PL.ACC = 1SG.SBJ\SBJV = 3M/N/NS.OBJ = fell-CAUS\SBJV

“What did you cut down my tree for, when I hadn’t asked you to cut it down [...] ...?” [LAR T139]

(476) [...] *ñumá tà tà-gú nū-ĩ gá tà-yǔè'ú* [...].

*ñumá = tà*              *tà = gú*                      *nū.ĩ*  
 present.time = ADD 3S.SBJ\SBJV = finish\SBJV CONJ

*gá = tà = yǔ-è-'ú*  
 LK.F/M/NS.PST = 3S.SBJ\SBJV = die-COLL\SBJV-SUB

‘[People only ate forest fruits] until all of them died out [lit. ‘until they were finished that they died’] [...].’ [LAR E92]

(477) *Wí'á tá ì posillo... ná-kūwāgú kù-ú'ú, dāu'nàgú tà-dāwēnū-àkù!*

*wí'á = tá = ì*              *posillo*      *ná-kūwā-gù*  
 one = FUT = CONTR.TOP cup 3N/NS-side-PLOC

*kù = ú-'ú*                      *dāu'nà-gú*              *tà = dāwēnū-àkù*  
 2SG.SBJ\SBJV = be.there.SG\SBJV-SUB upper.part-PLOC 3S.SBJ\SBJV = watch-MAN

‘You’re going to put one cup... next to it, with its mouth up [lit. ‘... in the manner of it looking at the top!’]!’ [RCA B8]

Interestingly, while the uses of bare SBJV in circumstantial adverbial clauses just exemplified regularly require the constructional co-occurrence of other markers for their correct interpretation, the following example from my corpus features a case of **bare SBJV circumstantial adverbial clause with no other marking than the use of bare SBJV itself**:

(478) “*Áh, àkú chí nūà chà-ú'ú <nū-ĩ... > nū-ĩ ñómá'ú nūà chì-ì'ú, tâiyà nūà chá-ǵú?*”

*áh*      *àkú = chí*              *nū-à*                      *chà = ú-'ú*                      *<nū.ĩ... >*  
 oh what?.NS = IRR PROX.ALOC-EXO 1SG.SBJ\SBJV = make\SBJV-SUB CONJ

*nū.ĩ*      *ñó-má-'ú*                      *nū-à*                      *chì = ì-'ú*  
 CONJ PROX.NS-ANAPH-STATE PROX.ALOC-EXO 1SG.SBJ.PCì\SBJV = be\SBJV-SUB

*tâiyà*              *nū-à*                      *chá = ǵú*  
 be.hungry PROX.ALOC-EXO 1SG.BEN = hurt\SBJV

“Alas, why do I have to be here, in the state in which I am, suffering from hunger [lit. ‘... with (the state of) being hungry hurting for me here?’]?”  
[LAR T85]

EAR, with whom I transcribed the text from which this utterance was extracted, confirmed to me that it was perfectly acceptable as it stands, although the same meaning could have been alternatively expressed with a *rù* + bare SBJV (‘while ...’) dependent clause. It thus seems that bare SBJV can function on its own as an Inflectional Type specialized in the expression of circumstantial adverbial clauses.

Examples (479) and (480) illustrate the use of bare SBJV in **polar interrogative and command complement clauses** respectively. These two examples were elicited. My corpus does not contain any instances of these rare, but apparently natural-sounding, constructions.

(479) Juan *chô-nà ná-kà rù/nǎ nā-gǔ í chàu-’ākù*.

Juan *chô-nà ná=kà rù/nǎ nā=gǔ*  
John 1SG-DAT 3M/N/NS.SBJ=ask and/ASSERT 3F.SBJ.SBJV=learn\SBJV

*í=chàu-’ākù*  
LK.F=1SG-daughter

‘John asked me if my daughter is studying.’ [EAR elic.]

(480) *Nǎmá’a nūchī-ū rù chàu-’kq yà-dqu*.

*nǎ-má’a nū=chī=ū rù chàu-’kq*  
3M-COM 3M/N/NS.ACC=1SG.SBJ.PCī=say and 1SG-CAUSE

*yà=dqu*  
AM.3F/M/N/NS.SBJ.SBJV=see\SBJV

‘I told him to come and look for me [lit. ‘I said it to him and may he come and look for me.’].’ [EAR elic.]

(iii) **USES NOT RELATED TO CLAUSE TYPE.** The use of bare SBJV is obligatory in **relative clauses**. The predicative phrase in bare SBJV then bears the relativizer suffix, which agrees in nominal class with the pivot (featuring the forms /-kū/ ‘REL.F’, /-kū/ ‘REL.M’, /-(’ú)nè/ ‘REL.N’, /-’è/ ‘REL.S’, and /-’ú/ ‘REL.NS’), as illustrated in the following examples:

(481) [...] *nò-rū tārǎ tà gá iyà-gěchìgükū* [...]

*nò-'rū̄ tārǎ = tà*  
3M-GEN machete = ADD

*gá = ī = yà = gē-chìgū-kū̄*  
LK.F/M/S/NS.PST = 3F.ACC = PCĪ.3M/N/NS.SBJ\SBJV = carry.SG-DISTR.SG\SBJV-REL.F

‘[...] also his machete that he was carrying along with him [...]’ [LAR D124]

(482) [...] *gà gūmà yěà tà-chî'ū̄nè* [...]

*gà = gū-mà yě-à tà = chî-'ū̄nè*  
LK.N.PST = DIST.N-ANAPH DIST.ALOC-EXO 3S.SBJ\SBJV = bite\SBJV-REL.N

‘[...] the one he had been eating there [...]’ [LAR E194]

(483) “*Ūpā chà-mé'gù ĩchà-úú'ū̄'ū̄wǎ* [...]”

*Ūpā chà = mé-'gù*  
formerly 1SG.SBJ\SBJV = be.good-CIRC

*ĩ = chà = ú-ú'ū̄-ú̄-wǎ*  
3ALOC = 1SG.SBJ\SBJV = go.SG-at.intervals\SBJV-REL.NS-ALOC

“[...] where I used to often go when I was doing well [...]” [LAR T99]

Relative clauses are involved as components of the cleft sentences that constitute the strategy used for **focalizing subject and (core) object arguments** (on the strategy employed for focalizing other constituents, see SECTION 5.2.6 below). Example (484), in which the subject *âi* ‘wild felid’ is focalized, is to be compared with the semantically equivalent plain sentence /*Âi pē = tà'kú-ē-é'è-kū̄*/ (wild.felid 2PL.ACC = be.an.orphan-INTR.PL-CAUS) ‘A jaguar has orphaned you.’

(484) “*Âi nū-ĩ yá pē-tà'kúē-é'è-kū̄*.”

*âi nū = ĩ*  
wild.felid 3M/N/NS.SBJ.PCĪ = be

*yá = pē = tà'kú-ē-é'è-kū̄*  
LK.M/S = 2PL.ACC = be.an.orphan-INTR.PL-CAUS\SBJV-REL.M

“‘It’s a jaguar that has orphaned you [lit. ‘A jaguar is who has orphaned you.’].” [Loida T143]

Focalization of interrogative constituents in any syntactic function is **optional but frequent in content interrogative utterances**, as shown in example (485) (see also (502) and end of SECTION 5.2.6 below). In practice, interrogative utterances featuring such focalization of the interrogative constituent do not seem to contrast in any significant way from corresponding utterances featuring no focalization, as in e.g. (459) above.

(485) “*Ákú ì tò ì kù-nâ’wé’è-’ú?*”

*ákú*      *ì = tò*                      *ì = kù-nâ-’wé’è-’ú*

what?.NS    LK.NS = other.NS    LK.NS = 2SG.SBJ\SBJV = 3N/NS-APPREC\SBJV-REL.NS

“‘What else do you want [lit. ‘What else [is] the [thing] that you want?’]?”

[JSG B160]

Bare SBJV is also obligatory in **subordinate clauses in /-’ú/ ‘SUB’**. Because subordinate clauses in /-’ú/ are extremely frequent and occur in a wide array of contexts—including in main clauses via insubordination—the uses of bare SBJV in association with /-’ú/ ‘SUB’ are treated separately, in SECTION 5.2.2 above (uses in declarative main clauses) and in the next section (other uses).

## 5.2.6 Subjunctive Inflectional Type + -’ú ‘SUB’ (SBJV-’ú) out of declarative main clauses

This section deals with a **particular use of SBJV**, namely its extremely frequent use **in association with the subordinator /-’ú/ ‘SUB’**. Unsurprisingly, the combination SBJV-’ú occurs in complement and adverbial dependent clauses, and is involved in cleft constructions that allow for the focalization of constituents that are neither subjects nor (core) object arguments. More surprisingly, SBJV-’ú also occurs in main clauses as a result of a phenomenon of insubordination.

The function of predicative phrases in SBJV-’ú in declarative main clauses is dealt with in SECTION 5.2.2 above. All other uses of SBJV-’ú are discussed in the present section.

**(i) USES IN NON-DECLARATIVE MAIN CLAUSES.** In non-declarative main clauses, SBJV-’ú may be used with one of two different functions:

- it is found in **polar interrogative** utterances (in apparent free variation with IND, see SECTION 5.2.3 above);
- it is regularly found in utterances involving **deontic modality**.

The use of SBJV-’ú in **polar questions** is illustrated in the following example:

(486) *Kúnà-mê’ú?*

*kú = nà = mê-’ú*

2SG.BEN = 3M/N/NS.SBJ\SBJV = be.good\SBJV-SUB



‘Did you like it?’ [JSG C166]

Examples (487) and (488) illustrate the use of SBJV-’*ú* in utterances involving **deontic modality**, with a first person subject and a fourth person subject respectively (see (477) and (467) above for instances of deontic SBJV-’*ú* involving a second person subject and a third person subject, respectively). Note that deontic SBJV-’*ú* can occur in both declarative utterances (as in (488)) and interrogative utterances (as in (487)).

(487) *Tũchà-’ú-’ùchí-’ú yá posillo?*

*tũ = ’ = chà = ’ú-’ùchí-’ú* *yá = posillo*  
 3S.ACC = 3ALOC = 1SG.SBJ\SBJV = be.there.SG-at\SBJV-SUB LK.M/S = cup

‘[Is there already a black rubber band in the bottom of the lower cup?]  
 Should I take the [upper] cup out [of the lower cup so I can see inside it to begin with]?’ [JCA C31]

(488) “*Ĝè’tá kù-’ú-’gù, pà chàu-’ākù rù “nô’ě” ñǎgù-’ú, “ǒl” ñǎgù-’ú, “tío” ñǎgù-’ú, “kûnèpù” ñǎgù-’ú!*”

*ĝè’tá* *kù = ’ú-’gù* *pà = chàu-’ākù* *rù* *nô’ě*  
 where?.ALOC 2SG.SBJ\SBJV = go.SG-CIRC VOC = 1SG-daughter and old.woman

*ñǎ-gù-’ú* *ǒl* *ñǎ-gù-’ú* *tío* *ñǎ-gù-’ú* *kû-nèpù*  
 do.thus-dtcC-SUB old.man do.thus-dtcC-SUB uncle do.thus-dtcC-SUB 2SG-uncle

*ñǎ-gù-’ú*  
 do.thus-dtcC-SUB

‘[My father used to teach me:] “Wherever you go, my daughter, one should say “grandmother” [to address people respectfully], one should say “grandfather”, one should say “uncle”, one should say “my uncle” [lit. ‘your uncle’]!’” [IGS 704–706]

(ii) **USES IN DEPENDENT CLAUSES.** Apart from main clauses, SBJV-’*ú* is found in two major kinds of dependent clauses:

- it is obligatory in **adverbial clauses** in *ná’a/nû-’í* ... ‘CONJ’ (‘it being the case that ...’), */...-’kǎ/* ‘CAUSE’ (‘in order to ...’), and *ěkǎ/kǎ* ... ‘so that ...’ (or ‘while ...’);
- it is obligatory in **complement clauses** in *ná’a/nû-’í* ... ‘CONJ’.

The frequent and semantically vague adverbial clauses in *ná'a/nû-ĩ* ... 'CONJ' are roughly comparable to English gerundive clauses, hence the possibility of generally glossing them as 'it being the case that ...'. They may take a wide array of circumstantial meanings and are often ambiguous. Their exact interpretation relies heavily on the linguistic and extra-linguistic context. Common possible translations of these adverbial clauses in English include 'when ..., once ..., while ..., as ..., because ..., although ...'. These clauses may also occasionally bear no clear semantic or discursive relation to their context (as in e.g. (T155)). The use of the conjunction *ná'a/nû-ĩ* ... 'CONJ' to introduce them is not optional. The following two examples illustrate this type of adverbial clauses featuring predicative phrases in SBJV-'ú:

(489) *Wá'í ná'a consorcio-wá chà-pūrākú-'ú rù mārū íchā-'ú'ú nāvá.*

*wá'í ná'a consorcio-wá chà = pūrākú-'ú = rù mārū*  
 CONTR CONJ consortium-ALOC 1SG.SBJ\SBJV = work\SBJV-SUB = TOP PRF

*í = chā = ú-'ú ná-wá*  
 3ALOC = 1SG.SBJ\SBJV = go.SG-out.PL 3N/NS-ALOC

'But because I work in the consortium [now], I've quit [working as a guide].'  
 [JSG A123]

(490) *Tûmàkùtû nû-ĩ gá āgānè, nû-ĩ gá tà-āiyā-'ú ā'a.*

*tû-mà-kùtû nû = ĩ gá = ā-gā-nè,*  
 3S-ANAPH-foot 3M/N/NS.SBJ.PCì = be LK.F/M/S/NS.PST = have-sound\SBJV-REL.N

*nû.ĩ gá = tà = āiyā-'ú = ā'a*  
 CONJ LK.F/M/S/NS.PST = 3S.SBJ\SBJV = bathe\SBJV-SUB = QUOT

'What made the noise was her feet while she was bathing.' [LAR T24]

**Purpose adverbial clauses** ('in order to ...') involve a predicative phrase in SBJV-'ú to which the relational noun /-'ka/ 'CAUSE' is attached. This is shown in example (491). These clauses are often—but not obligatorily—introduced by the conjunction *ná'a/nû-ĩ* ... 'CONJ'. Note that in rare occasions, clauses in SBJV-'ú-ka may be used to express reason ('because ...') rather than purpose.

(491) *Yémáàkù ā'a nû-ĩ gá nû'kú má gá tànā-ù-'ú gá āi ā'a, tǎu tūnà-ngō-'úka [...].*

*yé-má-àkù = ā'a nû = ĩ gá = nû'kú má*  
 DIST.NS-ANAPH-MAN = QUOT 3M/N/NS.SBJ.PCì = be LK.F/M/S/NS.PST = past.time

*gá = tà = nā = ù-'ú*  
 LK.F/M/S/NS.PST = 3S.SBJ\SBJV = 3M/N/NS.OBJ = say\SBJV-SUB

$gá = \hat{a}i = \tilde{a}'a$   $t\ddot{a}u$   
 LK.F/M/S/NS.PST = wild.felid = QUOT NEG

$t\ddot{u} = n\grave{a} = ng\acute{o}-'u\acute{k}a$   
 3S.ACC = 3M/N/NS.SBJ\SBJV = bite\SBJV-SUB-CAUSE

‘That’s how people would call the jaguar in ancient times so that it would not eat them up [...].’ [LAR T119]

Among younger speakers (e.g. JSG, IGV), such clauses in SBJV- $'u\acute{k}a$  are also frequently used as mere **complement clauses of predicates involving volitive modality** (i.e. predicates with meanings such as ‘to want to ...’, ‘to invite to ...’, ‘to tell to ...’, ‘to ask to ...’, etc.), as shown in example (492).

(492)  $T\ddot{a}u\ t\acute{a}-n\hat{a}'ch\grave{a}'u\acute{u}\ g\acute{a}\ n\acute{a}'a$  < mujeres... >  $mujeresm\acute{a}'a\ ch\grave{a}t\grave{a}-d\ddot{a}u'u\acute{k}a$ .

$t\ddot{a}u\ t\acute{a} = n\hat{a}'ch\grave{a}'u\acute{u}\ g\acute{a} = n\acute{a}'a$  < mujeres... >  $mujeres-m\acute{a}'a$   
 NEG 3S.SBJ = 3N/NS-VOL LK.PST = CONJ women women-COM

$ch\grave{a} = t\grave{a} = d\ddot{a}u-'u\acute{k}a$   
 1SG.ACC = 3S.SBJ\SBJV = see\SBJV-SUB-CAUS

‘He didn’t want to see me [lit. ‘He didn’t want it for seeing me ...’] with... with women.’ [ANO1 93–94]

In this context, however, clauses in SBJV- $'u\acute{k}a$  seem to be an emerging and still rarer alternative for the regular complement clauses in  $n\acute{a}'a/n\hat{u}-i$  ... ‘CONJ’ discussed further in this section (or, in specific cases, for the command complement clauses in  $r\grave{u}$  ... ‘and’, on which see SECTION 5.2.5 above).

SBJV- $'u$  is also of systematic use in the **semantically vague adverbial clauses in  $\acute{e}k\grave{a}/k\grave{a}$  ... ‘so that ..., while ...’,** as illustrated in the following example:

(493) “ $P\grave{a}\ m\bar{a},\ p\grave{a}\ m\bar{a},\ k\bar{u}-t\ddot{u}k\acute{u}\ k\grave{a}\ k\bar{u}-d\acute{e}'\grave{a}-\acute{e}ch\bar{a}'u\acute{u}?$ ”

$p\grave{a} = m\bar{a}\ (x2)$   $k\bar{u} = t\ddot{u}k\acute{u}$   $k\grave{a}$   
 VOC = mommy\VOC (x2) 2SG.SBJ = what’s.the.matter? so.that

$k\bar{u} = d\acute{e}'\grave{a}-\acute{e}ch\bar{a}'u\acute{u}$   
 2SG.SBJ.PC\SBJV = speak-PERSIST\SBJV-SUB

“‘Mum, mum, why are you talking all the time [lit. ‘What’s wrong with you, due to which you’re constantly talking?’]?’” [IGS 46–48]

**Regular complement clauses** consist in a clause that is introduced by the conjunction  $n\acute{a}'a/n\hat{u}-i$  ... ‘CONJ’ and includes a predicative phrase in SBJV- $'u$  (on rare

complement clauses including a predicative phrase in bare SBJV, see SECTION 5.2.5; on complement clauses of volitive predicates optionally marked with the relational noun /-'ka/ 'CAUS', see above in the present section). Such complement clauses may function syntactically as either subjects (as in example (494)), (core) objects, or any non-core participant required by the valency of the predicative phrase (as in (495)).

(494) *Ngû, ná-mé ná'a gě'tjì'ù'úmá'a ì-pūrāākú'ú.*

*ngû* *ná = mé* *ná'a* *gě'tjì'ù-ú-má'a*  
 yes 3M/N/NS.SBJ = be.good CONJ be.pubescent\ SBJV-REL.NS-COM

*ì = pūrāākú-ú*  
 PCØ.SBJV = work\ SBJV-SUB

'Yes, it's nice to work with teenagers [lit. 'Yes, it is good that one works with young people.].' [IGV 252]

(495) [...] *nūchā-fā ná'a nū'ré [yà] dùḡ nūà má'è'ú [...]*

*nū = chā = fā* *ná'a* *nū'ré* *[yà = ] dùḡ* *nū-à*  
 3M/N/NS.ACC = 1SG.SBJ = know CONJ how.much? LK.N/S = human PROX.ALOC-EXO

*má'-è-ú*  
 live-INTR.PL\ SBJV-SUB

'[...] I know how many people live here [...]' [JGS 395]

The exact syntactic role of regular complement clauses in *ná'a/nû-î* ... 'CONJ' is sometimes unclear, as in (496), where a complement clause functions as a syntactically indeterminate complement of the intransitive phasal verb *ûchìgù* 'continue' (/û-chìgù/ [go.SG-DISTR.SG] lit. 'go gradually'):

(496) [...] *yérú ā'a yě'iràwá ná-ûchìgù nû-î gá nà-chā'ú.*

*yérú = ā'a* *yě'irà-wá* *ná = û-chìgù* *nû.î*  
 because.PST = QUOT more.and.more?-ALOC 3M/N/NS.SBJ = go.SG-DISTR.SG CONJ

*gá = nà = chā-ú*  
 LK.F/M/S/NS.PST = PCrū.3M/N/NS.SBJ\ SBJV = swell\ SBJV-SUB

'[...] because he went on swelling more and more.' [LAR T57]

Regular complement clauses in *ná'a/nû-î* ... 'CONJ' may also be topicalized and thus occur in extra-syntactic position. In this specific case, the conjunction *ná'a/nû-î* ... 'CONJ' is frequently dropped, as in the following example:

(497) *Chà'ũ chà-nā-ũ'ũ ì chòmà ì, chò'rũ māmá chà'ũ ǵy'é'e'àkù.*

*chà'ũ*            *chà = nā = ũ-ũ'*  
 manioc.beer 1SG.SBJ\SBJV = 3M/N/NS.OBJ = make\SBJV-SUB

*ì = chò-mà = ì*                            *chò-rũ māmá chà'ũ ǵy'é'e'àkù*  
 LK.NS = 1SG-ANAPH = CONTR.TOP 1SG-GEN mum 1SG-ACC learn-CAUS-MAN

‘The way I make manioc beer is the way my mother taught me [lit. ‘My making manioc beer, [it’s] as my mother taught me.’].’ [LAR D306–307]

As shown in examples (494–496), complement clauses in *ná'a/nũ-ĩ* ... ‘CONJ’ that are syntactically integrated in a matrix clause regularly *follow* the predicative phrase of that matrix clause. Most of the time, an **expletive cataphoric third person non-salientive pronominal form** (whether a free pronominal form, or an index occurring within the predicative phrase as in (494–495)) precedes, or is included in, the predicative phrase of the matrix clause and fills the syntactic position of the complement clause (compare English ‘it is true that ...’, ‘it is hard to ...’).

Complement clauses in *ná'a/nũ-ĩ* ... ‘CONJ’ may complement an extremely diverse range of predicative phrases involving notions such as utterance (‘say that ..., ask what ..., etc.’), cognition (‘know that ..., think that ..., etc.’), perception (‘see that ..., hear that ..., etc.’), emotion (‘be afraid to ..., enjoy doing, etc.’), volitive modality (‘want to ..., order to ..., etc.’), or phasal aspect (‘continue to ..., finish doing, etc.’), among others.

(iii) **USES NOT RELATED TO CLAUSE TYPE.** Clauses in SBJV-*ũ* are involved as components of the cleft sentences that constitute the strategy used for **focalizing constituents other than subject and (core) object arguments** (on the strategy applied for focalizing subject and (core) object arguments, see SECTION 5.2.5 above). Constituents with any syntactic function (e.g. comitative in example (498), punctual locative in (499), manner in (491) above) and of any syntactic complexity (whether a simplex or complex NP as in (498–499) or a full dependent clause as in (500), repeated from (426 above)) may be focalized via this strategy.

(498) “*Tâu pě-má'a nũ-ĩ! Chàgùmá'a tàã nũ-ĩ ì ngēmà chà-ũ'ũ!*”

*tâu pě-má'a nũ = ĩ*                            *chà-gù-má'a = tàã nũ = ĩ*  
 NEG 2PL-COM 3M/N/NS.SBJ.PCì = be 1SG-REFL-COM = itself 3M/N/NS.SBJ.PCì = be

*ì = [ngē-mà*                            *chà = ũ-ũ']*  
 LK.NS = [MED.NS-ANAPH 1SG.SBJ\SBJV = make\SBJV-SUB]



(501) *Tǎu tā ì nǐ'ǔ pē-dǎu'ǔ [...]*!

*tǎu* = *tā*      *ì* = [*nǐ*-*'ǔ*]      *pē* = *dǎu*-*'ǔ*]  
 NEG = PROH    LK.NS = [3N/NS-ACC    2PL.SBJ.SBJV = touch\SBJV-SUB]

'Don't (pl.) touch him [...]!' [MVG A10]

Note the regular absence of the copula verb *ǐ* 'be' in this construction, in contrast with its frequent—but not obligatory—presence in ordinary focalization, as shown in (498–500) above. On the second person prohibitive construction, see SECTION 7.7.

As was mentioned at the end of SECTION 5.2.5 above, the focalization of interrogative constituents in any syntactic function is **optional but frequent in content interrogative utterances**, as shown in example (502) (see also (485) above). In practice, interrogative utterances featuring such focalization of the interrogative constituent do not seem to contrast in any significant way from corresponding utterances that do not feature focalization, as in (459) above.

(502) “*ǎkú-rǔ'ǔ ì chǎ'ǔ pē-chǐ'è-wē-gǔ'ǔ?*”

*ǎkú-rǔ'ǔ*      *ì* = *chǎ*-*'ǔ*]      *pē* = *chǐ*'è-*wē*-*gǔ*-*'ǔ*]  
 what?.NS-PURP    LK.NS = 1SG-ACC    2PL.SBJ.SBJV = be.bad-convenience-PL\SBJV-SUB

“‘Why are you bothering me [lit. ‘What is it that you (pl.) bother me for?’]?’” [IGS 233]

## 5.3 Inflection in the Indicative Inflectional Type (IND; slots 4–8)

This and the next two sections give a **detailed account of the inflectional morphology of the finite predicative phrase by Inflectional Type**, starting with IND (SECTION 5.3), then going on to IMP (5.4), and finishing with SBJV (5.5).

### 5.3.1 Agglutinative morphology in IND

The “basic”<sup>265</sup> morphemes available in the relatively simple inflectional template of IND are listed in TABLE 42.

<sup>265</sup>On this term, see SECTION 5.1, p.392.

	4	5	6	7	PP	
	SBJ =	AM =	PC =	3M/N/NS.OBJ =		
1SG	<i>chā</i> =	$\pm y\grave{a}$ =	PC $\emptyset$	$\emptyset$	$\pm n\bar{a}$ =	...
1PL	<i>kū</i> =		PC $\bar{i}$	$\bar{i}$ =		
2SG	<i>tā</i> =		PC $\grave{i}$	$\grave{i}$ =		
2PL	<i>pē</i> =		PC $r\bar{u}$	$r\bar{u}$ =		
3F	$\bar{i}$ =		PC $n\grave{a}$	$n\grave{a}$ =		
3M/N/NS	<i>ná</i> =					
3S	<i>tá</i> =					
4	<i>tá</i> =					

TABLE 42. Set of “basic” morphemes available in slots 4 to 7 of the inflectional template of the predicative phrase in IND

An important definitional property of IND is that it **requires slot 4 to be filled** (slots 5–7, on the other hand, may be left empty). In other words, a predicative phrase inflected in IND must minimally contain a subject index in order to be grammatical. This property is to be contrasted with the obligatory absence of subject index in IMP, and the possible absence of subject index in SBJV under specific conditions.

TABLE 42 further manifests the following contrasts between the inflectional morphology of IND and that of SBJV:

- indexes for third person masculine/neuter/non-salientive, third person feminine, and fourth person subjects are available in slot 4 in IND, while no corresponding indexes are available in slot 4 in SBJV (the encoding of such subject indexes therefore has to rely on less straightforward morphological strategies in SBJV; see SECTION 5.5, p.442);
- the indexation of a third person salientive subject and that of a fourth person subject are formally identical in IND, while they are distinguished in SBJV;
- the only morpheme available in slot 7 in IND (as well as in IMP) always encodes a third person (masculine/neuter/non-salientive) *object* index, while in SBJV the morphemes available in slot 7 may index either a third person (masculine/neuter/non-salientive/feminine) *subject* index or a third person (masculine/neuter/non-salientive) *object* index;
- slot 8 is not available in the inflectional template of IND (as well as in that of IMP), while it is available in that of SBJV.



Part of the morphemes in TABLE 42 may be **combined in a simple, concatenative fashion**. Thus, the combination of the inflectional morphemes /chā = / ‘1SG.SBJ’ + /rū = / ‘PCrū’ straightforwardly yields the phonological form /chā = rū = /, as in /chā = rū = ngù / ‘I rest’. Likewise, the combination of /kū = / ‘2SG.SBJ’ + /yà = / ‘AM’ + /rū = / ‘PCrū’ straightforwardly yields /kū = yà = rū = /, as in /kū = yà = rū = ngù / ‘you (sg.) go and rest’. These fully predictable, concatenative morphological combinations require no further comment.

However, an important number of potential combinations of the morphemes featured in TABLE 42 are strongly dispreferred or plainly ungrammatical, with **synchronically unanalyzable, fusional morphemes** being used in their stead. These fusional morphemes are dealt with in SECTIONS 5.3.2 through 5.3.4.

Also, the encoding of associated motion within a predicative phrase initially belonging to the predicative classes PCī or PCì has the unpredictable effect of **re-assigning these predicative phrases to PCrū̄**. The same observation could be expressed differently by saying that the combination of the associated motion marker /yà = / with the predicative class markers /ī = / and /î = / is morphologically ungrammatical, with different, unpredictable combinations of morphemes being used instead of the expected combinations. This issue is discussed in SECTION 5.3.5.

For exhaustive charts of the inflectional morphology of the predicative phrase in IND, see CHARTS A–D in SECTION 5.6, pp.449–450.

### 5.3.2 Fusional morphemes encoding subject index and predicative class (slots 4 + 6)

In the specific situation where a subject index from slot 4 should immediately precede (*i.e.* with no intervening morpheme /yà = / ‘AM’ in slot 5) the **predicative class markers /ī = / ‘PCī’ or /î = / ‘PCì’** from slot 6, a **phonological reduction of the vowel of the subject index** regularly occurs (either deletion or assimilation to the vowel quality of the following /ī = / or /î = /). This phonological reduction yields fusional morphemes that simultaneously encode the value of subject index (a parameter belonging to slot 4) and the value of predicative class (a parameter belonging to slot 6). A list of these fusional morphemes, contrasted with their expected concatenative forms, is given in TABLE 43. To contextualize the use of these morphemes within the whole inflectional paradigm of IND, see p.449, CHART A (columns PCī and PCì).

5.3. Inflection in the Indicative Inflectional Type (slots 4–8)

	4 = 6 = SBJ = PCī =	4 + 6 = SBJ.PCī =	4 = 6 = SBJ = PCì =	4 + 6 = SBJ.PCì =
1SG	(chā = ī =)	chī =	(chā = ì =)	chû =
1PL	kū = ī =	kī =	kū = ì =	kû =
2SG	(tā = ī =)	tī =	(tā = ì =)	tû =
2PL	(pē = ī =)	pī =	(pē = ì =)	pû =
3F	*ī = ī =	īyā =	*ī = ì =	īyà =
3M/N/NS	(ná = ī =)	nī =	(ná = ì =)	nû =
3S	(tá = ī =)	tī =	(tá = ì =)	tû =
4	(tá = ī =)	tī =	(tá = ì =)	tû =

TABLE 43. Fusional morphemes encoding both subject index and predicative class PCī or PCì in IND, contrasted with their expected (but either rarely attested or ungrammatical) concatenative forms

Thus, for instance, the combination of the inflectional values of /chā = / ‘1SG.SBJ’ and /ī = / ‘PCī’ is not normally realized as a concatenative /chā = ī = /. The vowel of the subject index /chā = / is indeed regularly deleted when immediately preceding the predicative class marker /ī = /, yielding the fusional morpheme /chī = / ‘1SG.SBJ.PCī’ instead of /chā = ī = /.<sup>266</sup>

Similarly, the combination of the inflectional values of /chā = / ‘1SG.SBJ’ and /ì = / ‘PCì’ is not normally realized as a concatenative /chā = ì = /. Indeed, the vowel of the subject index /chā = / regularly undergoes progressive vowel quality assimilation when immediately preceding the predicative class marker /ì = /, yielding the fusional morpheme /chī = / ‘1SG.SBJ.PCì’ instead of /chā = ì = /.

Additionally, via a different process rather comparable to dissimilation (as opposed to the assimilation processes previously discussed), the combination of the inflectional values of /ī = / ‘3F.SBJ’ (slot 4) and /ī = / ‘PCī’ (slot 6) yields the fusional, **fully irregular form** /īyā = / ‘3F.SBJ.PCī’ instead of a concatenative \*/ī = ī = /. Likewise, the combination of the inflectional values of /ī = / ‘3F.SBJ’ (slot 4) and /ì = / ‘PCì’ (slot 6) yields the **fully irregular form** /īyà = / ‘3F.SBJ.PCì’ instead of

<sup>266</sup>From a diachronic perspective, it is of course likely that the vowels of the subject indexes in slot 4 first underwent assimilation to the vowel quality of an immediately following /ī = / ‘PCī’, yielding e.g. \*/chī = / (< /chā = ī = /) instead of today’s regular form /chī = /. The systematic reduction of the resulting vowel sequences \*/(C)īī/ to plain /(C)ī/’s, as in today’s regular forms, probably occurred only at a later stage.

a concatenative  $*/\bar{i}=\dot{i}=/$ . Note that in the specific case where  $/\bar{i}y\grave{a}=/$  ‘3F.SBJ.PCì’ is combined with the high-frequency verb root  $\dot{i}$  ‘to be’, it virtually always takes an irregular phonological form  $/\bar{i}y\grave{i}=/$  (or even  $/\bar{i}y\grave{i}=/$ , with a vowel /i/ presumably resulting from assimilation with the quality of the nucleus /i/ of  $\dot{i}$ ), yielding the predicative phrase  $/\bar{i}y\grave{i}=\dot{i}/$  (3F.SBJ.PCì = be) ‘she is’ (but see example (226) for an instance of the expected combinatorial form  $/\bar{i}y\grave{a}=\dot{i}/$ ).<sup>267</sup>

Note that, although most of the expected concatenative combinations of the subject indexes from slot 4 with the predicative class markers  $/\bar{i}=/$  ‘PCì’ and  $/\hat{i}=/$  ‘PCì’ (such as  $/ch\bar{a}=\bar{i}=/$  and  $/ch\bar{a}=\hat{i}=/$  instead of the regular forms  $/ch\bar{i}=/$  and  $/ch\hat{i}=/$  respectively) are on the verge of extinction and virtually inexistent in the speech of younger speakers, they are **still remembered, and may still occasionally be heard** in the speech of middle-aged to older speakers. This is why they are not reported as unattested or ungrammatical in TABLE 43, but enclosed in parentheses instead. The two concatenative combinations  $/k\bar{u}=\bar{i}=/$  ‘2SG.SBJ = PCì =’ and  $/k\bar{u}=\hat{i}=/$  ‘2SG.SBJ = PCì =’ are even exceptional in that, although they certainly are a rare alternative to the regular forms  $/k\bar{i}=/$  and  $/k\hat{i}=/$  respectively, their occurrences are not marginal, even in the speech of younger speakers. In fact, among the forms recorded in TABLE 43, only the concatenative combinations  $*/\bar{i}=\bar{i}=/$  ‘3F.SBJ = PCì =’ (instead of  $/\bar{i}y\bar{a}=/$ ) and  $*/\bar{i}=\hat{i}=/$  ‘3F.SBJ = PCì =’ (instead of  $/\bar{i}y\grave{a}=/$ ) are plainly ungrammatical.

### 5.3.3 Fusional morpheme encoding associated motion and third person masculine/neuter/non-salientive object index (slots 5 + 7)

The combination of the associated motion marker  $/y\grave{a}=/$  from slot 5 with the third person masculine/neuter/non-salientive (core) object index  $/n\bar{a}=/$  from slot 7, which would yield an expected form  $*/y\grave{a}=n\bar{a}=/$  ‘AM = 3M/N/NS.OBJ =’, is ungrammatical. A **fusional morpheme**  $/y\grave{a}=/$  ‘AM.3M/N/NS.OBJ’ (homonymous with the non-fusional associated motion marker  $/y\grave{a}=/$  ‘AM’) is used instead. To

<sup>267</sup>For a similar case of assimilation for vowel quality of an /a/ with the nucleus /i/ of  $\dot{i}$  ‘to be’, see the case of the irregular realization  $/y\grave{i}=/$  of the proclitic  $/y\grave{a}=/$  ‘PCì.3F/M/N/NS.SBJ.SBJV’ in note 272, p.442.

contextualize the use of this morpheme within the whole inflectional paradigm of IND, see p.450, CHART D (column PCØ). For related cases of incompatibility between /yà = / ‘AM’ and a following third person masculine/neuter/non-salientive index, see SECTION 5.5, p.442.

Thus, for instance, an expected concatenative combination such as \*/chā = yà = nā = ngo/ (1SG.SBJ = AM = 3M/N/NS.OBJ = eat) ‘I go and eat it’ will instead be realized as /chā = yà = ngo/ (1SG.SBJ = AM.3M/N/NS.OBJ = eat).

The same observation could be expressed differently by saying that the morpheme /nā = / ‘3M/N/NS.OBJ’ is unavailable after /yà = / ‘AM’, although a third person masculine/neuter/non-salientive object index may be contextually understood in an inflected predicative phrase containing /yà = / ‘AM’. Interestingly, however, the fusional morpheme /nā = / ‘PCrū̄.3M/N/NS.OBJ’, which is homonymous with /nā = / ‘3M/N/NS.OBJ’ and functionally related to it (see SECTION 5.3.4 below), is for its part available after /yà = / ‘AM’, yielding the regular concatenative combination /yà = nā = / ‘AM = PCrū̄.3M/N/NS.OBJ = ’ (as in /chā = yà = nā = ngù-’é’e/ (1SG.SBJ = AM = PCrū̄.3M/N/NS.OBJ = rest-CAUS) ‘I go and make it rest’). This observation points towards the apparent uncombinability of /yà = / ‘AM’ with /nā = / ‘3M/N/NS.OBJ’ in today’s SMAT being more likely the accidental result of a superficial diachronic evolution, rather than the effect of a systemic constraint against the simultaneous explicit encoding of associated motion and a third person masculine/neuter/non-salientive object index.

### 5.3.4 Fusional morphemes encoding predicative class and third person masculine/neuter/non-salientive object index (slots 6 + 7)

The concatenative combination of the predicative class markers /ī = / ‘PCī’, /î = / ‘PCî’, /rū̄ = / ‘PCrū̄’, and /nà = / ‘PCnà’ from slot 6 with the third person masculine/neuter/non-salientive (core) object index /nā = / from slot 7 is ungrammatical. Fusional morphemes simultaneously encoding both of these categories are used instead. These are listed in TABLE 44, where they are contrasted to the expected, but ungrammatical, outcomes of the corresponding concatenative combinations. To contextualize the use of these morphemes within the whole inflectional

<b>6=7 =</b>			<b>6+7 =</b>
<b>PC = 3M/N/NS.OBJ =</b>			<b>PC.3M/N/NS.OBJ =</b>
<b>PCī</b>	<b>*ī = nā =</b>		<b>yā =</b>
<b>PCì</b>	<b>*ì = nā =</b>	>	<b>yà =</b>
<b>PCrū</b>	<b>*rū = nā =</b>		<b>nā =</b>
<b>PCnà</b>	<b>*nà = nā =</b>		<b>nà =</b>

**TABLE 44.** *Fusional morphemes encoding both predicative class and third person masculine/neuter/non-salientive (core) object index in IND contrasted with their expected (but ungrammatical) concatenative forms*

paradigm of IND, see p.449, CHART B (columns PCī, PCì, and PCrū).

Thus, for instance, an expected concatenative combination involving a PCī predicative phrase such as *\*/chā = ī = nā = yâ'u/* (1SG.SBJ = PCī = 3M/N/NS.OBJ = seize) 'I seize it' will instead be realized as */chā = yā = yâ'u/* (1SG.SBJ = PCī.3M/N/NS.OBJ = seize).

I tentatively hypothesize that the fusional morphemes */yā = /*, */yà = /*, */nā = /*, and */nà = /* under discussion in this section in fact arose as phonological reductions of formerly regular and concatenative combinations of the predicative class markers */ī = /*, */ì = /*, */rū = /*, and */nā = /* with a **morphological element whose phonological shape could be reconstructed as *\*/ã/***.<sup>268</sup> This *\*/ã/* element would have been the exponent of a third person masculine/neuter/non-salientive index. This hypothesis practically assumes the following phonologically plausible, although not unproblematic, evolutions:

- *ī + \*ã > yā*
- *ì + \*ã > yà*
- *rū + \*ã > nā*
- *nā + \*ã > nà*

Note that this hypothesis further prompts to assume that the "basic" third person masculine/neuter/non-salientive object index marker */nā = /*, which is in prac-

<sup>268</sup>Specifically the form may be reconstructed as *\*/ã̃/*, with a toneme */1/*, if a cognatic relation with the morpheme */-ã̃/* '3M/N/NS.OBJ' is accepted. On this possible relation, see end of this section.

tice only available in the apparent absence of an explicit predicative class marker (*i.e.* only available in association with a predicative phrase in predicative class PCØ), is probably not the direct reflex in today's SMAT of the hypothesized element \*/ã/. A direct phonological development \*/ã/ > /nā=/ is unlikely. The “basic” /nā=/ is in fact more likely to have arisen through analogy between the inflectional paradigm of predicative phrases belonging to PCØ and the inflectional paradigm of other predicative classes. It might specifically have emerged as an extension into PCØ's morphology of the PCrū fusional morpheme /nā=/ ‘PCrū.3M/N/NS.OBJ’ (< /rū/ + \*/ã/, according to the hypothesis just put forward). Interestingly, a parallel analogical borrowing from the inflectional paradigm of a predicative class other than PCØ into PCØ can be assumed to have been at the origin of at least two other inflectional morphemes, namely /nà=/ ‘PCØ.IMP’ (see SECTION 5.4) and /î=/ ‘PCØ.SBJV’ (5.5, p.445).

If correct, this \*/ã/-hypothesis would notably have the diachronically significant consequence of **suggesting a former identity between the hypothetical third person index \*/ã/ (slot 7) preposed to the inflected predicative phrase on the one hand, and the third person index morpheme /-ã̃/ ‘3M/N/NS.OBJ’ (slot 8) postposed to the inflected predicative phrase on the other hand** (on /-ã̃/, see SECTION 5.5, p.444). This conjecture might one day prove suggestive as to the formation of the current inflectional system of the Tikuna predicative phrase.

### 5.3.5 Reassignment of PCī and PCì predicative phrases to PCrū caused by the introduction of associated motion

Introducing the **encoding of associated motion within an inflected predicative phrase belonging to predicative classes PCī or PCì** has the apparent automatic effect of **reassigning these predicative phrases to the predicative class PCrū**.

In practice, combinations of /yà=/ ‘AM’ with the predicative class markers /ī=/ or /î=/ are ungrammatical. The combination /yà=rū=/, featuring the PCrū marker /rū=/, is used instead. Combinations of /yà=/ ‘AM’ with the fusional morphemes /yā=/ and /yà=/ simultaneously encoding predicative classes PCī or PCì and a third person masculine/neuter/non-salientive (core) object index (see SECTION 5.3.4) are equally ungrammatical. The combination /yà=nā=/, fea-

turing the fusional morpheme /nā = / simultaneously encoding PCrū̄ and a third person masculine/neuter/non-salientive object index, is used instead. To contextualize this phenomenon within the whole inflectional paradigm of IND, see p.450, CHARTS C–D (columns PCī and PCì).

Contrast for instance the inflected predicative phrase /chī = dé'à/ (1SG.SBJ.PCī = speak) 'I speak' (< /chā = ī = dé'à/ '1SG.SBJ = PCī = speak'; see SECTION 5.3.2) with /chā = yà = rū̄ = dé'à/ ('1SG.SBJ = AM = PCrū̄ = speak) 'I go and speak'. The lexical predicative class PCī of the verb dé'à 'to speak' is faithfully encoded in the former, while it apparently shifts to PCrū̄ in the latter, after the introduction of /yà = / 'AM'.

This phenomenon might properly deserve identification as a case of grammatical reassignment, whereby a predicative phrase would change predicative class for possibly semantic reasons. Note, however, that it can be alternatively analyzed as a non-semantically-motivated strategy that allows to avoid phonologically dispreferred combinations such as \*/yà = ī = / or \*/yà = yà = /. Under this scenario, the morphemes /rū̄ = / and /nā = /, which originally belong to the inflectional paradigm of PCrū̄, would have been extended into the inflectional paradigms of PCī and PCì for phonological reasons, displacing part of the distinctive inflectional morphology of these two predicative classes. My decision to adopt the first of these two analyses in this grammatical description is mainly based on practical reasons.

Note that the uncombinability discussed in this section might also affect PCnà, with the possible effect of forcing the use of /yà = rū̄ = / 'AM = PCrū̄ = ' and /yà = nā = / 'AM = PCrū̄.3M/N/NS.OBJ = ' instead of the expected combinations ?/yà = nà = / 'AM = PCnà = ' and ?/yà = nà = / 'AM = PCnà.3M/N/NS.OBJ = ', respectively. My data do not allow me to settle this question.

## 5.4 Inflection in the Imperative Inflectional Type (IMP; slots 4–8)

The “basic” morphemes available in the relatively simple inflectional template of IMP are listed in TABLE 45.

For the most part, the inflectional template of IMP is **identical to that of IND** (on IND, see SECTION 5.3). Note in particular that the several non-concatenative morphological peculiarities of IND (caused by uncombinabilities between certain morphemes) discussed in SECTIONS 5.3.3 through 5.3.5 above also apply in IMP.

5.4. Inflection in the Imperative Inflectional Type (slots 4–8)

5	6	7	PP
AM =	PC =	3M/N/NS.OBJ =	
$\pm y\grave{a} =$	PC $\emptyset$ $\emptyset$	$\pm n\bar{a} =$	...
	PC $\bar{i}$ $\bar{i} =$		
	PC $\grave{i}$ $\grave{i} =$		
	PC $r\bar{u}$ $r\bar{u} =$		
	PC $n\grave{a}$ ?		

TABLE 45. Set of “basic” morphemes available in slots 5 to 7 of the inflectional template of the predicative phrase in IMP

Importantly, however, while a definitional property of IND is that it requires slot 4 to be filled (*i.e.* a subject index to be present), the inflectional template of IMP, by contrast, **features no slot 4** (and, consequently, does not allow the presence of a subject index).

Another, minor peculiarity proper to the inflectional template of IMP (as opposed to both IND and SBJV) is the **filler PC $\emptyset$  marker / $n\grave{a} =$  / (slot 6)**. In the simultaneous absence of encoding of associated motion and of a third person masculine/neuter/non-salientive (core) object index (*i.e.* when both slots 5 and 7 are left empty), a predicative phrase belonging to PC $\emptyset$  such as *pé* ‘sleep’ would be expected to yield the IMP form *\*/( $\emptyset =$ )pé/* ‘sleep!’, devoid of any inflectional material. This expected form is ungrammatical. A morpheme / $n\grave{a} =$  /, which I gloss as ‘PC $\emptyset$ .IMP’, is used in this particular context to **fill the absence of predicative class marker for PC $\emptyset$** , in this case yielding the correct form / $n\grave{a} = pé/$  ‘sleep!’. To contextualize the use of this morpheme within the whole inflectional paradigm of IMP, see p.451, CHART E (column PC $\emptyset$ ).

The use of this morpheme / $n\grave{a} =$  / ‘PC $\emptyset$ .IMP’ can be interpreted as an *ad hoc* strategy that allows for the regularization of an inflectional form that would otherwise have been the only one to be devoid of any morphological marking (on / $\hat{i} =$  /, a functionally analogical filler PC $\emptyset$  marker used in SBJV, see SECTION 5.5, p.445). The specific form of this morpheme might have resulted from an extension into the inflectional template of PC $\emptyset$  of the regular predicative class marker / $n\grave{a} =$  / of PC $n\grave{a}$ .<sup>269</sup>

<sup>269</sup>Against this hypothesis, however, note that PC $n\grave{a}$  only occupies a marginal position within the system of predicative classes of today’s SMAT, and is at best rarely (if ever) to be found in forms



For more aspects opposing the inflectional template of IMP (and IND) to that of SBJV, see SECTION 5.3.1.

For exhaustive charts of the inflectional morphology of the predicative phrase in IMP, see CHARTS E–H in SECTION 5.6, p.451.

## 5.5 Inflection in the Subjunctive Inflectional Type (SBJV; slots 4–8)

The inflectional morphology of the finite predicative phrase in SBJV is generally **more intricate than that of the finite predicative phrase in IND or IMP**. For a good understanding of this section, the reader is invited to first explore **CHARTS J–M in the next section on pp.452–453**, or minimally to have these charts at hand while reading this section. The following paragraphs, rather than a full description of the paradigms displayed in these charts, are conceived as a **functionally-oriented itinerary through them** intended to give a sense of how the inflectional morphology in SBJV generally works, and how it differs from the inflectional morphology in IND and IMP. A complete description of the details of the inflectional morphology in SBJV could, in practice, hardly do any better than a mere chart. Importantly, note that part of the examples provided in this section are highly artificial (mostly because they involve, for the sake of simplicity, predicative phrases in bare SBJV, which is in practice of much more limited use than SBJV-*’ú*; see SECTION 5.2). These examples are, nonetheless, representative of the complex morphological phenomena under discussion, which they are only meant to illustrate in as straightforward a manner as possible.

As a first approximation, one may analyze the combinations of inflectional proclitics that occur in SBJV as **derived from those that occur in IND through the imposition of a toneme /<sup>1</sup>/ on one—and only one—of the proclitics** that constitute these combinations (specifically on the proclitic occurring in slot 4 whenever one is present in this slot, and otherwise on the last—or single—proclitic in the chain of proclitics). As for the proclitics that are not imposed SBJV’s toneme /<sup>1</sup>/ in these combinations, they appear exactly as they would in IND. Additionally, a predicative phrase inflected in SBJV is typically characterized by **tonological al-**

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inflected in IMP. This makes PC $\grave{n}$ à a poor candidate for contributing morphological material to PCØ via analogical extension, at least in the recent history of the language.

**ternations that affect the lexical toneme of its last syllable** (on Pattern 1 morphotonological alternations, which are not addressed in detail in the present section, see SECTION 2.6.2.1). In most cases, the essential exponents of SBJV (which distinguish it from IND) can thus be said to be of a morphotonological nature.

Contrast, for instance, the predicative phrase in IND /chā = pé/ (1SG.SBJ = sleep) ‘I slept’ with the corresponding predicative phrase in SBJV /chà = pê/ (1SG.SBJ\SBJV = sleep\SBJV) ‘(that) I slept’. The latter differs from the former in that its (single) inflectional proclitic /chà = / features an imposed toneme /<sup>1</sup>/ instead of the original toneme /<sup>3</sup>/ of the corresponding first person subject index in IND /chā = /. Additionally, the lexical toneme /<sup>43</sup>/ of the single syllable of the verb root *pé* ‘to sleep’, which is realized as is in the predicative phrase in IND, undergoes a tonological alternation that turns it into /<sup>31</sup>/ in the corresponding predicative phrase in SBJV. Contrast, likewise, the IND predicative phrase /tá = nā = ngo-kútū/ (3S.SBJ = 3M/N/NS.OBJ = bite-foot) ‘it bit him in the foot’ with the corresponding SBJV predicative phrase /tà = nā = ngo-kútù/ (3S.SBJ\SBJV = 3M/N/NS.OBJ = bite-foot\SBJV) ‘(that) it bit him in the foot’. Again, the latter differs from the former in that one of its inflectional proclitics, in this case /tà = / ‘3S.SBJ\SBJV’, features an imposed toneme /<sup>1</sup>/ instead of the original toneme /<sup>4</sup>/ that the corresponding proclitic features in IND (/tá = / ‘3S.SBJ’). Additionally, the lexical toneme /<sup>3</sup>/ of the last syllable of the predicative phrase /ngo-kútū/ ‘to bite someone’s foot’, which is realized as is when the predicative phrase is inflected in IND, undergoes a tonological alternation that turns it into /<sup>1</sup>/ when the same predicative phrase is inflected in SBJV.

**SIMPLER CASE 1: SUBJECT INDEXATION IN SLOT 4 IS AVAILABLE (FIRST FOUR ROWS AND SEVENTH ROW IN CHARTS J–M ON PP.452–453).** In the two examples just discussed, the proclitic that is imposed the toneme /<sup>1</sup>/ characteristic of SBJV belongs to slot 4 of the inflectional template of the predicative phrase, as is by default the case in the more straightforward cases of inflection in SBJV. The combinations of proclitics that obtain in these cases are easily described, as all they involve is essentially a **tonological shift in the proclitic occurring in slot 4** with respect to the corresponding combinations in IND. The only complication that occurs in these comparatively simple cases is that two of the subject proclitics that belong in slot 4 retain their original toneme /<sup>3</sup>/ when “imposed” SBJV’s toneme /<sup>1</sup>/ (specifically /tā = / ‘1PL.SBJ’ and /pē = / ‘2PL.SBJ’, which occur as /tā = / ‘1PL.SBJ.SBJV’ and /pē = / ‘2PL.SBJ.SBJV’ under the effect of SBJV). When a predicative phrase in SBJV features one of these two proclitics in slot 4, only the morphotonological alter-

	4 = 6 = SBJ = PCī =		4 + 6 = SBJ.PCī =		4 = 6 = SBJ = PCì =		4 + 6 = SBJ.PCì =
1SG	?chà = ī =		chī =		?chà = ì =		chì =
1PL	kù = ī =		kī =		kù = ì =		kì =
2SG	?tā = ī =	>	tī =		?tā = ì =	>	tī =
2PL	?pē = ī =		pī =		?pē = ì =		pī =
3S	?tā = ī =		tī =		?tā = ì =		tì =

TABLE 46. *Fusional morphemes encoding both subject index (in slot 4) and predicative class PCī or PCì in SBJV, contrasted with their expected (but rarely attested or unattested) concatenative forms*

nations that affect the last syllable of the predicative phrase remain as unambiguous phonological exponents of the predicative phrase's Inflectional Type. Contrast, for instance, the IND predicative phrase /tā = nā = fè/ (1PL.SBJ = 3M/N/NS.OBJ = shoot) 'we shot it' with its corresponding SBJV form /tā = nā = f'ě/ (1PL.SBJ(.SBJV) = 3M/N/NS.OBJ = shoot\SBJV) 'we killed it'. In practice, the latter only differs from the former by the effect of SBJV's morphotonological alternations affecting the last (and in this case, single) syllable of the predicative phrase (in this case, fè with /<sup>21</sup>/ in IND turns into f'ě with /<sup>CM</sup>/ in SBJV).

Note that, in SBJV just like in IND (see SECTION 5.3.2), in cases where a subject index in slot 4 should immediately precede (*i.e.* with no intervening morpheme /yà = / 'AM' in slot 5) the predicative class markers /ī = / 'PCī' or /ì = / 'PCì' from slot 6, a phonological reduction of the vowel of the subject index regularly occurs (see columns PCī and PCì in CHART J on p.452). Because in most cases the resulting morphemes arise from the fusion of a morpheme in slot 4 that features SBJV's imposed toneme /<sup>1</sup>/, instead of featuring its lexical toneme as in IND, these resulting morphemes are slightly different from the 4 + 6 fusional morphemes occurring in IND. TABLE 46 provides a list of the **4 + 6 fusional morphemes as they occur in SBJV** (this table is to be contrasted with TABLE 43 above, on which it is modeled).

**SIMPLER CASE 2: A THIRD PERSON SUBJECT IS EXPRESSED AS A NP (LAST ROW IN CHARTS J–M ON PP.452–453).** An additional, easily described complication occurs in SBJV in cases where a third person subject argument is expressed as a clause-internal syntactically independent NP that precedes the predicative phrase. In such contexts, a predicative phrase inflected in IND maintains its indexation of

the subject argument in slot 4.<sup>270</sup> By contrast, a predicative phrase inflected in SBJV **does not, in such contexts, feature any indexation of the subject argument in slot 4**. As a consequence, the toneme /<sup>1</sup>/ characteristic of SBJV cannot be imposed to a proclitic belonging in slot 4 (in the absence of any such morpheme). In this situation, **SBJV's toneme /<sup>1</sup>/ is simply not realized**, and the combinations of proclitics that obtain are identical to those found in IND, except that they lack any material in slot 4 (note that in practice, this makes the combinations of proclitics that occur in SBJV in this specific situation identical for the most part to those found in IMP, which are likewise mostly identical to those found in IND except that they lack any material in slot 4; see the preceding section). The morphotonological alternations that affect the last syllable of the predicative phrase in SBJV maintain, for their part, their usual effect. Contrast, for instance, the clause in IND /*Juan ná = pé*/ (John 3M/N/NS.SBJ = sleep) 'John slept' with the corresponding clause in SBJV /*Juan pê*/ (John sleep\SBJV) '(that) John slept'. While the predicative phrase in the former clause obligatorily indexes the subject argument already expressed as a NP preceding it, no such indexation occurs within the predicative phrase of the latter clause. The predicative phrase in SBJV additionally features the effect of SBJV's morphotonological alternations (with *pé* in IND → *pê* in SBJV). Contrast, likewise, the clause in IND /*Juan ná = yà = mā*/ (John 3M/N/NS.SBJ = PCì.3M/N/NS.OBJ = kill.SG) 'John killed it' with the corresponding clause in SBJV /*Juan yà = mǎ*/ (John PCì.3M/N/NS.OBJ = kill.SG\SBJV) '(that) John killed it'.

Much more intricate complications occur in SBJV in cases where a **third person feminine/masculine/neuter/non-salientive (F/M/N/NS) subject argument** (not expressed within the clause as a NP preceding the predicative phrase) **or a fourth person argument are to be indexed** on the predicative phrase. These complications arise from the fact that **slot 4 in SBJV does not feature indexes for such subjects** (while it does feature indexes for them in IND). The indexation of such subjects therefore has to operate via other strategies than straightforward encoding in slot 4.<sup>271</sup>

<sup>270</sup>This process of "indexation" could in fact be better characterized as a case of agreement for subject argument, given that it indexes a participant already expressed syntactically in the clause.

<sup>271</sup>Interestingly, certain speakers (e.g. JGS, LAR, IGV) occasionally produce analogical forms in SBJV with a third person F/M/N/NS subject index that aligns with the straightforward cases of encoding of subject indexes in slot 4 in SBJV discussed in the preceding paragraphs, e.g. /*nâ<sub>4</sub> = rû<sub>6</sub> = ngù-gù-'ú*/ (3M/N/NS.SBJ\SBJV = PCrû = rest-PL\SBJV-SUB) 'they rested' (on the model of the straightforward /*tâ<sub>4</sub> = rû<sub>6</sub> = ngù-gù-'ú*/ [3S.SBJ\SBJV = PCrû = rest-PL\SBJV-SUB] 'they rested') instead of the

The strategies employed for indexing a third person F/M/N/NS subject in SBJV differ from those employed for encoding a fourth person subject.

**COMPLEX CASE 1: INDEXATION OF A THIRD PERSON SUBJECT IN SLOT 7 (FIFTH AND SIXTH ROWS IN CHARTS J–M ON PP.452–453).** Third person F/M/N/NS subjects in SBJV are encoded in slot 7, *i.e.* in the slot dedicated to the encoding of third person M/N/NS (core) objects in IND, and their **exponents are segmentally (but not always tonologically) identical to those that encode third person M/N/NS objects in IND.**<sup>272</sup> In other words, the morphological material occurring in slot 7 in IND, although it happens to only serve for the encoding of third person M/N/NS *object* indexes in IND (given that subjects are always indexed in slot 4 in IND),<sup>273</sup> essentially encodes a third person F/M/N/NS index, whether subject or object, which is why the exact same material is found to occur in SBJV for the encoding of third person F/M/N/NS *subject* indexes. Portmanteau proclitics in SBJV that simultaneously encode a third person F/M/N/NS *subject* index in slot 7 together with features from slots 5 (associated motion) or 6 (predicative class) are likewise segmentally (but not always tonologically) identical to those that simultaneously encode in IND a third person M/N/NS *object* index in slot 7 together with features from slots 5 or 6. The reason why all these morphemes encoding a F/M/N/NS sub-

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regular but more opaque /nà<sub>6+7</sub> = ngù-gǔ-'ú/ [PCrī.3M/N/NS.SBJ\SBJV = rest-PL\SBJV-SUB] ‘they rested’ (subscript numbers in these forms correspond to the slots filled by the respective morphemes; for an instance of this phenomenon in context, see (T109)). I take such analogical forms as an indication that the system of encoding of third person F/M/N/NS subject indexes in SBJV proves opaque to speakers themselves, to the point of prompting unconscious “repairs” from them.

<sup>272</sup>This formal identity suffers a single exception. While the morpheme that simultaneously encodes PCì and a third person M/N/NS object index in IND has the phonological form /yà = /, the one that simultaneously encodes PCì and a third person F/M/N/NS subject index in SBJV virtually always takes the phonological form /yì = / (or even /yí = /, instead of the expected /yà = /) in the specific case where it is combined with the high-frequency verb root *í* ‘to be’ (yielding the predicative phrase /yì = ì/ [PCì.3F/M/N/NS.SBJ.SBJV = be\SBJV] ‘(that) he/she/it is’). For a similar case of assimilation for vowel quality of an /a/ with the nucleus /i/ of *í* ‘to be’, see the case of the irregular realization /iyì = / of the proclitic /iyà = / ‘3F.SBJ.PCì’ in SECTION 5.3.2.

<sup>273</sup>Note, additionally, that the reason why the morphemes that fill slot 7 in IND never stand for a third person F object but only for third person M/N/NS objects (while the same morphemes in IND may stand for both third person M/N/NS and F subjects) is because third person F participants in (core) object syntactic position are in practice always encoded, via a phenomenon of differential object marking, as participants in the accusative. Such participants, when indexed on the predicative phrase, systematically occupy slot 2 of the inflectional template of the predicative phrase, and never slot 7.

ject index in slot 7 (potentially along with other features from slots 5 or 6) in SBJV are not always tonologically identical (although they are segmentally) with those that encode a M/N/NS object index in slot 7 (again, potentially along with other features) in IND, is that they **undergo the imposition of SBJV’s characteristic toneme /<sup>1</sup>/ in cases where the third person subject index being encoded corresponds to a M/N/NS participant** (by contrast with a F participant). However, SBJV’s toneme /<sup>1</sup>/ is *not* imposed to these morphemes in cases where the third person subject index being encoded corresponds to a F participant, which is how a third person M/N/NS subject index may be distinguished from a third person F subject index.

Examples (503–505) illustrate what was just said in the preceding paragraph (the subscript numbers to the right of the morphemes in these examples correspond to the slots of the inflectional template of the predicative phrase that the respective morphemes fill). Example (503) shows that the same form /nā= / in slot 7 that serves for the encoding of a third person M/N/NS object in IND (as in (503a), where it is glossed as ‘3M/N/NS.OBJ’) may serve in SBJV for the encoding of a third person F subject, with no tonological modification (as in (503b), where it is glossed as ‘3F.SBJ.SBJV’). The same morpheme, if affected by SBJV’s toneme imposition of /<sup>1</sup>/, may serve in SBJV for the encoding of a third person M/N/NS subject (as in (503c), where it is glossed as ‘3M/N/NS.SBJ\SBJV’).

- (503) a. chā<sub>4</sub> = nā<sub>7</sub> = ngo  
 1SG.SBJ = 3M/N/NS.OBJ = bite  
 ‘I bit it’
- b. nā<sub>7</sub> = pê  
 3F.SBJ.SBJV = sleep\SBJV  
 ‘(that) she slept’
- c. nâ<sub>7</sub> = pê  
 3M/N/NS.SBJ\SBJV = sleep\SBJV  
 ‘(that) he slept’

Example (504) similarly shows that the same form /yà= / in slots 5+7 that contributes the encoding of a third person M/N/NS object in IND (as in (504a), where it is glossed as ‘AM.3M/N/NS.OBJ’) may contribute in SBJV the encoding of a third person F/M/N/NS subject (as in (504b), where it is glossed as ‘AM.3F/M/N/NS.SBJ.SBJV’). Note that in this case, by contrast with the case just discussed in the preceding example, because the form /yà= / already features a lexical toneme /<sup>1</sup>/, the encodings of a third person F vs a third person M/N/NS subject index cannot be distinguished

by the imposition of SBJV's toneme /<sup>1</sup>/ for the encoding of the latter.

- (504) a.  $ch\bar{a}_4 = y\grave{a}_{5+7} = ngo$   
 1SG.SBJ = AM.3M/N/NS.OBJ = bite  
 'I went and bit it'
- b.  $y\grave{a}_{5+7} = p\hat{e}$   
 AM.3F/M/N/NS.SBJ.SBJV = sleep\SBJV  
 '(that) she/he slept'

Example (505) shows an additional case of the same phenomenon. The form / $n\bar{a} = /$  in slots 6 + 7, which contributes the encoding of a third person M/N/NS object in IND (as in (505a)), may contribute in SBJV the encoding of a third person F subject index (as in (505b), where the form's toneme is left unchanged) or a third person M/N/NS subject index (as in (505c), where the form is imposed SBJV's toneme /<sup>1</sup>/).

- (505) a.  $ch\bar{a}_4 = y\grave{a}_5 = n\bar{a}_{6+7} = ng\grave{u}'\acute{e}'e$   
 1SG.SBJ = AM = PCr $\bar{u}$ .3M/N/NS.OBJ = rest-CAUS  
 'I went and made him rest'
- b.  $y\grave{a}_5 = n\bar{a}_{6+7} = ng'\ddot{u}$   
 AM = PCr $\bar{u}$ .3F.SBJ.SBJV = rest\SBJV  
 '(that) she went and rested'
- c.  $y\grave{a}_5 = n\grave{a}_{6+7} = ng'\ddot{u}$   
 AM = PCr $\bar{u}$ .3M/N/NS.SBJ\SBJV = rest\SBJV  
 '(that) he went and rested'

Incidentally, the indexation of a F/M/N/NS subject in SBJV, because it occupies slot 7, **forces the indexation of third person M/N/NS objects (when present) out of slot 7** (see fifth and sixth rows in CHARTS K and M on pp.452–453). From a functional perspective, this can be said to be the reason why the inflectional template of the predicative phrase in SBJV features an extra slot 8 (at the right edge of the predicative phrase) compared to the inflectional templates of the predicative phrase in IND or IMP. The only function of this **extra slot 8 is to encode a third person M/N/NS object index** (by means of a suffix /- $\grave{a}$ / '3M/N/NS.OBJ') in cases where slot 7 is already filled by the encoding of a third person F/M/N/NS subject (note that whenever slot 7 is available, however, the indexation of a third person M/N/NS object in SBJV operates, by default, in slot 7). Contrast, for instance, the IND predicative phrase / $n\acute{a}_4 = n\bar{a}_7 = ngo$ / (3M/N/NS.SBJ = 3M/N/NS.OBJ = bite) 'he ate it' with its corresponding SBJV predicative phrase / $n\grave{a}_7 = ng\acute{o}'\grave{a}_8$ / (3M/N/NS.SBJ\SBJV = bite\SBJV-3M/N/NS.OBJ) '(that) he ate it'. Because in the SBJV predicative phrase

slot 7 is occupied by the indexation of a third person M/N/NS subject, the third person M/N/NS object index encoded in slot 7 in the IND predicative phrase is forced out of it into slot 8 in the SBJV predicative phrase.

**COMPLEX CASE 2: “NEGATIVE INDEXATION” OF A FOURTH PERSON SUBJECT (SECOND-TO-LAST ROW IN CHARTS J–M ON PP.452–453).** Fourth person subjects in SBJV can be said to be encoded negatively. It is the absence of any subject marking in slots 4 or 7, combined with the absence of any NP in subject position preceding the predicative phrase, that is interpreted as implying that the predicative phrase has a fourth person subject. **Fourth person subjects in SBJV are represented morphologically—so to say—as an absence of subject.** When “indexation” of a fourth person subject occurs in SBJV, the **last of the proclitics that precede the predicative phrase is systematically imposed SBJV’s toneme /<sup>1</sup>/** (which may, as in other cases discussed in this section, result in no change if the last proclitic’s lexical toneme, *i.e.* the one it features in IND, is already /<sup>1</sup>/).

Contrast the predicative phrase in IND /tī̄ = dé’ à-gǔ/ (4SBJ.PCī̄ = speak-PL) ‘we (incl.) spoke’ (with /tī̄ = / < /tá = ī̄ = / ‘4SBJ = PCī̄ = ’; see TABLE 43) with the corresponding predicative phrase in sbjv /î̄ = dé’ à-gǔ/ (PCī̄ \ SBJV = speak-PL \ SBJV) ‘(that) we (incl.) spoke’. The latter differs from the former in that it completely lacks—from a formal perspective—a subject, and in that its last (and only) proclitic (/î̄ = / ‘PCī̄ \ SBJV’) features SBJV’s imposed toneme /<sup>1</sup>/ (by contrast with /ī̄ = / ‘PCī̄’ in the IND predicative phrase, which features its lexical toneme /<sup>3</sup>/). Contrast, likewise, the predicative phrase in IND /tá = yà = rǔ = ngǔ-gǔ/ (4SBJ = AM = PCrǔ̄ = rest-PL) ‘we (incl.) went and rested’ with the corresponding predicative phrase in SBJV /yà = rǔ̄ = ngǔ-gǔ/ (AM = PCrǔ̄ \ SBJV = rest-PL \ SBJV) ‘(that) we (incl.) went and rested’. Again, the latter differs from the former in that it completely lacks a subject, and in that the last morpheme in its chain of proclitics (/rǔ̄ = / ‘PCrǔ̄ \ SBJV’) features SBJV’s imposed toneme /<sup>1</sup>/ (by contrast with /rǔ̄ = / ‘PCrǔ̄’ in the IND predicative phrase, which features its lexical toneme /<sup>3</sup>/). Finally, contrast in the same way the predicative phrase in IND /tá = yà = pé-gǔ/ (4SBJ = AM = sleep-PL) ‘we (incl.) went and slept’ with the corresponding predicative phrase in SBJV /yà = pé-gǔ/ (AM.SBJV = sleep-PL \ SBJV) ‘(that) we (incl.) went and slept’. Note, in this last example, that the form /yà = /, which already features a lexical toneme /<sup>1</sup>/, remains tonologically unchanged from the IND predicative phrase to the SBJV predicative phrase.

Note, finally, an exception that occurs in PC∅ predicative phrases in SBJV with a fourth person subject, in cases where neither associated motion nor a third person



M/N/NS object index are encoded within the predicative phrase (see second-to-last row of the first column of CHART J on p.452). Given an IND predicative phrase /tá = pé-gú/ (4SBJ = sleep-PL) ‘we (incl.) slept’, one might expect its corresponding SBJV predicative phrase to be \*/pé-gú/, *i.e.* to lack any proclitic, as per the principles put forward in the preceding paragraph. In this specific situation, however, and probably so as to avoid the complete lack of inflectional marking in the predicative phrase, an ***ad hoc* PCØ marker /î = / ‘PCØ.SBJV’ “fills” the lack of proclitics**, yielding in this case a SBJV predicative phrase /î = pé-gú/ (PCØ.SBJV = sleep-PL\SBJV) ‘(that) we (incl.) slept’ (for a similar case of “filler” PCØ marker occurring in the inflectional morphology of IMP, see the discussion of /nà = / ‘PCØ.IMP’ in SECTION 5.4). The form of this morpheme might indicate that it represents historically an extension of the regular predicative class markers /ī = / and /î = / of PCī and PCî respectively (which both acquire the form /î = / under the effect of SBJV’s toneme /<sup>1</sup>/ imposition) into the inflectional morphology of PCØ.

## 5.6 SUMMARY: charts of combinations found in slots 4–8 of the inflectional template of the predicative phrase

Below (CHARTS A–M, pp. 449–453) are exhaustive **charts of the morphological combinations found in slots 4–8 of the inflectional template of the predicative phrase**. Although these charts should be essentially predictable by application of the morphological rules exposed in SECTIONS 5.3 through 5.5 above, they should usefully provide a fully explicit exposition of the outcomes of these relatively complex morphological rules. Note that slots 1–3 of the inflectional template of the predicative phrase are not considered here as they present no particular morphological difficulties in their combinations both between themselves and with morphemes from slots 4–8 (for a list of the morphemes occurring in slots 1–3, see TABLE 39, p.393).

The charts in this section are **arranged, at a first level, by Inflectional Type**. The Indicative Inflectional Type (IND) is exposed in CHARTS A–D, the Imperative Inflectional Type (IMP) in CHARTS E–H, and the Subjunctive Inflectional Type (SBJV) in CHARTS J–M.<sup>274</sup>

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<sup>274</sup>The tonological properties exhibited by the predicative phrases themselves (in light grey) in

Within each of these three sections, the charts are, **at a second level**, arranged according to the combination they correspond to among the four possible combinations of the following two parameters:

- **absence vs presence of encoding of associated motion (slot 5)** in the inflected predicative phrase ([-AM] vs [+AM]);
- **absence vs presence of indexation of a third person masculine/neuter/non-salientive (core) object argument (slots 7 or 8)** in the inflected predicative phrase ([-3M/N/NS.OBJ] vs [+3M/N/NS.OBJ]).

Within each particular chart, forms are arranged **horizontally according to the predicative class** whose inflectional morphological combinations they illustrate (PCØ, PCī, PCì, PCrī; forms belonging to the poorly attested PCnà are not included).

Forms are further arranged **vertically according to the particular person-number-nominal class combination that is encoded by their subject index**. The subject person-number-nominal class combinations 2SG.SBJ in IMP and 4SBJ in SBJV are not—strictly speaking—*indexed*, which is why they are in parentheses in the corresponding charts. In these two particular cases, it is in fact the *absence* of a subject exponent in the inflected predicative phrase that guides the interpretation of the person of the subject. The bottom row labeled ‘Explicit NP’ in CHARTS J–M refers to the specific situation, only occurring in SBJV, where no subject is indexed in the inflected predicative phrase because the subject is expressed within the clause as an explicit syntactic NP preceding the inflected predicative phrase.

Seven of the eight predicative phrases used here for illustration (in light grey in the charts) are verb roots. These are the intransitive verb roots *pé* ‘to sleep’ (lexically a PCØ verb root), *dé’à* ‘to speak’ (lexically PCī), *yû’u* ‘to jump’ (a verb root often encountered inflected in PCì, although it belongs lexically to PCØ), and *ngù* ‘to rest’ (lexically PCrī), and the transitive verb roots *ngò* ‘to eat’ (lexically PCØ), *yâ’u* ‘to seize’ (lexically PCī), and *má* ‘to kill (sg.)’ (lexically PCì). The eighth predicative phrase used in the charts, the transitive predicative phrase /ngù-’é’e/ ‘to make rest’ (lexically PCrī), is derived from *ngù* ‘to rest’ (lexically PCrī) by means of the causative suffix /-’é’e/ ‘CAUS’, which has no effect on the predicative class of

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CHARTS E–H correspond to forms in bare SBJV—*i.e.* not SBJV-’ú—that are further *not* associated with relativizers nor /-’gǔ/ ‘CIRC’. Under certain circumstances, the exact tonological outcomes of the predicative phrases themselves may be different in SBJV forms associated with relativizers, /-’gǔ/, or /-’ú/ ‘SUB’ (see SECTION 2.6.2.1).

the predicative phrase it is attached to.<sup>275</sup>

Importantly, the fact that only intransitive predicative phrases ('sleep, speak, jump, rest') are used here to illustrate the inflectional morphology of predicative phrases that do not comprise a third person masculine/neuter/non-salientive (core) object index (*i.e.* [+3M/N/NS.OBJ] forms) should not be misunderstood. This convenient selection should not be erroneously taken to mean that only intransitive predicative phrases can be inflected as [-3M/N/NS.OBJ] forms. Indeed, transitive predicative phrases will be inflected just like intransitive predicative phrases any time their object is not integrated within them as a third person masculine/neuter/non-salientive object index. Thus, the intransitive predicative phrase /chā = pé/ 'I sleep' (CHART A, column PCØ), for instance, is inflectionally distinct from the transitive one /chā = nā = ngo/ 'I eat it' (CHART B, column PCØ), but it is no different from the transitive one /chó'ní chā = ngo/ 'I eat fish', where the object, a NP in the non-salientive nominal class, is not indexed on the predicative phrase, in this case because it is a syntactically independent NP that precedes the inflected predicative phrase. Although intransitive predicative phrases may only inflect as [-3M/N/NS.OBJ] forms by definition, **transitive predicative phrases may, for their part, inflect as both [-3M/N/NS.OBJ] and [+3M/N/NS.OBJ] forms depending on their morphosyntactic context.**

A general gloss is provided for each chart in order to give a quick and rough indication of the meaning of the forms it contains.

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<sup>275</sup>The predicative class PCrū contains no transitive (morphologically simplex) verb root, which is why a (morphologically complex) predicative phrase is resorted to here.

INDICATIVE INFLECTIONAL TYPE (IND)

CHART A [-AM], [-3M/N/NS.OBJ] 'I (you, etc.) sleep (speak, etc.)'

	PCØ ('sleep')	PCī ('speak')	PCì ('jump')	PCrū ('rest')
1SG.SBJ	chā = pé	chī = dé'à	chī̄ = yû'u	chā = rū = ngù
2SG.SBJ	kū = pé	kī = dé'à	kī̄ = yû'u	kū = rū = ngù
1PL.SBJ	tā = pé	tī = dé'à	tī̄ = yû'u	tā = rū = ngù
2PL.SBJ	pē = pé	pī = dé'à	pī̄ = yû'u	pē = rū = ngù
3F.SBJ	ī = pé	īyā = dé'à	īyā̄ = yû'u	ī = rū = ngù
3M/N/NS.SBJ	ná = pé	nī̄ = dé'à	nī̄ = yû'u	ná = rū = ngù
3S.SBJ	tá = pé	tī̄ = dé'à	tī̄ = yû'u	tá = rū = ngù
4SBJ	tá = pé	tī̄ = dé'à	tī̄ = yû'u	tá = rū = ngù

CHART B [-AM], [+3M/N/NS.OBJ] 'I (you, etc.) eat (seize, etc.) it'

	PCØ ('eat')	PCī ('seize')	PCì ('kill')	PCrū ('make rest')
1SG.SBJ	chā = nā = ngo	chā = yā = yâ'u	chā = yà = ma	chā = nā = ngù-'é'e
2SG.SBJ	kū = nā = ngo	kū = yā = yâ'u	kū = yà = ma	kū = nā = ngù-'é'e
1PL.SBJ	tā = nā = ngo	tā = yā = yâ'u	tā = yà = ma	tā = nā = ngù-'é'e
2PL.SBJ	pē = nā = ngo	pē = yā = yâ'u	pē = yà = ma	pē = nā = ngù-'é'e
3F.SBJ	ī = nā = ngo	ī = yā = yâ'u	ī = yà = ma	ī = nā = ngù-'é'e
3M/N/NS.SBJ	ná = nā = ngo	ná = yā = yâ'u	ná = yà = ma	ná = nā = ngù-'é'e
3S.SBJ	tá = nā = ngo	tá = yā = yâ'u	tá = yà = ma	tá = nā = ngù-'é'e
4SBJ	tá = nā = ngo	tá = yā = yâ'u	tá = yà = ma	tá = nā = ngù-'é'e

**CHART C** [+AM], [-3M/N/NS.OBJ] ‘I (you, etc.) go and sleep (speak, etc.)’

	<b>PCØ</b> (‘sleep’)	<b>PCī</b> (‘speak’)	<b>PCì</b> (‘jump’)	<b>PCrū</b> (‘rest’)
<b>1SG.SBJ</b>	chā = yà = pé	chā = yà = rū = dé’à	chā = yà = rū = yû’u	chā = yà = rū = ngù
<b>2SG.SBJ</b>	kū = yà = pé	kū = yà = rū = dé’à	kū = yà = rū = yû’u	kū = yà = rū = ngù
<b>1PL.SBJ</b>	tā = yà = pé	tā = yà = rū = dé’à	tā = yà = rū = yû’u	tā = yà = rū = ngù
<b>2PL.SBJ</b>	pē = yà = pé	pē = yà = rū = dé’à	pē = yà = rū = yû’u	pē = yà = rū = ngù
<b>3F.SBJ</b>	ī = yà = pé	ī = yà = rū = dé’à	ī = yà = rū = yû’u	ī = yà = rū = ngù
<b>3M/N/NS.SBJ</b>	ná = yà = pé	ná = yà = rū = dé’à	ná = yà = rū = yû’u	ná = yà = rū = ngù
<b>3S.SBJ</b>	tá = yà = pé	tá = yà = rū = dé’à	tá = yà = rū = yû’u	tá = yà = rū = ngù
<b>4SBJ</b>	tá = yà = pé	tá = yà = rū = dé’à	tá = yà = rū = yû’u	tá = yà = rū = ngù

**CHART D** [+AM], [+3M/N/NS.OBJ] ‘I (you, etc.) go and eat (seize, etc.) it’

	<b>PCØ</b> (‘eat’)	<b>PCī</b> (‘seize’)	<b>PCì</b> (‘kill’)	<b>PCrū</b> (‘make rest’)
<b>1SG.SBJ</b>	chā = yà = ngo	chā = yà = nā = yâ’u	chā = yà = nā = ma	chā = yà = nā = ngù-’é’e
<b>2SG.SBJ</b>	kū = yà = ngo	kū = yà = nā = yâ’u	kū = yà = nā = ma	kū = yà = nā = ngù-’é’e
<b>1PL.SBJ</b>	tā = yà = ngo	tā = yà = nā = yâ’u	tā = yà = nā = ma	tā = yà = nā = ngù-’é’e
<b>2PL.SBJ</b>	pē = yà = ngo	pē = yà = nā = yâ’u	pē = yà = nā = ma	pē = yà = nā = ngù-’é’e
<b>3F.SBJ</b>	ī = yà = ngo	ī = yà = nā = yâ’u	ī = yà = nā = ma	ī = yà = nā = ngù-’é’e
<b>3M/N/NS.SBJ</b>	ná = yà = ngo	ná = yà = nā = yâ’u	ná = yà = nā = ma	ná = yà = nā = ngù-’é’e
<b>3S.SBJ</b>	tá = yà = ngo	tá = yà = nā = yâ’u	tá = yà = nā = ma	tá = yà = nā = ngù-’é’e
<b>4SBJ</b>	tá = yà = ngo	tá = yà = nā = yâ’u	tá = yà = nā = ma	tá = yà = nā = ngù-’é’e

IMPERATIVE INFLECTIONAL TYPE (IMP)

CHART E [-AM], [-3M/N/NS.OBJ] ‘sleep (speak, etc.)!’

	PCØ (‘sleep’)	PCī (‘speak’)	PCì (‘jump’)	PCrū̄ (‘rest’)
(2SG.SBJ)	nà = pé	ī = dé’à	ì = yû’u	rū̄ = ngù

CHART F [-AM], [+3M/N/NS.OBJ] ‘eat (seize, etc.) it!’

	PCØ (‘eat’)	PCī (‘seize’)	PCì (‘kill’)	PCrū̄ (‘make rest’)
(2SG.SBJ)	nā = ngo	yā = yâ’u	yà = ma	nā = ngù-’é’e

CHART G [+AM], [-3M/N/NS.OBJ] ‘go and sleep (speak, etc.)!’

	PCØ (‘sleep’)	PCī (‘speak’)	PCì (‘jump’)	PCrū̄ (‘rest’)
(2SG.SBJ)	yà = pé	yà = rū̄ = dé’à	yà = rū̄ = yû’u	yà = rū̄ = ngù

CHART H [+AM], [+3M/N/NS.OBJ] ‘go and eat (seize, etc.) it!’

	PCØ (‘eat’)	PCī (‘seize’)	PCì (‘kill’)	PCrū̄ (‘make rest’)
(2SG.SBJ)	yà = ngo	yà = nā = yâ’u	yà = nā = ma	yà = nā = ngù-’é’e

**SUBJUNCTIVE INFLECTIONAL TYPE (SBJV)**

**CHART J** [-AM], [-3M/N/NS.OBJ] '(that) I (you, etc.) sleep (speak, etc.)'

	<b>PCØ</b> ('sleep')	<b>PCī</b> ('speak')	<b>PCì</b> ('jump')	<b>PCrū̄</b> ('rest')
<b>1SG.SBJ</b>	chà = pê	chī = dé'ā	chì = yû'u	chà = rū̄ = ng'ũ
<b>2SG.SBJ</b>	kù = pê	kī = dé'ā	kì = yû'u	kù = rū̄ = ng'ũ
<b>1PL.SBJ</b>	tā = pê	tī = dé'ā	tī̄ = yû'u	tā = rū̄ = ng'ũ
<b>2PL.SBJ</b>	pē = pê	pī = dé'ā	pī̄ = yû'u	pē = rū̄ = ng'ũ
<b>3F.SBJ</b>	nā = pê	yā = dé'ā	yà = yû'u	nā = ng'ũ
<b>3M/N/NS.SBJ</b>	nà = pê	yà = dé'ā	yà = yû'u	nà = ng'ũ
<b>3S.SBJ</b>	tà = pê	tī = dé'ā	tì = yû'u	tà = rū̄ = ng'ũ
<b>(4SBJ)</b>	ì = pê	ì = dé'ā	ì = yû'u	rù̄ = ng'ũ
<b>Explicit NP</b>	NP pê	NP ī = dé'ā	NP ì = yû'u	NP rū̄ = ng'ũ

**CHART K** [-AM], [+3M/N/NS.OBJ] '(that) I (you, etc.) eat (seize, etc.) it'

	<b>PCØ</b> ('eat')	<b>PCī</b> ('seize')	<b>PCì</b> ('kill')	<b>PCrū̄</b> ('make rest')
<b>1SG.SBJ</b>	chà = nā = ngǒ	chà = yā = yâ'u	chà = yà = má	chà = nā = ngù-'é'ẹ
<b>2SG.SBJ</b>	kù = nā = ngǒ	kù = yā = yâ'u	kù = yà = má	kù = nā = ngù-'é'ẹ
<b>1PL.SBJ</b>	tā = nā = ngǒ	tā = yā = yâ'u	tā = yà = má	tā = nā = ngù-'é'ẹ
<b>2PL.SBJ</b>	pē = nā = ngǒ	pē = yā = yâ'u	pē = yà = má	pē = nā = ngù-'é'ẹ
<b>3F.SBJ</b>	nā = ngǒ-à	yā = yâu'-à	yà = má-à	nā = ngù-'é'e-à
<b>3M/N/NS.SBJ</b>	nà = ngǒ-à	yà = yâu'-à	yà = má-à	nà = ngù-'é'e-à
<b>3S.SBJ</b>	tà = nā = ngǒ	tà = yā = yâ'u	tà = yà = má	tà = nā = ngù-'é'ẹ
<b>(4SBJ)</b>	nà = ngǒ	yà = yâ'u	yà = má	nà = ngù-'é'ẹ
<b>Explicit NP</b>	NP nā = ngǒ	NP yā = yâ'u	NP yà = má	NP nā = ngù-'é'ẹ

CHART L [+AM], [-3M/N/NS.OBJ] '(that) I (you, etc.) go and sleep (speak, etc.)'

	PCØ ('sleep')	PCī ('speak')	PCì ('jump')	PCrū ('rest')
1SG.SBJ	chà = yà = pê	chà = yà = rū = dé'ā	chà = yà = rū = yû'u	chà = yà = rū = ng'ũ
2SG.SBJ	kù = yà = pê	kù = yà = rū = dé'ā	kù = yà = rū = yû'u	kù = yà = rū = ng'ũ
1PL.SBJ	tā = yà = pê	tā = yà = rū = dé'ā	tā = yà = rū = yû'u	tā = yà = rū = ng'ũ
2PL.SBJ	pē = yà = pê	pē = yà = rū = dé'ā	pē = yà = rū = yû'u	pē = yà = rū = ng'ũ
3F.SBJ	yà = pê	yà = nā = dé'ā	yà = nā = yû'u	yà = nā = ng'ũ
3M/N/NS.SBJ	yà = pê	yà = nà = dé'ā	yà = nà = yû'u	yà = nà = ng'ũ
3S.SBJ	tà = yà = pê	tā = yà = rū = dé'ā	tà = yà = rū = yû'u	tà = yà = rū = ng'ũ
(4SBJ)	yà = pê	yà = rù = dé'ā	yà = rù = yû'u	yà = rù = ng'ũ
Explicit NP	NP yà = pê	NP yà = rū = dé'ā	NP yà = rū = yû'u	NP yà = rū = ng'ũ

CHART M [+AM], [+3M/N/NS.OBJ] '(that) I (you, etc.) go and eat (seize, etc.) it'

	PCØ ('eat')	PCī ('seize')	PCì ('kill')	PCrū ('make rest')
1SG.SBJ	chà = yà = ngó	chà = yà = nā = yâ'u	chà = yà = nā = má	chà = yà = nā = ngù-'é'ẹ
2SG.SBJ	kù = yà = ngó	kù = yà = nā = yâ'u	kù = yà = nā = má	kù = yà = nā = ngù-'é'ẹ
1PL.SBJ	tā = yà = ngó	tā = yà = nā = yâ'u	tā = yà = nā = má	tā = yà = nā = ngù-'é'ẹ
2PL.SBJ	pē = yà = ngó	pē = yà = nā = yâ'u	pē = yà = nā = má	pē = yà = nā = ngù-'é'ẹ
3F.SBJ	yà = ngó-à	yà = nā = yâ'u-à	yà = nā = má-à	yà = nā = ngù-'é'e-à
3M/N/NS.SBJ	yà = ngó-à	yà = nà = yâ'u-à	yà = nà = má-à	yà = nà = ngù-'é'e-à
3S.SBJ	tà = yà = ngó	tà = yà = nā = yâ'u	tà = yà = nā = má	tà = yà = nā = ngù-'é'ẹ
(4SBJ)	yà = ngó	yà = nà = yâ'u	yà = nà = má	yà = nà = ngù-'é'ẹ
Explicit NP	NP yà = ngó	NP yà = nā = yâ'u	NP yà = nā = má	NP yà = nā = ngù-'é'ẹ



## 5.7 Indexes common to the three Inflectional Types (IND, IMP, and SBJV(-'ǔ̃); slots 1–3)

This section deals with the inflectional proclitics of the predicative phrase whose use and phonological shape are independent from the category of Inflectional Type, *i.e.* are identical in the three Inflectional Types. These proclitics belong to **slots 1 to 3 of the inflectional template of the predicative phrase**. For a synoptic presentation of their paradigms, see TABLE 39, p.393.

SECTION 5.7.1 discusses the proclitics that serve as **indexes for participants with a benefactive(-malefactive) and accusative syntactic function** (slots 1 and 2 of the inflectional template of the predicative phrase, respectively). The proclitics that serve as **indexes for participants with a locative and partitive object syntactic function** (which I hypothesize to occupy the same slot, specifically slot 3) are the topic of SECTION 5.7.1.

### 5.7.1 Indexes for benefactive-malefactive and accusative participants (slots 1–2)

The benefactive(-malefactive) and accusative indexes in slots 1 and 2 of the inflectional template of the predicative phrase (see TABLE 39, p.393) **stand pronominally for participants which, if they were expressed as full NPs, would bear the benefactive and accusative case-marking suffixes /-(ǎ)'ǔ̃/ and /-'ǔ̃/, respectively**. Compare, for instance, example (506), where the participant referring to the recipient of a payment, being expressed as a NP, receives the benefactive suffix /-'ǔ̃/ (/maestro-'ǔ̃/ [expert-BEN] 'to a professional'), with (507), where the recipient participant is encoded as a mere pronominal index procliticized to the predicative phrase (/chǎ = / '1SG.BEN'):

(506) O a vece *gá ì-diḕrù-ǎgú ì diḕrù-má'a maestro-'ǔ̃ nà-ǔ̀tànū-'ǔ̃*.

o a vece[s] *gá = ì = diḕrù-ǎ-gú = ì* *diḕrù-má'a*  
or at times if = PCĪ\SBJV = money-POSS-CIRC = CONTR.TOP money-COM

*maestro-'ǔ̃ nà = ǔ̀-tànū-'ǔ̃*  
expert-BEN 3M/N/NS.OBJ\SBJV = make-compensation\SBJV-SUB

['To build their house, people here call communal labor days and offer food and drink in exchange for a few hours work.] Or sometimes if you've got

money you hire a professional for money [lit. ‘... you pay for it (*i.e.* the job) to an expert with money.’]’ [JSG B702]

(507) “[...] *ngē’gùmáré chánánā-ǔtànù ì gùnē’ú.*”

*ngē’gùmá-ré*                      *chǎ = ná = nā = ǔ-tànù*  
ANAPH.CIRC-amount?    1SG.BEN = 3M/N/NS.SBJ = 3M/N/NS.OBJ = make-compensation

*ì = gùnē-’ú*  
LK.NS = get.light\SBJV-REL.NS

“[...] they pay me this much a day [lit. ‘... they pay this much for the day to me.’]” [JGS 502]

It makes little doubt that these indexes are of fairly recent formation. They resulted from the **phonological reduction of the independent pronouns bearing the benefactive and accusative suffixes** just mentioned (e.g. /nú = / ‘3M/N/NS.BEN’ < /nú-’ú/ ‘3M/N/NS-BEN’ and /nū = / ‘3M/N/NS.ACC’ < /nú-’ú/ ‘3M/N/NS-ACC’; on combinations of the pronominal roots with the benefactive and accusative suffixes, see SECTION 3.3.4).<sup>276</sup> These **independent pronouns remain available for use** instead of their corresponding indexes in all contexts in today’s language, although their use is comparatively rare in most contexts. Contrast, for instance, example (508a) (repeated from example (i) in note 264, p.416), where a first person singular accusative participant is indexed on the predicative phrase (as /chā = / ‘1SG.ACC’), with the essentially parallel utterance in (508b), where the same participant in the same syntactic function is expressed as an independent pronoun in the accusative (/châ-’ú/ ‘1SG-ACC’). In (508b), the irritated speaker is reiterating with more emphasis the complaint she has just expressed a few seconds before in (508a), which is probably why she uses the phonologically heavier alternative for encoding a first person singular accusative participant, specifically an independent word instead of its equivalent proclitic.

(508) a. “*Áh, mêà rù chāpē-chî’èwē!*”

*áh mêà rù chā = pē = chî’è-wē*  
oh well and 1SG.ACC = 2PL.SBJ = be.bad-convenience

‘Come on, quiet, you’re bothering me!’ [IGS 69]

<sup>276</sup>These indexes are unattested in Cushillococha Tikuna (as described by Anderson 1962), where the pronominal encoding of benefactive or accusative participants can only be achieved through the use of independent pronouns bearing the benefactive or accusative suffixes (a situation that I consider as more conservative than the one attested in SMAT).

b. “*Châ’ũ pē-chî’èwē, pà chàu’ākùǎ!*”

*châ-’ũ* *pē* = *chî’è-wē*                      *pà* = *chàu-’ākùǎ*  
1SG-ACC 2PL.SBJ = be.bad-convenience    VOC = 1SG-children

“‘You are bothering me, my children!’” [IGS 73]

Restoring an independent pronoun instead of a benefactive or accusative index **may occur as a strategy allowing for the insertion of an enclitic** (especially one that typically behaves as a second-position clitic) between the pronoun and the predicative phrase. In the following example, the future enclitic / = *tá*/, which usually behaves as a second-position clitic, is inserted right after the expression of a second person singular accusative participant by means of an independent pronoun (/ *kû-’ũ*/ ‘2SG-ACC’), and in front of the predicative phrase:

(509) “*Ñumá tá ì, kû’ũ tá chà-ǎágú’ũ!*”

*ñumá* = *tá* = *ì*                      *kû-’ũ* = *tá*      *chà* = *ǎágú-’ũ*  
present.time = FUT = CONTR.TOP    2SG-ACC = FUT    1SG.SBJ\SBJV = try\SBJV-SUB

“‘Now I’m going to test you!’” [JSG B114]

However, the **restoration of an independent pronoun is not obligatory for enclitic insertion**, and in practice remains infrequent (although it might have been obligatory at a former stage of the language when independent pronouns in the benefactive and the accusative were just starting to evolve into proclitics). Contrast example (509) above, where / = *tá*/ ‘FUT’ intervenes between the expression of the accusative participant and the predicative phrase, with the following example, where the same enclitic comes after the whole predicative phrase regardless of the fact that the latter bears an accusative index (/ *nũ* = / ‘3M/N/NS.ACC’):

(510) “*Kú <chàu’rú’ũ tá... > chàu’rú’ũ tá... nũkù-ǎ’ũ tá ì ngēmà nũchà-ǎ’ũ!*”

*kú* = *<chàu-’rú’ũ = tá... >*      *chàu-’rú’ũ* = *tá*  
come.on = 1SG-like = FUT              1SG-like = FUT

*nũ* = *kù* = *ǎ-’ũ* = *tá*                                      *ì* = *ngē-mà*  
3M/N/NS.ACC = 2SG.SBJ\SBJV = make\SBJV-SUB = FUT    LK.NS = MED.NS-ANAPH

*nũ* = *chà* = *ǎ-’ũ*  
3M/N/NS.ACC = 1SG.SBJ\SBJV = make\SBJV-SUB

“‘Come on, you’re going to... you’re going to do the same as me [lit. ‘... do what I do like me!’]!” [JSG B342–343]

Using an independent pronoun in the accusative instead of an accusative index seems to be **obligatory in a single context, specifically when the corresponding participant is a complement of the deictic verb**. This morphologically irregular verb is never procliticized with the accusative indexes (see SECTION 6.2.1). Thus, the third person salientive independent pronoun in the accusative (/tû-'ũ̄/ '3S-ACC') in the following example cannot be replaced by its corresponding index (a form such as \*/tũ̄ = ñâ-'ũ̄/ [3S.ACC = do.thus.3M/N/NS.SBJ.SBJV-SUB] for 'he told him' is unattested in my data and in all likelihood ungrammatical):

(511) *Mārũ̄ gá última pruebawá ná-ǧũ̄ rù tũ̄-'ũ̄ ã'a gá ñâ-'ũ̄*: [...]

*mārũ̄ = gá* última prueba-wá ná = ǧũ̄ rù tũ̄-'ũ̄ = ã'a = gá  
 PRF = PST last test-ALOC 3M/N/NS.SBJ = reach and 3S-ACC = QUOT = PST  
 ñâ-'ũ̄  
 do.thus.3M/N/NS.SBJ.SBJV-SUB

'It was now [lit. 'It (impersonal) had arrived to ...'] the last test and he told him: [...]' [JSG 134–135]

In cases where **both a benefactive participant and an accusative participant are to be referred to pronominally within the same clause**, only the accusative one may be encoded as an index procliticized to the predicative phrase. The benefactive one is then obligatorily expressed as an independent pronoun (for instances of this situation, see examples (153), (T69), and (T70)). In other words, **slots 1 and 2 of the inflectional template of the predicative phrase cannot be filled simultaneously**. I treat them as separate slots, instead of considering that they belong to a single paradigm of which only one element can be present within a given inflected predicative phrase, because the benefactive and accusative series of indexes are not interchangeable in the situation just discussed. That is, when both a benefactive and an accusative participants are referred to pronominally within a single clause, it is not possible to express first the accusative one as an independent pronoun and next the benefactive one as an index. Benefactive and accusative pronominal markers have to occur in this order, with the consequence that only the benefactive one, being more peripheral than the accusative one relative to the predicative phrase, can be "expelled" out of the inflectional morphology of the predicative phrase when needed.

The first person singular benefactive and accusative indexes display **two interspeaker variants each**, specifically /chǎ = ~chǒ = / (BEN) and /chā = ~chō = / (ACC). The /a/-variants /chǎ = / and /chā = / are logically (given the origin of the benefactive and accusative indexes as phonological reductions of the independent

pronouns in the benefactive and the accusative) used by those speakers who use the /a/-variant of the first person singular pronominal root in cases where it bears the benefactive or accusative suffixes (/châ-'ú/ '1SG-BEN', /châ-'ü/ '1SG-ACC'). Conversely, the /o/-variants /chǒ=/ and /chō=/ are used by those speakers who use the /o/-variant of the first person singular pronominal root in combination with the benefactive or accusative suffixes (/chô-'ú/ '1SG-BEN', /chô-'ü/ '1SG-ACC'). On the /a/ and /o/ variants of the first person singular pronominal root in combination with the benefactive and accusative suffixes, see SECTION 3.3.4.

Note that morphological sequences involving an **accusative index followed by the areal locative index /í=/** (on which see next section) **are occasionally realized by some speakers exactly like the benefactive index** in the corresponding person, which can prove confusing to the analyst. Thus, the morphemes /kú=/ and /tú=/, in examples (512) and (513) respectively, do not encode a second person singular benefactive and a third person salientive benefactive participants (although they are homonymous with the corresponding benefactive indexes /kú=/ '2SG.BEN' and /tú=/ '3S.BEN'), but the sequence of a second person singular *accusative* and a third person salientive *accusative* participants followed by the areal locative index /í=/:

(512) “Núà nà-ú rù <chô-'rū...> chòmùkūrú'ú wēè tá kúchū-gá!”

nú-à                      nà = ú                      rù      <chô-'rū...>  
 PROX.ALOC-EXO    PCØ.IMP = go.SG    and    1SG-GEN

chò-mùkū-rú'ú = wēè = tá                                      kú = chū = gá  
 1SG-companion-PURP = from.the.outset = FUT    2SG.ACC.3ALOC = 1SG.SBJ.PCì = lead.SG

‘[Just before leaving on a journey, the legendary figure Moe receives a visit from his closest friend. Moe calls him:] “Come here, I was going to take you with me [lit. ‘... I was going to take you away from it (i.e. the currently most activated ground topic)...’] as my... as my companion!” [JSG B324–325]

(513) Ngēmà nū-í gá, túyà-gà'ú gá tūmà.

ngē-mà                      nū = í = gá  
 MED.NS-ANAPH    3M/N/NS.SBJ.PCì = be = PST

tú = yà = gà-'ú    gá = tū-mà  
 3S.ACC.3ALOC = PCì.3F/M/N/NS.SBJ.SBJV = lead.SG\SBJV-SUB    LK.PST = 3S-ANAPH

‘[A hunter spotted a baby monkey and managed to catch it.] And then, he took it away with him [lit. ‘... he took it away from it (i.e. the currently most activated ground topic)...’].’ [JSG C109]

## 5.7.2 Third person indexes for locative and partitive object participants (slot 3)

**Third person participants with a locative syntactic function** may be indexed on the predicative phrase by means of the proclitics /ĩ=/ (areal locative participant), /ně=/nú=/ (areal locative participant corresponding to the source of a centripetal motion), and /î=/ (punctual locative participant?) in slot 3 of the inflectional template of the predicative phrase. These morphemes are discussed in SECTION 5.7.2.1.

The encoding of **third person (core) object participants that are only partitively affected by the process** denoted by a transitive predicative phrase involve, under certain conditions, the use of the proclitics /tà=/ (masculine partitive object), /ně=(/nú=?)/ (neuter partitive object), and /nè=/ (non-salientive partitive object) in what I hypothesize to be the same morphosyntactic slot. These morphemes are the topic of SECTION 5.7.2.2.

The reasons why I tentatively analyze these two subsystems of locative participant indexation and partitive object participant indexation as belonging to the same morphosyntactic slot are because 1) they never co-occur within the same inflected predicative phrase in my data (negative evidence) and 2) they **appear to share one morpheme**, specifically /ně=/ (and possibly its subdialectal variant /nú=/), which is featured in both subsystems although with different functions (positive but uncertain evidence). This question could probably be easily settled by further research.

### 5.7.2.1 Locative indexes

(i) /ĩ=/ ‘3ALOC’. The index /ĩ=/ ‘3ALOC’ **ordinarily stands for third person areal locative (ALOC) participants** (*i.e.* grounds conceived as areas, as opposed to grounds conceived as points) in most contexts (see paragraph (ii) below for one case where an ALOC participant is indexed on the predicative phrase by means of /ně=/nú=/, not /ĩ=/). Like ALOC participants in general, such indexed participants may refer, in particular, to an **areal ground within the boundaries of which the figure remains** (areal localization) as in (514), to a **source** (*i.e.* an areal ground left by the figure in a motion event) as in (515), or to a **goal** (*i.e.* an areal ground reached by the figure in a motion event), as in (516).

(514) “*Yěà tàā nūwǎ ǐpē-pó’wōēgúèchā’úwǎ!*”

*yě-à = tàā*                      *nūwǎ*  
DIST.ALOC-EXO = itself    well.M/N/NS

*ǐ = pē = pó’wō-ē-gú-èchā-’ú-wǎ*  
3ALOC = 2PL.ACC = fishhook-EVENT.PRED-PL-PERSIST\SBJV-REL.NS-ALOC

‘[“But where do you get all that fish from?”] – Well, from the very place over there where you guys always fish!”] [JSG B316]

(515) *Châ’ũ ítá- <ch... > tq’úchí gá casawá!*

*châ-’ũ*    *ǐ = tá = <ch... >*    *tq-’úchí*                      *gá = casa-wá*  
1SG-ACC    3ALOC = 3S.SBJ =                      drop.SG-out.SG    LK.PST = house-ALOC

‘[My father once told me I was useless.] He thr... threw me out of home!’  
[ANO1 12]

(516) [...] *gè’tá ínà- <ĩ... > îgú’úwǎ rù nǎwé chí-ûchìgù tà {gá} nūchà-fǎànèchìgū’úkq.*

*gè’tá*                      *ǐ = nà = <ĩ... >*  
where?.ALOC    3ALOC = 3M/N/NS.SBJ\SBJV = go.PL\SBJV

*î-gú-’ú-wǎ = rù*    *nǎ-wé*  
go.PL-PL\SBJV-REL.NS-ALOC = TOP    3N/NS-following

*chí = û-chìgù = tà*  
1SG.SBJ.PCĪ = go.SG-DISTR.SG = ADD

*{gá} = }nū = chà = fǎ-ànè-chìgū-’ú-kq*  
LK.F/M/NS.PST = 3M/N/NS.ACC = 1SG.SBJ\SBJV = know-space-DISTR.SG\SBJV-SUB-CAUSE

‘[...] where they g... went, I’d follow them to get to know new places.’ [JGS 766–767]

The index /ǐ = / ‘3ALOC’ may also stand for a dative participant referring to the animate ground of a motion event (lit. ‘to/from her/him/them’), although such occurrences are relatively rare. This mostly occurs in association with the verb *kà* (PCØ), which in the absence of a dative participant means ‘to call (over)’ (i.e. to request attention or a physical spontaneous motion on the part of an addressee conceived of as a figure themselves), but in the presence of such a participant means ‘to ask for (an information or an object)’ (i.e. to request the—metaphorical or physical—caused motion of a figure away from an addressee conceived of as a ground). Indexing a dative participant on this verb, in cases where it is intended to mean ‘to ask for’ but where that dative participant is not expressed as a NP preceding the predicative phrase, is therefore crucial for its correct interpretation. The

dative participant in example (517a) is expressed as a NP that precedes the predicative phrase (in this case, an independent pronoun, /nû-'nà/ [3N/NS-DAT] ‘from him’). Consequently, the predicative phrase /tà=kă-'ú/ (3S.SBJ\SBJV=ask\SBJV-SUB) ‘he asked’ does not bear any indexation of a dative participant. In (517b), by contrast, which immediately follows the utterance in (517a), the dative participant is further backgrounded by no longer being expressed as a separate NP. As a consequence, the predicative phrase /í=tá=kà/ (3ALOC=3S.SBJ=ask) ‘he asked’ must index a dative participant by means of /í=/. In the absence of any marking for a dative participant, the utterance would be interpreted as ‘he called luck over (*i.e.* to come to him)’ (for an instance of a construction involving *kà* in its meaning ‘to call (over)’, see (234)).

(517) a. *Nû'nà tà-kă-'ú gá ná'kq gá pöra.*

*nû-'nà*      *tà=kă-'ú=gá*                                      *ná-'kq*      *gá=pöra*  
 3N/NS-DAT    3S.SBJ\SBJV=ask\SBJV-SUB=PST?    3N/NS-CAUSE    LK.PST=be.strong

‘[A hunter met the legendary figure Daiyae, who promised to give him anything he would ask for if he succeeded in a few tests.] He asked him for strength.’ [JSG B63]

b. *Chí ná'a tà-fènūèèchā-'ú, {ngēmà} suertekq gá íta-kà gá tûmà.*

*chí*   *ná'a*   *tà=fènūèèchā-'ú*                                      *{ngēmà}*  
 and   CONJ   3S.SBJ\SBJV=hunt-PERSIST\SBJV-SUB    MED.NS-ANAPH

*suerte-kq=gá*   *í=tá=kà*                                      *gá=tû-mà*  
 luck-CAUSE=PST    3ALOC=3S.SBJ=ask    LK.PST=3S-ANAPH

‘And because he spent his time hunting, he asked him for luck.’ [JSG B65–66]

The areal locative index /í=/ ‘3ALOC’ may further **stand for a duration complement (lit. ‘for it’)**, although note that such complements, when expressed as NPs, are not usually marked with the areal locative relational noun /-wǎ/ but left in the zero-case instead (but see (T44) for an instance of such a complement—in this case a relative clause—marked with /-wǎ/). In example (518), /í=/ in the relative clause /nú-à í=chī=pūrākū-'ú/ (PROX.ALOC-EXO 3ALOC=1SG.SBJ.PCĪ.SBJV=work\SBJV-SUB), lit. ‘[the time] that I’ve been working here **for it**’, is a resumptive index standing for the pivot, which serves as a duration complement within the relative clause:

(518) “[...] *ñdà nû-í ì tiempo ì núà íchī-pūrākū-'ú* [...].”



*ñá-à*      *nû=i*      *ì = tiempo*    *ì = nú-à*  
 PROX.NS-EXO 3M/N/NS.SBJ.PCì = be LK.NS = time LK.NS = PROX.ALOC-EXO

*ĩ = chí = pūrākú-’ú*  
 3ALOC = 1SG.SBJ.PCì.SBJV = work\SBJV-SUB

‘[I introduced myself to these tourists I was going to work as a guide for: “My name is such and such,] I’ve been working here for this long [lit. ‘this is the time that I’ve been working here for it’] [...].” [JGS 335]

Apart from its function as an index, /ĩ=/ also frequently serves as a mere **progressive aspect marker** (expressing an aspectual notion comparable to the one encoded by the English *be + -ing* construction). This function of /ĩ=/ is very likely to be derived from its function as an index for a duration complement just discussed. Possibly the only difference between contexts where /ĩ=/ serves as an index for a duration complement and contexts where it functions as a progressive marker is that an explicit duration referent is present in the former (e.g. *tiempo* ‘time’ in (518)) while no such referent is explicitly identified in the latter. This is why I use the same gloss for /ĩ=/ whether it functions as an index or as an aspect marker. Instances of /ĩ=/ in its function as a progressive marker are featured in the following two examples ((520) is repeated from (324) for convenience; see also (T104)):

(519) *Chí... mé’e... yí’è-má < bû’... > tûmânē gá rû-ì’rà-māè-’è gá yò’ní yí’è-má qarí-má’a ùtā-ññūkā-’ú.*

*chí = mé’e*    *yí’è-má*      *< bû-’... >*      *tû-mā-nē*  
 and = DUB    MED.S-ANAPH    be.young\SBJV-    3S-ANAPH-son

*gá = rû = ì’rà-māè-’è = gá*      *yò’ní*      *yí’è-má*  
 LK.PST = PCrû = be.small-COMPAR\SBJV-REL.S = PST    meanwhile    MED.S-ANAPH

*qarí-má’a*    *ĩ = tā = ññūkā-’ú*  
 tamarin-COM    3ALOC = 3S.SBJ = play\SBJV-SUB

‘[The hunter came back with a live tamarin monkey and a dead capybara, and his wife started roasting the capybara.] And... I guess... the chí... his younger son was playing with the monkey in the meanwhile.’ [JSG C148–150]

(520) *Ñumá rù chàuchí’ú ìchā-’ú ì chòmà.*

*ñumá = rù*      *chàu-chí’ú*    *ĩ = chā = ’ú*      *ì = chòmà*  
 present.time = TOP    1SG-home    3ALOC = 1SG.SBJ = make    LK.NS = 1SG-ANAPH

‘Right now I’m building my own house.’ [JSG A113]

(ii) /**ně**=/**nú**=/ ‘**CTRPET.3ALOC**’. In one particular configuration, areal locative participants are not indexed with /í=/ but with the **morpheme** /**ně**=/**nú**=/ **instead**. This happens when the indexed areal locative participant specifically refers to the **source of a centripetal motion**, as in the relative clause /nú’kúamá **ně**=tâ=î-gú-’ú/ (past.time **CTRPET.3ALOC**=3S.SBJ\SBJV=go.PL-PL\SBJV-REL.NS) ‘where they came from long ago’ in the following example:

(521) *Chô’rũ māmá wâ’í yá númàkũã, San Martínwá, núámá... nú’kúamá nětâ-îgú’úwá,*  
 Agua Blancawá.

*chô-’rũ māmá wâ’í yá=nú-mà-kũã San Martín-wá*  
 1SG-GEN mum CONTR LK.M/N/S=PROX.ALOC-ANAPH-origin San.Martín-ALOC

*nú-ámá nú’kúamá*  
 PROX.ALOC-DIR past.time

*ně=tâ=î-gú-’ú-wá Agua Blanca-wá*  
**CTRPET.3ALOC**=3S.SBJ\SBJV=go.PL-PL\SBJV-REL.NS-ALOC Agua.Blanca-ALOC

‘[My father is not from here but from the Putumayo area.] My mum [is] the one who’s from here, [the region of] San Martín [de Amacayacu], from [the area] in this direction... where people came from long ago [*i.e.* when they founded this community], Agua Blanca [*i.e.* a river a couple of hours upriver of San Martín].’ [JSG A355–357]

Note that the index /**ně**=/**nú**=/ is employed **even when the ground participant it indexes is already expressed as a NP in front of the predicative phrase** (which is virtually always the case in practice), as long as that participant is to be interpreted as the source of a centripetal motion, as in examples (522) and (523). Participants with most other syntactic functions are normally not indexed on the predicative phrase when they are syntactically present as a NP preceding it.

(522) *Turista rù gú’ú ì nâ-ànwá núná-îgú.*

*turista=rù gú-’ú ì=nâ-ànwá*  
 tourist=TOP finish\SBJV-REL.NS LK.NS=3N/NS-space-ALOC

*nú=ná=î-gú*  
**CTRPET.3ALOC**=3M/N/NS.SBJ=go.PL-PL

‘The tourists [*i.e.* those who come here] are from everywhere [lit. ‘... come from it at every place’.]’ [JGS 189–190]

(523) *Yěà něnánā-nâ ì ónà, chíbù, tũmàkq [...].*

*yě-à*                      *ně = ná = nā = nâ*    *ì = ònà*  
 DIST.ALOC-EXO    CTRPET.3ALOC = 3M/N/NS.SBJ = 3M/N/NS.OBJ = carry.PL    LK.NS = food  
*chíbù*    *tû-mà-kq*  
 eat            3S-ANAPH-CAUSE

‘[I organize cultural workshops here with the elders on behalf of the National Park nearby.] They [*i.e.* staff from the Park] bring from there the provisions, the food, for them [*i.e.* the elders] [...]’ [JSG A200]

In other words, the presence of the index /*ně = /nú = /* is what signals that the motion is centripetal, which is why it must remain on the predicative phrase whether it functions as an ordinary index (in the absence of a coreferential NP preceding the predicative phrase) or as a kind of agreement marker (in the presence of a coreferential NP preceding the predicative phrase). In the absence of /*ně = /nú = /*, the same areal locative participant would be interpreted as the goal of a non-centripetal motion ((522), for instance, would then be interpreted as ‘The tourists go everywhere.’).

Note that although (521–523) refer to centripetal motions oriented towards the speaker themselves, as is frequently the case, this need not always be the case. Centripetal motions can be conceived of as motions whose path is oriented towards the most activated ground topic, which indeed **often, but not always, coincides with the location of the speaker** (see (574) for an occurrence of /*ně = /nú = /* contributing to the encoding of a centripetal motion not oriented towards the speaker).

The distribution between the **variants /*ně = /* and /*nú = /* is a subdialectal one**, with most speakers using the former (LAR, JSG, IGV, among others) and only a few speakers using the latter (among whom JGS and GSG).

(iii) /*ì = /* ‘3PLOC’. Although its exact distribution remains unclear, the morpheme /*ì = /* seems to function essentially as an **index standing for a third person punctual locative (PLOC) participant**, as in the following example:

(524) “*Chòmà rù tá, kóyà-’ù tá nû-ì ì chàgù {?} tá ìchà-’ù-’ù.*”

*chò-mà = rù = tá*            *kóyà-’ù = tá*            *nû = ì*    *ì = chà-gù*  
 1SG-ANAPH = TOP = FUT    caiman-STATE = FUT    3M/N/NS.SBJ.PCì = be    LK.NS = 1SG-REFL  
*{?} = tá*    *ì = chà = ’ù-’ù*  
 = FUT            3PLOC = 1SG.SBJ\SBJV = put.SG\SBJV-SUB

“‘For my part, I’ll position myself there [*i.e.* at any spot in the immediate surroundings] under the shape of a caiman.” [LAR T153]

In this example, /î=/ is most likely added to the predicative phrase because the speaker feels that the verb *ú* ‘to put (sg.)’, being a motion verb, and more specifically a non-durative one (on the distinction between durative *vs* non-durative motion verb roots, see SECTION 4.2.3), semantically requires a locative complement, and more specifically a PLOC one, although there is no need for mentioning any specific locative complement in the context. Note, however, that /î=/ is optional in this utterance (as was confirmed to me by EAR, with the help of whom I transcribed the utterance in (524)) and does not contribute any referential meaning. In most of its occurrences, the index /î=/ thus seems to serve, like in (524), as a mere **optional filler for a semantically called for but morphosyntactically optional complement position**. In my data, such occurrences of /î=/ are especially frequent in association with the verbs *tó* ‘to plant’ and *ǵû/yì* ‘to fall (sg./pl.)’.

For unclear reasons, inflected occurrences of the verb *gû* (PCØ/PCî) ‘to finish’ especially frequently include /î=/ when that verb specifically means ‘to reach its end (at a certain point in space or in a discourse performance)’. In co-occurrence with this verb, /î=/ typically remains **even in the presence of a PLOC NP preceding the predicative phrase** (which is not the case with the verbs just mentioned above). This is shown in the following example (contrast, however, example (164), an essentially parallel example that does not involve the co-occurrence of /î=/ with *gû* ‘to reach its end’):

(525) *Ngě'má nû-î ì ngēmà inà-gú'ú ērú ná-nû'u.*

<i>ngě'-má</i>	<i>nû=î</i>	<i>ì=ngē-mà</i>
MED.PLOC-ANAPH	3M/N/NS.SBJ.PCì = be	LK.NS = MED.NS-ANAPH
<i>ì=nà=gú-'ú</i>		<i>ērú ná=nû'u</i>
3PLOC = 3M/N/NS.SBJ\SBJV = finish\SBJV-SUB		

‘[At the end of a second story shorter than the first:] This one ends here because it’s a short one.’ [IGS 288]

It could be that the presence of /î=/ in finite forms of certain predicative phrases has lexicalized to the point of tending to become obligatory in any context.<sup>277</sup>

The morpheme /î=/ is **homonymous with a handful of other morphemes** in the language, in particular /î=/ ‘PCØ.SBJV’, /î=/ ‘PCî\SBJV’, /î=/ ‘PCì’, /î=/ ‘PCì.SBJV’, and /î=/ ‘LK.NS’. This often seriously complicates its identification,

<sup>277</sup> Compare the French lexicalized phrase *y aller* ‘to leave’ (lit. ‘to go to it’) as in *Je vais devoir y aller* ‘I should probably get going’, which likewise involves a non-referential spatial index *y*.

not only to the foreign analyst but possibly also to speakers themselves. This might explain why some speakers occasionally use /ĩ= / where /î= / could have been expected, thereby **generalizing the use of /ĩ= / to the indexation of both ALOC and PLOC participants**. Thus, while the locative complement that the verb *ǣu* ‘to stay’ takes is normally a PLOC complement, the relative clause /nû-mà ĩ=nà=ǣu-’ũ-gù-ámá/ (3N/NS-ANAPH 3ALOC = PCrũ.3M/N/NS.SBJ\SBJV = stay\SBJV-REL.NS) ‘where he is’ in example (526), which precisely relativizes a complement of that verb, does not feature the PLOC index /î= / to resumptively stand for the pivot, but the ALOC index /ĩ= / instead:

(526) [...] nûmà ĩnà-ǣu’ũgùámá ná-dǎwēnũ.

nû-mà            ĩ=nà=ǣu-’ũ-gù-ámá  
 3N/NS-ANAPH 3ALOC = PCrũ.3M/N/NS.SBJ\SBJV = stay\SBJV-REL.NS-PLOC-DIR  
 ná = dǎwēnũ  
 3M/N/NS.SBJ = watch

‘[And how is the pen positioned?] – [...] it is pointing towards where he [*i.e.* Denis Bertet, sitting close by] is.’ [JCA D93]

### 5.7.2.2 Partitive object indexes

The third person partitive (core) object indexes occur in what I hypothesize to be the same slot as the third person locative participant indexes (for why I hypothesize these two types of indexes to belong to the same slot, see introduction to SECTION 5.7.2 above). These partitive object indexes are part of an **intricate system of encoding of partitively affected third person objects**. This grammatical system is of relatively infrequent use in discourse. Note that due to the limited number of unequivocal instances of its use in my corpus, the analysis of it I present here relies for a large part on elicited utterances and must therefore be considered as tentative.

**Masculine partitive objects** are indexed on the predicative phrase by means of a **proclitic /nè= /**, **neuter ones by means of /ně= /** (which possibly displays a subdialectal variant /nú= /), and **non-salientive ones by means of /tà= /** (whose identification may be complicated by the fact that it is homonymous with several other morphemes in the language, in particular /=tà/ ‘ADD’). As discussed below, feminine and salientive partitive objects, which do not have dedicated indexes, can only be referred to pronominally by means of independent pronouns in the partitive case. Instances of use of /ně= / ‘3N.PART.OBJ’ and /tà= / ‘3NS.PART.OBJ’

as ordinary indexes (*i.e.* elements referring to the participant in the absence of a NP referring to it in front of the predicative phrase) are provided in examples (527) and (528), respectively. The nominal class of the indexed partitive objects in these two examples (N and NS, respectively) is clear from the context.

(527) *Něchà-ngó'ú.*

*ně = chà = ngó-'ú*

3N.PART.OBJ = 1SG.SBJ\SBJV = eat\SBJV-SUB

‘[I climbed a tree to pick some guavas(.N).] I ate some.’ [IGV 380]

(528) “*Pē-nâ'wqēgù rù mēà tàpū-mǎ!*”

*pē = nâ-'wqē-gù = rù* *mēà*

2PL.SBJ.SBJV = 3N/NS-APPREC-CIRC = TOP well

*tà = pū = mǎ*

3NS.PART.OBJ = 2PL.SBJ.PCì.SBJV = kill.SG\SBJV

‘[The Master of the peccaries to a group of hunters: “Are you the ones who keep injuring my animals(.NS)?] If that’s what you want, kill some properly!”] [GRA 276]

The partitive object indexes remain, however, in the presence of a NP that is coreferential with them and precedes the predicative phrase, as shown in example (529). This is most likely because they are the only way to indicate that the object is partitively, and not totally, affected in the process (see SECTION 5.7.2.1, paragraph (ii) above for the similar case of the index /*ně* = /*nú* = / ‘CTRPET.3ALOC’ remaining in the presence, in front of the predicative phrase, of a NP coreferential with the participant it indexes).

(529) “*Dâà <âkú-nè... > ôrāchà něchā-ngo.*”

*dâ-à* *<âkú-nè... >* *ôrāchà* *ně = chā = ngo*

PROX.N-EXO what?.M/N/NS\SBJV-REL.N guava 3N.PART.OBJ = 1SG.SBJ = bite

‘[Someone saw me and asked: “What are you doing?”] – I’m eating some of these, uh... guavas.”] [IGV 382]

As shown in examples (530) and (531), the encoding of **masculine partitive objects** is highly anomalous in that it involves the obligatory indexation of the participant on the predicative phrase not only as the index /*nè* = / ‘3M.PART.OBJ’, but also, simultaneously, as an **ordinary core object index** (represented by /*nā* = / in (530) and /-*â*/ ‘3M/N/NS.OBJ’ in (531)). This intriguing feature was confirmed during elicitation sessions to be regular.

(530) “*Ómé tá nèchānā-fè.*”*óme* = *tá**nè* = *chā* = *nā* = *fè*

brown.woolly.monkey(.M?) = FUT 3M.PART.OBJ = 1SG.SBJ = 3M/N/NS.OBJ = shoot

“I’ll shoot some brown woolly monkeys.” [LAR T100]

(531) *Nũ’kúma ā’a gá tánā-fègùèchàgú, ñumárú’ũ tàā tǎ < ñumá rù ngùũ... > ìnè rù ngùũ nènā-fègúũ.**nũ’kúma* = *ā’a* = *gá*    *tá* = *nā* = *fè-gù-èchà-gú*

past.time = QUOT = PST 3S.SBJ = 3M/N/NS.OBJ = shoot-PLURAC-PERSIST-PL

*ñumá-rú’ũ* = *tāā*    *tǎ*    < *ñumá* = *rù*    *ngùũ... >*

present.time-like = itself ASSERT.EXPL present.time = TOP collared.peccary

*ìnè* = *rù*    *ngùũ*

day.before = TOP collared.peccary(.M)

*nè* = *nà* = *fè-gú-ā*

3M.PART.OBJ = 3M/N/NS.SBJ\SBJV = shoot-PL-3M/N/NS.OBJ

‘[At the beginning of a traditional story on the collared peccaries:] In ancient times, people would continuously shoot them, just like today, you know, today they... yesterday they shot some peccaries.’ [GRA 262–265]

The encoding of **feminine and salientive partitive objects** involves the use of the **independent pronouns bearing the partitive suffix -’nè**, i.e. /ngî-’nè/ (3F-PART) and /tũ-’nè/ (3S-PART). Note that the partitive suffix -’nè is only attested in these morphological compounds in my corpus. The partitive object pronouns *ngî’nè* and *tũ’nè*, similarly to the partitive object indexes discussed above, may serve either as ordinary pronouns, as in (532), or as a kind of resumptive pronoun that is coreferential with a NP that precedes the predicative phrase, as in (533). In the latter case, the partitive object pronoun is likely maintained because it is the only available strategy for encoding grammatically the fact that the object is partitively, not totally, affected in the process.

(532) [...] *tāmā ā’a ngî’nè nà-f’è’ũ ērú ā’a ī-ì’rà-màchī ñā’ũ.**tāmā* = *ā’a**ngî-’nè*    *nà* = *f’è-’ũ**ērú* = *ā’a*

NEG.precisely = QUOT 3F-PART 3M/N/NS.SBJ\SBJV = shoot\SBJV-SUB because = QUOT

*ī* = *ì’rà-màchī**ñā-’ũ*

3F.SBJ = be.small-meat do.thus.3M/N/NS.SBJ.SBJV-SUB

‘[A man went hunting and came across a flock of parrots(.F), but] he didn’t shoot some because they didn’t have a lot of meat, he said to himself.’ [LAR D117]

(533) [...] *nû-î gá chó'ní tû'nè tà-yâu'gû'û* [...].

*nû.î gá = chó'ní tû-'nè tà = yâu'-gû-'û*  
 CONJ LK.F/M/S/NS.PST = fish(.S) 3S-PART 3S.SBJ\SBJV = seize-PLURAC\SBJV-SUB

‘[A group of Tikunas invited a man to go poison-fishing with them. He was first reluctant to participate, but then felt like] catching some of the [dead] fish [...].’ [LAR E158]

The neuter partitive object index /*ńé* = / is relatively well attested in a specific kind of intransitive construction where it cannot, by definition, function as an index for a partitive object, but functions instead as what could be characterized as an **index for a partitive areal locative participant**. In this construction, which always features an areal locative participant referring to a static location or a goal ground (in practice, *nú* [PROX.ALOC] ‘all around here’ or /*gû-'û-wá*/ [finish\SBJV-REL.NS-ALOC] ‘everywhere’), /*ńé* = / explicitly indicates that the process **only occurs in or towards most—but not all—subparts of the ground**, which is not to be conceived of as an indivisible whole but rather as a set of potentially involved “sub-grounds”. Note that in this specific use, the partitive index /*ńé* = / ‘3N.PART.OBJ’ is also attested under a subdialectal variant /*nú* = / (compare the variants /*ńé* = /*nú* = / of the areal locative index discussed in SECTION 5.7.2.1, paragraph (ii) above).

Thus, in example (534), the presence of /*nú* = / explicitly indicates that the speaker did not literally go everywhere in the region, but to most places in the region, in a spontaneous and cumulative fashion, rather than in an organized and systematic way:

(534) Bueno, *gû'ûwá gá núchà-û'û*.

bueno *gû-'û-wá = gá*  
 good finish\SBJV-REL.NS-ALOC = PST

*nú = chà = û-'û*  
 3N.PART.OBJ = 1SG.SBJ\SBJV = go.SG\SBJV-SUB

‘[When I first came to this region, I seized all the opportunities I had to visit the communities X, Y, Z, etc.] In short, I went just about everywhere.’ [JGS 770]

Likewise, in (535), the presence of /*nú* = / indicates that Peta-Peta did not literally examine all the parts of the body of the Tikuna man, but most of its parts:<sup>278</sup>

<sup>278</sup>The subtle shade of meaning contributed by /*ńé* = /*nú* = / ‘3N.PART.OBJ’ in this construction is



(535) *Nú ā'a nēnánà-dāuáchìgù.*

*nú = ā'a*

PROX.ALOC = QUOT

*nē = ná = nà = dāu-á-chìgù*

3N.PART.OBJ = 3M/N/NS.SBJ = PCnà.3M/N/NS.OBJ = see-PLLOC-DISTR.SG

‘[The mythical figure Peta-Peta came across a weird feathered creature—in fact a Tikuna man—and started examining it.] He was examining him from every possible angle.’ [LAR E45]

For another instance of /*nē*=/ in the construction under discussion, see (T124).

Note that in cases where the predicative phrase involved in this construction denotes a motion event, **only the context may help determine that the form /*nē*=/*nú*=/ functions as a neuter partitive object index**, and not as an index for an areal locative participant in a centripetal motion event. Example (534), for instance, is indeed essentially parallel to (522) above. Only the surrounding context makes clear that (534) is to be interpreted as ‘I went just about everywhere’ (instead of ‘I came from everywhere’). Conversely, it is likely that only the surrounding context makes clear that (522) is to be interpreted as ‘The tourists come from everywhere’ (instead of ‘The tourists go just about everywhere’).

Note also that in the speech of older speakers, predicative phrases involved in this construction apparently always see their **predicative class shift to PCnà**, as in (535) and (T124). Whether this predicative class shift is obligatory in these speakers remains an open question.

## 5.8 Associated motion (slot 5)

Guillaume & Koch (to appear, section 1) define associated motion, from a typological perspective, as a “**verbal grammatical category, separate from tense, aspect, mood and direction, whose function is to associate, in different ways, different kinds of translational motion (spatial displacement / change of location) to a (generally non-motion) verb event**” (boldface mine; see Guillaume 2016:84–94 for a typological introduction to the category of associated motion). Guillaume has shown

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probably comparable to the one contributed by the French preposition *de* ‘from’ (which, like SMAT /*nē*=/*nú*=/ is involved in the encoding of source grounds and partitivity) in e.g. *J’ai regardé de partout mais je ne l’ai pas trouvé* (‘I looked on all sides but I couldn’t find it’), by contrast with *J’ai regardé ∅ partout mais je ne l’ai pas trouvé* (‘I looked everywhere but I couldn’t find it’).

that this grammatical category is particularly common in the languages of the western half of the Amazonian basin, among which it is highly likely to have spread by contact (2016). Associated motion in SMAT is a semantically fairly simple category that essentially contributes meanings such as ‘go/come (*i.e.* undergo a motion unspecified for path) and perform the main process denoted by the lexical component of the predicative phrase’, as shown in the following example:

(536) “Ngû, chā-pūrākúǵ nû-î rû kú chārû finca pēyârû-chě’gû!” ñâ’û. Ngémà gá,  
quince día de vacación nû-î rû ngémà tàyà-pūrākùè’û.

ngû chā = pūrākú-ǵ nû = î rû kú = chā-rû finca  
yes 1SG.SBJ = work-POSS 3M/N/NS.SBJ.PCì = be and come.on = 1SG-GEN farm

pē = yà = rû = chě’-gû ñâ-’û  
2PL.SBJ.SBJV = AM = PCRû = chop-PL\SBJV do.thus.3M/N/NS.SBJ.SBJV-SUB

ngé-mà = gá quince día de vacación nû = î rû  
MED.ALOC-ANAPH = PST fifteen day of vacation 3M/N/NS.SBJ.PCì = be and

ngé-mà t̄ā = yà = pūrākú-è-’û  
MED.ALOC-ANAPH 1PL.SBJ.SBJV = AM = work-INTR.PL\SBJV-SUB

‘[I asked him if he had some work he could offer me.] “Yes, I do have work: go (pl.) clear my farm [*i.e.* from unwanted vegetation with a machete]!” he said. And then there was a fifteen-day vacation period and we went and worked there.’ [JGS 694–698]

Note that associated motion is relatively rare in SMAT discourse, with motion of subject arguments being much more frequently expressed by lexical means, *i.e.* by means of specialized verbs of motion.

Associated motion in SMAT belongs to the grammatical categories that are **encoded through the inflectional morphology** of the finite predicative phrase (it occupies a morphological slot of its own—slot 5—within the inflectional template of the predicative phrase, although its encoding is in practice often merged into portmanteau morphemes together with the encoding of categories belonging in neighboring slots; see SECTION 5.1). It may consequently only occur in finite predicative phrases. This clearly distinguishes it from the semantically close but separate SMAT category of “direction” (grammatical encoding of the “path” of a location or a motion), which is encoded by means of derivational suffixes (see SECTION 4.2.3). The exponent of associated motion is a **proclitic morpheme** /yà =/, which either encodes associated motion alone, as in example (536), or is a portmanteau morpheme that simultaneously serves as an exponent for associated motion and a third person index and/or the Subjunctive Inflectional Type, as in (541) (on /yà =/

serving as an exponent for both associated motion and unrelated categories, see SECTION 5.3.3). Note that this marker /yà=/ is homonymous with a few other inflectional proclitics of the predicative phrase (/yà=/ ‘PCĭ.3M/N/NS.SBJ\SBJV’, /yà=/ ‘PCĭ.3F/M/N/NS.SBJ.SBJV’, and /yà=/ ‘PCĭ.3M/N/NS.OBJ’ in particular), a situation which may in practice complicate its identification. Associated motion may occur with both intransitive and transitive predicative phrases (contrast its first and second occurrences in example (536)). Its presence **does not entail any morphosyntactic effects**, such as *e.g.* a change in their valency structure or in the encoding of the arguments they govern. Note, however, that predicative phrases that belong lexically to PCĭ and PCĭ appear to shift to PCrū when their inflection includes associated motion (see SECTION 5.3.5).

Associated motion in SMAT is a privative binary feature: it is either absent or present, which implies that it may only take a single value when present. Its semantic contribution is to indicate that the **main process denoted by the lexical component of the predicative phrase that includes it is preceded by a motion of the subject argument**.<sup>279</sup> The fact that the associated motion event occurs prior to the main process is particularly manifest in examples such as the following three, which feature cases of “echo” encoding of associated motion,<sup>280</sup> *i.e.* a phenomenon whereby motion is first expressed by lexical means in a separate clause (see *e.g.* ‘They left’, in example (537)) and then redundantly encoded in the clause that includes associated motion marking (*e.g.* ‘They went to sleep elsewhere’ in (537)):

(537) *Nû'nà tà-îgǔ'ú gá yěmá mārū, gá nô'rǐ'ú'ú. Tò'mà tàyà-pégǔ'ú.*

*nû'nà*      *tà = î-gǔ'ú*      *gá = yě-má*      *mārū*  
 3N/NS-DAT    3S.SBJ\SBJV = go.PL-PL\SBJV-SUB    LK.F/M/NS.PST = DIST.NS-ANAPH    PRF

*gá = nô'rǐ'ú'ú*      *tò'mà*  
 LK.F/M/NS.PST = beginning-TEMP.PRED\SBJV-REL.NS    elsewhere.PLOC

*tà = yà = pé-gǔ'ú*  
 3S.SBJ\SBJV = AM = sleep-PL\SBJV-SUB

<sup>279</sup>Contrast this binary system of associated motion with the significantly more complex systems of *e.g.* certain Australian or South American languages, in which associated motion, when present, may further take one of several different values depending on whether the path of the associated motion is oriented towards or away from the deictic center, whether the motion precedes, is concurrent with, or follows the main process, whether the stop—if any—of the figure at the ground is temporary or prolonged, etc. (see Guillaume 2016).

<sup>280</sup>On this notion of “echo” encoding of associated motion, see Guillaume (2016:91, note 11) and Guillaume & Koch (to appear, section 5.3).

‘[In ancient times, when a member of a communal dwelling died, the group would abandon it.] They left that one, the initial one. They went to sleep [*i.e.* to live] elsewhere.’ [GRA 148–149]

(538) *Gú'ú gá chàumùkū—novenoàrū—núà ná-îgú. Nǔ'à tǎyà-pégú'ú. Mô'ú'àkù*  
*lunesgú íti-îgú'ú.*

*gú'ú*                      *gá = chàu-mùkū*                      *noveno-àrū*                      *nǔ-à*  
 finish\SBJV-REL.NS    LK.PST = 1SG-companion    ninth.grade-GEN    PROX.ALOC-EXO

*ná = î-gú*                      *nǔ'-à*                      *tǎ = yà = pé-gú'ú*  
 3M/N/NS.SBJ = go.PL-PL    PROX.PLOC-EXO    1PL.SBJ = AM = sleep-PL\SBJV-SUB

*mô'ú'-àkù*                      *lunes-gú*                      *í = tí = î-gú'ú*  
 following.day-APPROX    monday-PLOC    3ALOC = 1PL.SBJ.PC̄.SBJV = go.PL-PL\SBJV-SUB

‘[We came to San Martín de Amacayacu—where the speaker is located at utterance time—to pick up costumes for a performance.] All my classmates—those of ninth grade—had come. We slept here [lit. ‘We came and slept here.’]. The next day, on monday, we left.’ [IGV 309–310]

The motion component of predicative phrases involving associated motion in SMAT is **entirely unspecified as to its path**, just like motion encoded by lexical verbs in the language (*e.g.* *ú* ‘to go/come (sg.) (*i.e.* to undergo, as a singular animate entity, a spontaneous motion following any kind of path)’, *í* ‘to climb (following any kind of path, typically up or down)’, *nú* ‘to put/take (pl.) (*i.e.* to cause several inanimate entities to change location following any kind of path)’). It is thus unspecified, among others, as to the deictic properties of its path. While in most cases the encoded associated motion is oriented away from the deictic center, as is clear in *e.g.* (536) and (541), it may equally well be oriented towards the deictic center, as in (538) and (539). In SMAT, the deictic properties of the path of motion events are to be understood from the context, whether motion is encoded lexically or by means of the associated motion marker. In practice, the deictic properties of associated motion can often be deduced from the presence in the clause of locative demonstratives specifying the deictic properties of the ground at which the main process occurs once the associated motion event has been achieved (see *e.g.* *nǔ'à tǎyà-pégú'ú* ‘we came and slept here’, lit. ‘we performed a motion and [slept **here**]’, in example (538)).

Whether the spatial relation of the figure relative to the ground, once the associated motion is achieved, is **temporary or prolonged is equally unspecified** (grammatically encoded contrasts of this kind are attested in *e.g.* the Takanan language Cavineña; Guillaume 2009, Guillaume 2016:118, note 16). Compare for

instance the following two examples, the first of which explicitly indicates that the figure soon leaves the reached location, while the second refers to a prolonged stay of the figure at the reached location:

(539) *Nǔ'à náyàrū-ngùgú pā'àáčí.*

*nǔ'-à*                      *ná = yà = rū = ngù-gú*                      *pā'à-áčí*  
 PROX.PLOC-EXO    3M/N/NS.SBJ = AM = PCrū = rest-PL    be.quick-upslope

‘[Tourists come here on vacation.] They come to rest a bit [lit. ‘They come and rest here briefly.].’ [JGS 206]

(540) *Ngěmà gá chàyà-yǎ'ú.*

*ngě-mà = gá*                      *chà = yà = yǎ-'ú*  
 MED.ALOC-ANAPH = PST    1SG.SBJ\SBJV = AM = grow\SBJV-SUB

‘[I was nine months old when my mother went with me to live in a community called Buenos Aires.] I got to grow up there [until at least the age of five].’ [JGS 650]

Although associated motion is more typically found with predicative phrases that do not include a motion component in their own lexical semantics, it does **occasionally co-occur with predicative phrases that already denote a motion lexically**. While in some languages the grammatical markers that may under certain circumstances contribute associated motion meanings regularly take a function of mere path specifiers when co-occurring with lexical motion verbs (‘perform the lexically-encoded motion event *following a certain path*’; see Guillaume & Koch to appear, section 2.2), the meaning contributed by the associated motion marker in such contexts in SMAT remains one of associated motion, *i.e.* the predicative phrase then regularly involves two subsequent motion events encoded separately (‘go/come and perform the lexically-encoded motion event’). This is shown in the following two examples:

(541) “*Kú wá'í ngěmà nà-ú rù < [inaudible]... > ngě'má yà-ù-ànè ñyáčí tá wá'í kù-tǎ-ègū-ú!*”

*kú = wá'í*                      *ngě-mà*                      *nà = ú*                      *rù < [inaudible]... >*  
 come.on = CONTR    MED.ALOC-ANAPH    PCØ.IMP = go.SG    and

*ngě'-má*                      *yà = ù-ànè*                      *ñyáčí = tá wá'í*  
 MED.PLOC-ANAPH    AM.3M/N/NS.OBJ = go.SG-space    and = FUT    CONTR

*kù = tǎ-ègū-ú*  
 2SG.SBJ\SBJV = drop.SG-INV\SBJV-SUB

“[If I leave this place I’ll never come back.] – Come on, do go there [*i.e.* to San Martín de Amacayacu], go take a look around there [lit. ‘... go and walk the land there ...’], but then you’ll come back!” [JGS 739–741]

(542) “*Tāmā, ēgá kù-ā’mq’achà’ũgú nũ’má rù kúēyq tūyà-gǎ rù wí’á cambio tá-ũgú!*”

*tāmā*            *ēgá*    *kù = ā-’mq-chà’ũ-gú*  
 NEG.precisely    if    2SG.SBJ\SBJV = have-wife-VOL\CIRC-CIRC  
*nũ’-má = rù*            *kú-ēyq*    *tū = yà = gǎ*            *rù*    *wí’á*    cambio  
 PROX.PLOC-ANAPH = TOP    2SG-sister    3S.ACC = AM = lead.SG    and    INDF    exchange  
*tá = ũ-gú*  
 4SBJ = make-PL

‘[To a man who wanted to take a wife:] “No, if you want to take a wife here, bring your sister [lit. ‘... go and lead your sister (here) ...’] and let’s make an exchange!” [AMB 91–93]

The encoding of a round-trip or circular path<sup>281</sup> within a single predicative phrase (as in *e.g.* ‘go and come back’, whether taking the same route or different routes), in particular, is apparently regularly obtained by the combination of associated motion with a motion verb suffixed with the figure-ground configuration morpheme /-ègù/ ‘INV’ (yielding complex predicative phrases with literal meanings such as ‘go and [perform the lexically-encoded motion event back to the initial point]’). The following two examples feature instances of such a combination:

(543) *Tûmà’ākù tûmàkq yéámá īyà-tǎègù.*

*tû-mà-’ākù*            *tû-mà-kq*            *yéee-ámá*            *ī = yà = tá-ègù*  
 3S-ANAPH-daughter    3S-ANAPH-CAUSE    DIST.ALOC-DIR    3F.SBJ = AM = drop.SG-INV

‘[A mother abandoned her children to go and live in the jungle. These were crying and following her.] Her daughter went a loong way with her to see her off [lit. ‘Her daughter went and came back from that direction over theere (with palm-lateral flat-hand gesture pointing far away) for her.’].’ [IGS 103]

(544) *Kq tûmà <ā’a... > <-m... > -má’a ā’a gá, yǒ’ní ā’a gá, gũēwá ā’a... — todo el centrowá ā’a, tûmámá’a ínáyà-bòègù, tûmámá’a ínáyà-bòègù ā’a.*

<sup>281</sup>Also labeled “reversive path” by some authors, as *e.g.* Rose (2015).

5. INFLECTION OF THE PREDICATIVE PHRASE

*kq tû-mà* < = *ã'a...* > < -*m...* > -*má'a* = *ã'a* = *gá* *yõ'ní* = *ã'a* = *gá*  
 and 3S-ANAPH = QUOT COM = QUOT = PST meanwhile = QUOT = PST

*gûê-wá* = *ã'a* todo el centro-*wá* = *ã'a* *tû-mà-má'a*  
 canoe-ALOC = QUOT all the center-ALOC = QUOT 3S-ANAPH-COM

*ĩ = ná = yà = bô-ègù* *tû-mà-má'a*  
 3ALOC = 3M/N/NS.SBJ = AM = be.round-INV 3S-ANAPH-COM

*ĩ = ná = yà = bô-ègù = ã'a*  
 3ALOC = 3M/N/NS.SBJ = AM = be.round-INV = QUOT

‘[The legendary figure Moe went by water to Eware—a magical place deep into the jungle—with a companion, and once there he disappeared.] And meanwhile, in the canoe... — it [*i.e.* the canoe] went around and went around in circles with him [*i.e.* the companion; lit. ‘... it went and circled back from there with him (with a repeated circular hand gesture)...’], throughout the interior [jungle].’ [JSG B358–362]

Although associated motion is more typically found with non-stative predicative phrases, it seems to be **able to occur with predicative phrases featuring, in principle, any kind of semantics**, including predicative phrases with a stative *Aktionsart*, as shown in the following example:

(545) *Chāyà-ãmùkū tá ná'kq ērú... Pā'à chǎnà-gú'úkq nû-ĩ.*

*chā = yà = ã-mùkū = tá* *ná'kq* *ērú* *pā'à*  
 1SG.SBJ = AM = have-companion = FUT 3N/NS-CAUSE because be.quick

*chǎ = nà = gú-'ú-kq* *nû = ĩ*  
 1SG.BEN = 3M/N/NS.SBJ\SBJV = finish\SBJV-SUB-CAUSE 3M/N/NS.SBJ.PCì = be

‘[Right now I’m going to go plant some manioc in my swidden.] I’ll have friends there to help me do it because [lit. ‘I’ll go and have companions for it because...’]... It’s so I’m done quickly.’ [LAR D403–404]

Associated motion in SMAT normally affects the subject argument of the predicative phrase. In causative constructions, however, **associated motion may apply to either the causer argument (which is morphosyntactically encoded as a subject) or to the causee argument (which is morphosyntactically encoded as an object)**, or to both. For a discussion of the interpretation of associated motion in causative constructions, see SECTION 4.5.2, p.375. The following example provides an instance of associated motion that only applies to the causee (*i.e.* the object) argument:

(546) “*Áh, {ká}ná ērú nâi yá Õnānèkq chātáyà-dǎu'é'e!*”

*áh {ká}nǎ ērú nâi yá = Ōnānè-ka*  
 oh was.it.again because tree LK.M/N/S = Ōnānè-CAUSE

*chā = tá = yà = dǎu-’é’e*  
 1SG.ACC = 3S.SBJ = AM = see-CAUS

‘[Before leaving the household, a woman said to her lover: “If you miss me one day, go look for the Onane<sup>282</sup> tree and make it into a canoe!” After days of affliction, the man recalled:] “Oh, that’s right, she had told me to go look for the Onane tree!”] [JSG B298]

A handful of verbal predicative phrases obligatorily involve the presence of the associated motion marker whenever they are inflected as finite predicative phrases, without necessarily implying, however, any actual motion event. These **predicative phrases featuring lexicalized associated motion** minimally include *ó* ‘to disappear’, *tǎ’u* ‘to get lost’, and *ǰǰmā* ‘to forget’. While a physical motion of the subject argument could be argued to be implied in example (547) (lit. ‘go and be absent’?; compare the PCØ predicative phrase *tǎ’u* ‘be absent’, which does not require associated motion marking), there clearly is none in (548).

(547) *Nǰgù nà-fǎ’gú ná’a mārū nà-nô’répǰǰ’ǰ rù náyàrū-tǎu’ē.*

*nǰ-gù nà = fǎ-’gú ná’a mārū*  
 3M-REFL 3M/N/NS.SBJ\SBJV = know-CIRC CONJ PRF

*nà = nô’ré-epǰǰ-’ǰ = rù*  
 3M/N/NS.SBJ\SBJV = be.few-amount?\SBJV-SUB = TOP

*ná = yà = rǰ = tǎu-’ē*  
 3M/N/NS.SBJ = AM = PCrǰ = get.lost-INTR.PL

‘When they [*i.e.* collared peccaries] feel there’s only few of them left [due to people hunting them], they get lost [to protect themselves from hunters].’ [GRA 299]

(548) *Pō’ǰgú rù mārū náyàrū-ógú.*

*pō’ǰgú = rù mārū ná = yà = rǰ = ó-gú*  
 plantain-PL = TOP PRF 3M/N/NS.SBJ = AM = PCrǰ = disappear-PL

‘Plantain [varieties], they’re disappearing [*i.e.* we’re gradually losing diversity in our crops].’ [JSG A166]

<sup>282</sup>Ōnānè appears to be the name of an individual legendary tree, rather than a designation for a tree species.



On the reinterpretation currently taking place in younger speakers of the **inflectional paradigm specific to the predicative class PCnà as the inflectional paradigm of the predicative class PCØ involving associated motion**, see SECTION 5.8, p.481. The resulting forms, although they include the associated motion marker, clearly do not imply any actual associated motion. This reinterpretation phenomenon is likely stimulated, or even made possible, by the existence in the language of predicative phrases with lexicalized associated motion marking that does not involve an actual associated motion.

## 5.9 Predicative class assignment (slot 6)

This section discusses the **fairly complex lexical, semantic, and morphosyntactic bases for the assignment of predicative phrases to one of the five predicative classes** of the language, specifically the unmarked predicative class (PCØ) and the predicative classes in /ī= / (PCī), in /î= / (PCî), in /rū= / (PCrū), and in /nà= / (PCnà). For a detailed description of the morphological encoding of the predicative classes, see SECTIONS 5.3–5.5, as well as the charts at the end of SECTION 5.6. Their respective labels are derived from what can be shown to be their basic morphological exponent, *i.e.* their only exponent that does not simultaneously encode features unrelated to predicative class (portmanteau morpheme) but only encodes predicative class in a straightforward manner. These basic morphological exponents can be directly observed, in particular, in cases where the subject of a predicative phrase inflected in the Subjunctive Inflectional Type is a syntactic NP (as opposed to a pronominal index) that precedes that predicative phrase (see row “Explicit NP” at bottom of CHART J, p.452).

The SMAT predicative classes are, as a first approximation, comparable to the categories commonly referred to as “conjugations” or “verb groups” in the traditional grammar of the Romance languages (see the four conjugations of Classical Latin or the three verb groups of French). They are **ultimately a lexical feature of each predicative phrase** (and, among them, of verbs) that is **exposed morphologically through the selection of a specific inflectional paradigm**. As a consequence, learners of the language essentially have to memorize the predicative class of each predicative phrase as they first encounter it. Contrast, for instance, the pairs of semantically comparable verbs in the following examples:

- (549) a. **PCØ:** *chā = nā = ngo*                      **PCī:** *chā = yā = à'ü*

<p>1SG.SBJ = 3M/N/NS.OBJ = bite 'I ate it'</p> <p>b. <b>PC<math>\emptyset</math></b>: <i>chā = nā = dāi</i> 1SG.SBJ = 3M/N/NS.OBJ = kill.PL 'I killed them'</p> <p>c. <b>PC<math>\emptyset</math></b>: <i>chā = pé</i> 1SG.SBJ = sleep 'I slept'</p>	<p>1SG.SBJ = PC<math>\bar{c}</math>.3M/N/NS.OBJ = drink 'I drank it'</p> <p><b>PC<math>\bar{c}</math></b>: <i>chā = yà = mā</i> 1SG.SBJ = PC<math>\bar{c}</math>.3M/N/NS.OBJ = kill.SG 'I killed him'</p> <p><b>PC<math>\bar{r}\bar{u}</math></b>: <i>chā = r̄ū = nḡū</i> 1SG.SBJ = PC<math>\bar{r}\bar{u}</math> = rest 'I rested'</p>
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Recall, importantly, that I do not normally include explicitly the grammatical feature PC $\emptyset$  in glosses (hence its absence in the glosses of the left-side forms in (549)), as I analyze it as the default predicative class of the language. There is no obvious morphosyntactic or semantic reason why a verb meaning 'to eat' should be lexically assigned to PC $\emptyset$  while one meaning 'to drink' is assigned to PC $\bar{c}$  (as shown in example (549a)), or why a verb meaning 'to sleep' should be lexically assigned to PC $\emptyset$  while one meaning 'to rest' is assigned to PC $\bar{r}\bar{u}$  (as shown in (549c)). It seems even more arbitrary and unpredictable that the two suppletive forms of the verb meaning 'to kill', one of them taking a singular object and the other one taking a plural object, should be lexically assigned to two different predicative classes (PC $\bar{c}$  for the former, PC $\emptyset$  for the latter, as shown in (549b)).

Certain verb morphemes may enter the formation of several lexicalized predicative phrases with different syntactic and semantic role structures and obviously related but different meanings (contrast, for instance, /âirú-' $\bar{u}$  chā = dāu/ (dog-ACC 1SG.SBJ = see) 'I see the dog' vs /âirú-ka chā = dāu/ (dog-CAUSE 1SG.SBJ = see) 'I look for the dog', where the same verb *dāu* governs different types of complements and takes on slightly different meanings). Often, such pairs (or larger sets) of **predicative phrases based on the same verb morpheme are additionally assigned lexically to different predicative classes**. There is no apparent motivation, however, for these differences in predicative class assignment, and for why the members of such pairs of predicative phrases are respectively assigned to this or that specific predicative class. Contrast, for instance, the pairs of predicative phrases in the following examples:

<p>(550) a. <b>PC<math>\emptyset</math></b>: <i>Pērú-wá chā = ḡū</i></p>	<p><b>PC<math>\bar{c}</math></b>: <i>chī = ḡū</i></p>
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Peru-ALOC 1SG.SBJ = reach 'I arrived to Peru'	1SG.SBJ.PC̄i = reach 'I am done'
b. <b>PC∅:</b> <i>ūgúànè-má'a chā = nā = ū</i> story-COM 1SG.SBJ = 3M/N/NS.OBJ = say 'I call it a story'	<b>PC̄i:</b> <i>ūgúànè-'ū chī = ū</i> story-ACC 1SG.SBJ.PC̄i = say 'I told a story'
c. <b>PC∅:</b> Juan-'ū chā = īnū John-ACC 1SG.SBJ = hear 'I heard John'	<b>PCrū:</b> Juan-gù chā = rū = īnū John-PLOC 1SG.SBJ = PCrū = think 'I thought about John'

However, the fact that the lexical assignment of predicative phrases to predicative classes is to be analyzed as ultimately arbitrary and unpredictable on morphosyntactic or semantic grounds **does not mean that no regularities at all may be detected in that assignment.**

**PC∅ is clearly the default predicative class**, from a morphological point of view (what characterizes its inflectional paradigm is in many cases the absence of morpheme in the slot where the inflectional paradigms of the other predicative classes display a specific predicative class marker) as well as from the point of view of the lexical distribution of predicative phrases in predicative classes. Predicative classes with all sorts of meanings and morphosyntactic properties (whether verbal or non-verbal and intransitive or transitive, in particular) are lexically assigned to PC∅, which likely makes it the **most frequent predicative class** both in the language's lexicon and in discourse. Spanish morphemes that are borrowed or inserted by code-mixing and used predicatively in SMAT (e.g. *gánà* 'win', from Sp. *gana* 'she/he wins'; *sérò* 'be absent', from Sp. *cero* 'zero'; Sp. *importante* 'important', used in SMAT as a verb meaning 'be important'), are systematically assigned to PC∅, which manifests its **nature of open class.**

**PC̄i is the second-largest predicative class** in terms of the number of predicative phrases that are lexically assigned to it, but note that it is a closed lexical class, by contrast with PC∅, and one with a relatively reduced number of members compared with PC∅. All predicative phrases lexically belonging to PC∅ seem to be verbal. They may be either intransitive or transitive, and do not appear to feature clear defining semantic properties (e.g. *dūrá* 'be unkind (intr.)', *dé'á* 'to speak (intr.)', *â* 'to burn oneself (intr.)', *yâ'u* 'to seize (tr.)', *gû* 'to roast (tr.)').

Few predicative phrases are **lexically assigned to PCrū** (about 20–25 different PCrū predicative phrases are attested in my corpus). All of them are verbal, and

more specifically consist in or are derived from intransitive verbs. Most of them denote processes affecting the referent corresponding to the subject but on which the latter has **no control or a limited control** (e.g. *chàu* ‘be bored’, *ǵǵmā* ‘to forget’, *yù* ‘to wake up’, *ngù* ‘to rest’, *châ* ‘to swell’, *ó* ‘to disappear’). But note, on the one hand, that not all predicative phrases denoting such processes are lexically assigned to PCr $\bar{u}$  (e.g. *múú* ‘be afraid’ belongs lexically to PC $\emptyset$  and *d’ǎwè* ‘be sick’ to PC $\bar{i}$ ), and, on the other hand, that a few lexical PCr $\bar{u}$  verbs do involve full control of the subject (e.g. *mō’è* ‘to say hello or goodbye’).

Predicative phrases assigned to PC $\bar{i}$  and PCn $\grave{a}$  are, in practice, not easily detectable for phonological and morphological reasons. In particular, the inflectional forms corresponding to these two predicative classes are in many cases identical or extremely similar to those of the much more frequent predicative classes PC $\bar{i}$  and PC $\emptyset$ , respectively. What is clear, in any case, is that **PC $\bar{i}$  and PCn $\grave{a}$  are very limited classes in terms of the number of predicative phrases that are lexically assigned to them.** They are likely to be, in addition, obsolescent classes in the process of merging into other predicative classes.

About 5–10 different predicative phrases that can be relatively confidently analyzed as **lexically attributed to PC $\bar{i}$**  are attested in my corpus. All of them are verbal. They display widely diverging meanings and may be either intransitive or transitive, which suggests that they **do not feature any defining semantic or morphosyntactic properties** (e.g. *kà* ‘to shout (intr.)’, *nâi* ‘to fart (intr.)’, *dǎu* ‘to bother (intr., with the bothered argument marked with the relational noun /-ǵǵ/ ‘PLOC’), *mǵ* ‘to kill (sg.; tr.)’). The copula verb *ǐ* ‘to be’ is by far the PC $\bar{i}$  predicative phrase with the highest frequency in discourse. It is probable that the **distinction between the inflectional paradigms of PC $\bar{i}$  and PC $\bar{i}$  is gradually getting blurred in today’s SMAT**, with the result that PC $\bar{i}$  predicative phrases (with the exception of *ǐ* ‘to be’) may optionally be inflected like PC $\bar{i}$  predicative phrases without any detectable consequence, especially in the speech of younger speakers.

Only two verbal predicative phrases that can be confidently analyzed as **belonging lexically to PCn $\grave{a}$**  are attested in my corpus: *pù* ‘to rob’ and *dēyù* ‘to cause to feel cold’. Additionally, non-verbal predicative phrases formed by the predicative relational noun /-rà’ǔ/ ‘like’ also belong to PCn $\grave{a}$  (e.g. /âirǔ-rà’ǔ/ ‘to resemble a dog’). In the speech of younger SMAT speakers, however, the inflectional paradigm of PCn $\grave{a}$ , although it is still identified as such passively, is **being reinterpreted in active uses of the language as the inflectional paradigm of PC $\emptyset$  involving associated motion** (for the inflectional paradigm of PC $\emptyset$  involving associated motion, see first columns of CHARTS C–D, G–H, and L–M, pp.449–453; on associated

motion, see SECTION 5.8). Contrast the pairs of semantically identical forms in examples (551a–551b), where a conservative variant involving the specific inflectional paradigm of PC $\bar{n}\grave{a}$  is given first, and the corresponding innovative variant where that inflectional paradigm is reinterpreted as that of PC $\emptyset$  in the presence of associated motion is given next:

- (551) a. i. **Conservative variant: PC $\bar{n}\grave{a}$**   
*chā = ná = nā = dēyù*  
 1SG.ACC = 3M/N/NS.SBJ = PC $\bar{n}\grave{a}$  = cause.to.feel.cold  
 ‘I’m cold’
- ii. **Innovative variant: PC $\emptyset$  with /yà = / ‘AM’**  
*chā = ná = yà = dēyù*  
 1SG.ACC = 3M/N/NS.SBJ = AM = cause.to.feel.cold  
 ‘I’m cold’
- b. i. **Conservative variant: PC $\bar{n}\grave{a}$**   
*ná = nā = ūì-tē’e-rà’ù*  
 3M/N/NS.SBJ = PC $\bar{n}\grave{a}$  = manioc.flour-granular.substance-like  
 ‘it’s like manioc flour’
- ii. **Innovative variant: PC $\emptyset$  with /yà = / ‘AM’**  
*ná = yà = ūì-tē’e-rà’ù*  
 3M/N/NS.SBJ = AM = manioc.flour-granular.substance-like  
 ‘it’s like manioc flour’

Under certain circumstances, **interfering with a predicative phrase’s lexical predicative class** and reassigning it to a different predicative class results in apparently regular (*i.e.* predictable) semantic and morphosyntactic effects. Data on this phenomenon are complex. I shall only present here two well-established cases that are representative of it.

Stative intransitive predicative phrases lexically belonging to PC $\emptyset$  may be optionally **reassigned to PC $\bar{i}$** <sup>283</sup> in discourse with the **semantic effect of implying that the subject is a collective entity**, *i.e.* a plurality of entities that are being viewed as a group, rather than as a collection of individuals. The predicative phrase undergoes no other morphosyntactic change in this process. When such predicative phrases are inflected in their lexical predicative class (*i.e.* PC $\emptyset$ ), the referent corresponding to their subject may be singular or plural (in which case the predicative

<sup>283</sup>Or perhaps in fact PC $\bar{i}$ , taking into account the fact that these two predicative classes are often confused with each other in my corpus (see above in this section).

phrase may optionally bear the suffix /-gú/ ‘PL’), but in cases where that referent is plural, it is typically being viewed as a plurality of individuals rather than as a collective entity. The semantic effect of PCØ > PCī reassignment of stative intransitive predicative phrases in discourse is illustrated in the following examples:

- (552) a. i. **Lexical predicative class PCØ:**  
*ná = mé(-gú)*  
 3M/N/NS.SBJ = be.good-PL  
 ‘it is/they are good [individually]’
- ii. **Reassignment to PCī:**  
*nū = mé(-gú)*  
 3M/N/NS.SBJ.PCī = be.good-PL  
 ‘they are good [collectively]’
- b. i. **Lexical predicative class PCØ:**  
*ná = ìrà(-gú)*  
 3M/N/NS.SBJ = be.small-PL  
 ‘it is/they are small [individually]’
- ii. **Reassignment to PCī:**  
*nū = ìrà(-gú)*  
 3M/N/NS.SBJ.PCī = be.small-PL  
 ‘they are small [collectively]’
- c. i. **Lexical predicative class PCØ:**  
*tá = ḡè-’chírù(-gú)*  
 3S.SBJ = not.have-clothes-PL  
 ‘she/he/they don’t have clothes [individually]’
- ii. **Reassignment to PCī:**  
*tū = ḡè-’chírù(-gú)*  
 3S.SBJ.PCī = not.have-clothes-PL  
 ‘they don’t have clothes [collectively]’

This device is often used, for instance, in **stretches of discourse referring to the way of life of social groups**, such as the ancestors of the Tikunas, who are typically conceived of as a collectivity, as shown in the following example:

(553) *Ngēmàkq nū-ì gá malocagù tī-āch’ū’ū.*

*ngē-mà-kq*                      *nū = ì*                      *gá = maloca-gù*  
 MED.NS-ANAPH-CAUSE    3M/N/NS.SBJ.PCī = be    LK.F/M/NS.PST = *maloca*-PLOC

*tī = ā-chí’ū-’ū*  
 3S.SBJ.PCī\SBJV = have-home\SBJV-SUB

‘That’s why they lived in *malocas* [large communal dwellings].’ [IGS 484]

Example (553) is to be contrasted with (554), where the same predicative phrase  $\bar{a}ch\acute{i}'\ddot{u}$  ‘have one’s home’ occurs inflected in PCØ, its lexical predicative class (the difference in the relational noun carried by the noun *maloca*, /-gũ/ ‘PLOC’ in (553) vs /-má’a/ ‘COM’ in (554), is irrelevant here and is not what accounts for the change in predicative class assignment of the inflected predicative phrase):

(554) *Malocamá'a tá-ā-chí'ũ gà chārũ pāpá.*

*maloca-má'a*    *tá = ā-chí'ũ*            *gà = chā-rũ*            *pāpá*  
*maloca-COM*    **3S.SBJ** = have-home    LK.N/S.PST = 1SG-GEN    dad

‘My dad lived in a *maloca*.’ [IGS 474]

Another well-attested case of predicative class reassignment with regular semantic effects is that of **lexical PCØ (spontaneous or caused) durative motion verbs reassigned to PCī** (on the notions of durative vs non-durative motion verb roots, see SECTION 4.2.3). When inflected in their lexical predicative class PCØ, these verbs require a ALOC complement that refers to the goal of the motion (or occasionally an equivalent goal complement marked with a relational noun different from /-wá/ ‘ALOC’, e.g. in cases where that complement has an animate referent), whether that motion is oriented towards or away from the deictic center. When these verbs are reassigned to PCī, their ALOC (or equivalent) complement becomes optional and no longer refers to the goal, but to the source of the motion, and this motion is now specifically implied to be oriented away from the deictic center. This type of PCØ > PCī reassignment thus entails both morphosyntactic and semantic effects. These are illustrated in the following examples:

(555) a. i. **Lexical predicative class PCØ:**

*ngě-mà*            *ná = ũ*  
 MED.ALOC-ANAPH    3M/N/NS.SBJ = go.SG  
 ‘she/he went/came there’

ii. **Reassignment to PCī:**

*(ngě-mà)*            *nũ = ũ*  
 MED.ALOC-ANAPH    3M/N/NS.SBJ.PCī = go.SG  
 ‘she/he left (from there)’

b. i. **Lexical predicative class PCØ:**

*ngě-mà*            *ná = ñā*  
 MED.ALOC-ANAPH    3M/N/NS.SBJ = run.SG  
 ‘she/he ran there’

ii. **Reassignment to PC $\bar{I}$ :**

(ngě-mà)      nî = ñā  
 MED.ALOC-ANAPH 3M/N/NS.SBJ.PC $\bar{I}$  = run.SG  
 ‘she/he ran away (from there)’

c. i. **Lexical predicative class PC $\emptyset$ :**

ngě-mà      tî = ná = gâ  
 MED.ALOC-ANAPH 3S.ACC = 3M/N/NS.SBJ = lead.SG  
 ‘she/he took her/him there’

ii. **Reassignment to PC $\bar{I}$ :**

(ngě-mà)      tî = nî = gâ  
 MED.ALOC-ANAPH 3S.ACC = 3M/N/NS.SBJ.PC $\bar{I}$  = lead.SG  
 ‘she/he took her/him away (from there)’

The following example illustrates this predicative class reassignment phenomenon in context:

(556) [...] nî-yû'u.

nî = yû'u  
 3M/N/NS.SBJ.PC $\bar{I}$  = jump

‘[A man being chased by an isolated group arrives at a river:] he jumped [i.e. away from them into the river].’ [AMB 161]

Example (556) is to be contrasted with (557), where the same motion verb occurs inflected in its lexical predicative class PC $\emptyset$  (note that in this example the goal complement has an animate referent undergoing an aggression, which is why it is not encoded as a ALOC complement but bears the dative suffix /-'nà/):

(557) [...] mārū nîwǎ ā'a tî'nà nà-yû'ù'û gá gǔmá âi [...].

mārū nîwǎ = ā'a      tî-'nà nà = yû'ù-û  
 PRF well.M/N/NS=QUOT 3S-DAT 3M/N/NS.SBJ\SBJV = jump\SBJV-SUB  
 gá = gǔ-má      âi  
 LK.F/M/S/NS.PST = DIST.M-ANAPH wild.felid

‘[A jaguar is attacking a hunter:] at this point the jaguar jumped upon him [...].’ [LAR D134–135]

Apart from these cases of “spontaneous” predicative class shift, a frequent cause of predicative class shift is the suffixation of certain derivational morphemes to predicative phrases. These derivational morphemes **impose (in most cases) a**



particular predicative class upon the predicative phrase they are suffixed to. Thus, as shown in example (558a), the verb *yǎ* ‘to grow’, which is lexically assigned to PCØ, is inflected as a PC $\bar{i}$  predicative phrase when suffixed with the distributive morpheme /-chìgù/ (see SECTION 5.10, p.494), and as a PC $\bar{r}\bar{u}$  predicative phrase when suffixed with the comparative morpheme /-māē/ (see SECTION 4.4.5.1). Similarly, predicative phrases automatically shift to PCØ when attached with the antipassive suffixes /-ē/ ‘ANTIP2’ and /-ètà/ ‘ANTIP1’, as shown in (558b) and (558c) respectively (see SECTION 4.5.1).

(558) a. i. **Lexical predicative class PCØ:***chā* = *yǎ*

1SG.SBJ = grow

‘I’m fully-grown/old’

ii. **Reassignment to PC $\bar{i}$  caused by /-chìgù/ ‘DISTR.SG’:***chī* = *yǎ-chìgù*1SG.SBJ.PC $\bar{i}$  = grow-DISTR.SG

‘I gradually grow older’

iii. **Reassignment to PC $\bar{r}\bar{u}$  caused by /-māē/ ‘COMPAR’:***(kū = )chā = rǔ* = *yǎ-māē*2SG.ACC = 1SG.SBJ = PC $\bar{r}\bar{u}$  = grow-COMPAR

‘I’m older (than you)’

b. i. **Lexical predicative class PC $\bar{i}$ :***chā* = *yā* = *gū*1SG.SBJ = PC $\bar{i}$ .3M/N/NS.OBJ = roast

‘I roasted it’

ii. **Reassignment to PCØ caused by /-ē/ ‘ANTIP2’:***chā* = *gū-ē*

1SG.SBJ = roast-ANTIP2

‘I did some roasting’

c. i. **Lexical predicative class PC $\grave{i}$ :***chā* = *yà* = *mā*1SG.SBJ = PC $\grave{i}$ .3M/N/NS.OBJ.SBJV = kill.SG

‘I killed it’

ii. **Reassignment to PCØ caused by /-ètà/ ‘ANTIP1’:***chā* = *má-ètà*

1SG.SBJ = kill.SG-ANTIP1

‘I was a murderer’

This type of morphosyntactic effect of certain derivational morphemes is mentioned in their respective sections in CHAPTER 4.

Note, finally, the existence of one case of automatic **predicative class shift related to the introduction of a strictly inflectional feature** into a certain type of predicative phrases. Predicative phrases that belong lexically to  $PC\bar{i}$  and  $PC\bar{i}$  appear to shift to  $PCr\bar{u}$  when their inflection includes associated motion (on this phenomenon of predicative class shift, see SECTION 5.3.5).

## 5.10 Strategies for encoding the number of participants

Number may be analyzed, to a certain extent, as an inflectional category of the SMAT predicative phrase. Its encoding cannot be attributed to a single, relatively straightforwardly identifiable locus, however, in the way that *e.g.* associated motion or predicative class can be. In practice, no less than **seven different strategies** can be identified as contributing to the **encoding within the finite predicative phrase of the value of the number feature of arguments**.

From a morphological perspective, these seven strategies variously rely on:

- the **selection** of particular inflectional indexes (*e.g.* / $ch\bar{a}=$ / ‘1SG.SBJ’ vs / $t\bar{a}=$ / ‘1PL.SBJ’), particular allomorphs of certain verb roots (*e.g.*  $\acute{u}$  ‘go.SG’ vs  $\hat{i}$  ‘go.PL’), or particular allomorphs or certain derivational suffixes when present (*e.g.* / $\bar{e}$ / ‘off.SG’ vs / $\bar{u}$ / ‘off.PL’);
- the **addition** of particular suffixes to the predicative phrase (/ $\bar{e}$ / ‘INTR.PL’ and/or / $g\acute{u}$ / ‘PL’);
- or the **reassignment** of the predicative phrase to a predicative class that departs from its lexical one ( $PC\emptyset > PC\bar{i}$  in specific circumstances).

From a semantic perspective, they may variously encode either the **singular, plural, or collective** value (or a value that is a combination of these) of the number feature of either a **subject, object, accusative, or benefactive argument**. Only one of them is of strictly obligatory application, specifically the one that operates through inflectional index selection. Note that it is frequent for several of them (from two to at least four) to be simultaneously—and often redundantly—applied within the same predicative phrase (see for instance example (574) below, which features a predicative phrase within which the plurality of the subject argument is encoded via three different strategies: / $n\acute{u}=\hat{i}-g\acute{u}-\grave{e}t\bar{a}n\bar{u}-\acute{u}$ / (CTR-PET.3ALOC = **go.PL-PL-DISTR.PL\**SBJV-REL.NS) ‘[who] came, each of them, from

[another community]’).

These strategies are **dealt with one by one in the following paragraphs** following an arrangement that roughly goes from the one that is encoded in the leftmost locus to the one that is encoded in the rightmost locus within the inflected predicative phrase. The section closes with a brief discussion of the inflectional character of number encoding in SMAT.

**(i) INDEX SELECTION.** The **singular vs plural (or collective)** value of the number feature of **first and second person benefactive, accusative, and subject** arguments is obligatorily encoded through the selection of the corresponding singular or plural indexes in slots 1, 2, and 4—respectively—of the inflectional template of the predicative phrase, whenever such indexes are present. Note, importantly, that third and fourth person indexes in any of these slots are, by contrast, always unspecified for number. On these indexes, see SECTION 5.1, and in particular TABLES 39 and 40, p.393.

This **typologically unsurprising** strategy for number encoding is illustrated by the contrast between examples (559) and (560) (repeated from (459) above). These nearly parallel examples mainly differ in the selection of the subject indexes featured in their predicative phrases, namely a second person *singular* subject index in (559) as opposed to a second person *plural* subject index in (560).

(559) “*Ákú ngémà kù-ǔ’ú?*”

*ákú*      *ngé-mà*      *kù = ǔ-’ú*  
what?.NS    MED.ALOC-ANAPH    2SG.SBJ\SBJV = make\SBJV-SUB

“‘What are you (sg.) doing there?’” [IGV 381]

(560) “*Ákú núà pē-ǔgú ì pēmà?*”

*ákú*      *nú-à*      *pē = ǔ-gú*      *ì = pē-mà*  
what?.NS    PROX.ALOC-EXO    2PL.SBJ = make-PL    LK.NS = 2PL-ANAPH

“‘What are you (pl.) doing here?’” [IGV 320]

**(ii) PREDICATIVE CLASS REASSIGNMENT.** The **collective** value of the number feature of the **subject argument** of stative intransitive predicative phrases lexically belonging to PCØ may be optionally made explicit by the reassignment of such predicative phrases to PC̄. On this phenomenon, see SECTION 5.9, 482.

This strategy is illustrated by the contrast between examples (561) and (562). The same predicative phrase, *ĩrã* ‘be small’, is employed in both examples. In the former, this predicative phrase is inflected in its lexical predicative class, PCØ, leaving the number of its subject argument unspecified (in this case, the subject—the city of Leticia—is contextually singular). In the latter example, by contrast, the same predicative phrase is inflected in the predicative class PCĩ, which explicitly indicates that its subject argument is a collective entity (in this case, the trees of a patch of jungle).

(561) *Dâ {nà} Leticia rù nô'rí rù nà-ĩrã!*

*dâ-à{ = nà}*                      Leticia = *rù*    *nô'rí* = *rù*  
 PROX.N-EXO = ASSERT?    Leticia = TOP    beginning = TOP

*nà = ĩrã*

3M/N/NS.SBJ\SBJV(.PCØ) = be.small\SBJV

‘You know, this [city of] Leticia, it was small initially!’ [IGS 622]

(562) [...] *nâi rù nũ-ĩrãgú* [...].

*nâi = rù*    *nũ = ĩrã-gú*  
 tree = TOP    3M/N/NS.SBJ.PCĩ = be.small-PL

‘[In secondary jungle, unlike in primary jungle,] trees are small [...].’ [JGS 223]

**(iii) VERB ALLOMORPH SELECTION.** The **singular vs plural (or collective)** value of the number feature of the **subject argument** of certain verbal intransitive predicative phrases, and that of the **object argument** of certain verbal transitive predicative phrases, is regularly—although not entirely systematically—encoded through the selection of one or the other of the two suppletive forms of the verb root on which these predicative phrases are based.

The verb roots that inflect for number as per the phenomenon just described are listed in TABLE 47. Note, incidentally, that **almost all of them denote localization or motion processes**, to the exception of the verb meaning ‘to kill’. Verbal predicative phrases derived from any of these verb roots select for their singular or plural allomorphs following the same principle as these verb roots themselves (e.g. sg. /*ú-pétù*/, pl. /*chó-pétù*/ ‘to pass’, derived from *ú/chó* ‘to find oneself (sg./pl.)’ through the addition of the suffix /-*pétù*/ ‘across’). Three fully lexicalized and, to a certain extent, irregular verb stems based on the verb roots inflecting for number are included in this table, however. The singular forms of two of them,

Intransitive verbs	SBJ is SG	SBJ is PL
‘find oneself’	ú	chó
‘enter’	ú-kù (PCØ/PCĪ)	chó-kù (PCØ/PCĪ)
‘stay’	ũ (PCrũ)	chó (PCrũ)
‘go/come’	ú	î
‘exit’	ú-’ũ	chó-’ũ
‘return’	tǎ-ègù	wò-ègù
‘run’	ñā	ũ(gù’ũ)
‘fly, rush’	gô	ũ
‘sprout, grow’	gô (PCrũ)	yì (PCrũ)
‘fall’	gũ	yì
Transitive verbs	OBJ is SG	OBJ is PL
‘put/take’	ú	nũ
‘drop’	tǎ	wò
‘carry’	gê	nâ
‘lead’	gǎ	nâ
‘kill’	mǎ (PCì)	dài (PCØ)

N.B.: those items for which no indication of lexical predicative class is provided in this table belong lexically to the predicative class PCØ.

TABLE 47. SMAT verb roots and verb stems with suppletive singular vs plural forms

/ú-kù/ (be.there.SG-in.PL) ‘to enter’ and /ú-’ũ/ (go.SG-out.PL) ‘to exit’, are irregular inasmuch as they feature the plural allomorph of a figure-ground configuration suffix (instead of its singular allomorph, as expected; see paragraph (v) below). The verb stem meaning ‘to return’ (sg. /tǎ-ègù/ ‘drop.SG-INV’, pl. /wò-ègù/ ‘drop.PL-INV’), for its part, can be considered to have, to a certain degree, non-compositional semantics.

This strategy for number encoding is illustrated by the contrast between the three pairs of examples (602–564), (565–566), and (567–568). The first pair of examples shows that the distribution of the two allomorphs gô and yì of the intransitive verb meaning ‘to grow’ relies on whether the subject of this verb is singular, as in (602), or plural, as in (564).

(563) [...] *ērú chàwú rù tǎu gē'tǎ mārē nárū-gò.*

*ērú chàwú=rù tǎu gē'tǎ=mārē ná=rū=gò*  
because corn=TOP NEG where?.ALOC=just 3M/N/NS.SBJ=PCrū=**grow.SG**

‘[Corn we plant at the very spots where we’ve heaped and burnt slashed vegetation,] because corn does not just grow anywhere.’ [LAR D261–262]

(564) [*Nû*]wǎ yǐ'kù'ámá rù mārū... eh... *nâi mārē nárū-yì.*

[*nû*]wǎ yǐ'kù'ámá=rù mārū nâi=mārē ná=rū=yì  
well.M/N/NS later-DIR=TOP PRF tree=just 3M/N/NS.SBJ=PCrū=**grow.PL**

‘[Once a swidden has grown old it no longer yields fruit.] That’s because afterwards... uh... nothing else than trees grows [there].’ [LAR D386–387]

In (565–566), the same principle is shown to apply to the distribution of the allomorphs *tǎ* and *wò* of the transitive verb meaning ‘to drop’. Note, however, that it is now the number of the object argument (as opposed to the subject argument as in the preceding two examples) that determines the use of the singular or plural allomorph of the verb:

(565) “*Kú nûwǎ kù-ò'gù rù nûà tá kùchā-tǎ!*”

*kú nûwǎ kù=ò-'gù=rù nû-à=tá*  
come.on well.M/N/NS 2SG.SBJ\SBJV=be.unwilling-CIRC=TOP PROX.ALOC-EXO=FUT  
*kū=chā=tǎ*  
2SG.ACC=1SG.SBJ=**drop.SG**

“‘If you refuse to do it, I’ll abandon you here!’” [JSG B353]

(566) *Kú tûgù ítà-wògǐ'ú.*

*kú tû-gù í=tà=wò-gǐ-'ú*  
I.mean 3S-REFL 3ALOC=3S.SBJ\SBJV=**drop.PL**\SBJV-SUB

‘[My parents did not get along well.] So they separated [lit. ‘So they dropped each other.’].’ [JGS 641]

The fact that it is the number of the object argument, rather than that of the subject argument, that determines the selection of the singular or plural allomorph of transitive verb roots inflecting for number is made even clearer by (567–568). In (567), although the subject is explicitly marked as plural (by the presence of the suffix /-gǐ/ ‘PL’ within the predicative phrase), the singular allomorph *gǎ* of the verb meaning ‘to lead’ is selected in accordance with the singular number of the



(569) *Dítichìawá nà-pūrākú'ú.*

*Dítichìà-wá nà = pūrākú-ú*

Leticia-ALOC 3M/N/NS.SBJ\SBJV = work\SBJV-SUB

'He worked in Leticia.' [AMB 184]

(570) *Ngémà ná-pūrākúē [...].*

*ngé-mà ná = pūrākú-ē*

MED.ALOC-ANAPH 3M/N/NS.SBJ = work-INTR.PL

'They work there [...].' [JGS 477]

(v) **SELECTION OF FIGURE-GROUND CONFIGURATION SUFFIX ALLOMORPH.** The **singular vs plural (or collective)** value of the number feature of the **subject argument** of most verbal intransitive predicative phrases that contain any of the derivational suffixes encoding the figure-ground configurations 'in', 'out', and 'off', and that of the **object argument** of most verbal transitive predicative phrases that contain these same suffixes, is regularly—although not entirely systematically—encoded through the selection of one or the other of the two suppletive forms of these suffixes (e.g. /-kúchí/ 'in.SG' vs /-kú/ 'in.PL'). On these suffixes, see SECTIONS 4.2.3.1, 4.2.3.2, and 4.2.3.5.

This strategy for number encoding is illustrated by the contrast between examples (571) and (572) (the latter being repeated from (455b) above). These largely parallel examples differ in the selection of the form of the figure-ground configuration suffix featured in their essentially synonymous main predicative phrases. In (571), the singular allomorph /-ē/ of the figure-ground configuration suffix meaning 'off' is selected for, while it is its plural allomorph /-ú/ that is used in (572). Because the predicative phrases in question are transitive, the selection of /-ē/ 'off.SG' in (571) indicates that the object argument is singular (in this case, a mash), while the selection of /-ú/ 'off.PL' in (572) indicates that the object argument is plural (in this case, plantains).

(571) *Ngémà kùnā-táè'ú.*

*ngé-mà kù = nā = tá-è-ú*

MED.ALOC-ANAPH 2SG.SBJ\SBJV = 3M/N/NS.OBJ = drop.SG-off.SG\SBJV-SUB

'You throw it in [lit. '... off.'] [i.e. the plantain mash into the cooking pot].'

[TVJ 372]



(572) *Ngémà kùnā-wòù'ú ì pō'í, mārū gàu'ú-gú'ú.*

*ngé-mà*                      *kù = nā = wò-ú-ú*  
 MED.ALOC-ANAPH    2SG.SBJ\SBJV = 3M/N/NS.OBJ = drop.PL-off.PL\SBJV-SUB

*ì = pō'í*                      *mārū gàu-ú-gú-ú*  
 LK.NS = plantain    PRF            tear-out.PL-PL\SBJV-REL.NS

'You throw in [lit. 'You drop off ...'; *i.e.* into the pot] the plantains, already peeled.' [TVJ 360–361]

Note, however, than in a few lexicalized predicative phrases, the **plural allomorph of a figure-ground configuration suffix is used in practice with a singular value**, as in the singular intransitive predicative phrases /ú-kù/ (be.there.SG-in.PL) 'to enter (sg.)' and /ú-'ú/ (go.SG-out.PL) 'to exit (sg.)', in particular.

**(vi) DISTRIBUTIVE SUFFIX ALLOMORPH SELECTION.** The **non-plural (*i.e.* singular or collective) vs plural** value of the number feature of the **subject, object, or accusative argument** of predicative phrases that contain the derivational distributive suffix is regularly—although not entirely systematically—encoded through the selection of one or the other of the two suppletive forms of this suffix (specifically /-chìgù/ 'DISTR.SG' vs /-ètānù/ 'DISTR.PL'). In a clause that contains several arguments that could be specified by the plural form of the distributive suffix (*e.g.* both the subject and object arguments of a transitive predicative phrase), **which of them is being specified by it as plural is left to context.**

This strategy for number encoding is illustrated by the contrast between examples (573) and (574). These examples both feature a predicative phrase that includes the plural form of the intransitive verb meaning 'to go' (*î*). These predicative phrases necessarily have a non-singular (*i.e.* collective or plural) subject. The one in (573) is suffixed with the non-plural form of the distributive suffix (/ -chìgù/), which indicates that its subject (in this case, the jungle fauna) is to be viewed as a collective entity rather than as a collection of individuals. In such a context, distributivity is accordingly interpreted as indicating that the process occurs little by little or step by step.

(573) *Ñumá rù mārū ná-gú'chà ērú ná-mú ì dùù'ú tà rù nâē'ù rù mārū yà'nà ná-îchìgù tà.*

*ñumá = rù*                      *mārū ná = gú'chà*                      *ērú*  
 present.time = TOP    PRF            3M/N/NS.SBJ = be.difficult    because

*ná = mú*                      *ì = dùú-’ú = tà*                      *rù*  
 3M/N/NS.SBJ = be.several    LK.NS = be.a.human\SBJV-REL.NS = ADD    and  
*[ná-ē’ù = rù*            *mārū yà’nà*            *ná = î-chìgù = tà]*  
 3N/NS-animal = TOP    PRF    far.away    3M/N/NS.SBJ = go.PL-DISTR.SG = ADD

‘[People used to hunt with blowguns.] Now it’s complicated because there’s [too] many people so the animals are withdrawing further and further [lit. ‘... and the animals, they’re now going far away little by little accordingly.’.]’  
 [ANO2 7:29–7:34]

By contrast, the predicative phrase containing *î* ‘to go (pl.)’ in (574) is suffixed with the plural form of the distributive suffix (*/-ètānū/*), which indicates that its subject (in this case, students) is to be viewed as a collection of individuals rather than as a collective entity. In such a context, distributivity is accordingly interpreted as indicating that each of these individuals is involved in a specific sub-occurrence of the process (in this case, each individual student comes from a community that is different from that of all or part of the other students).

(574) *Ngēmà gá, mú’úchī’ú gá chòmùkūtānū chàrū-’áú’ú gá chòmàrú’ú < nāi yà îàn... >*  
*tòmà yà îànè... -wǎ nū-îgùètānū’ú.*

*ngē-mà = gá*                      *mú-’úchī-’ú*  
 MED.ALOC-ANAPH = PST    be.several-genuinely\SBJV-REL.NS  
*gá = chò-mùkū-tānū*                      *chà = rū = áú-’ú*  
 LK.F/M/NS.PST = 1SG-companion-group    1SG.SBJ\SBJV = PCrū = stay.SG\SBJV-SUB  
*[gá = chò-mà-rú’ú*                      *< nāi yà = î-àn... >*                      *tò-mà*  
 LK.F/M/NS.PST = 1SG-ANAPH-like    other.N    LK.N/S = building-    other.NS-ANAPH  
*yà = î-ànè-wǎ*                      *nū = î-gù-ètānū-’ú]*  
 LK.N/S = building-space-ALOC    CTRPET.3ALOC = go.PL-PL-DISTR.PL\SBJV-REL.NS

‘[Then I went to a boarding school.] And then, I was living together with lots of [school]mates who came from... other com... other communities like me [lit. ‘... who came, each of them, from another community like me.’.]’  
 [JGS 713–716]

(vii) **ADDITION OF */-gù/* ‘PL’.** Finally, the **plural** value of the number feature of either the **subject, object, or accusative argument** of apparently any predicative phrase may be optionally made explicit by the addition of the suffix */-gù/* ‘PL’ to that predicative phrase. In a clause that contains several arguments that could be specified by */-gù/* ‘PL’ (e.g. both the subject and object arguments of a transitive

predicative phrase), **which of them is being specified by it as plural is left to context**. Note that this suffix, by contrast with /-ē/ ‘INTR.PL’ (see paragraph (iv) above), is transcategorial, *i.e.* it may be attached to words belonging to several parts of speech, including nominal constituents and predicative phrases.

Examples (575) and (576) both feature the verb *dé’à* occurring with a third person non-salientive subject. The number of the subject argument of *dé’à* in (575) is left unspecified (in this case, the subject—a single man—is contextually singular). In (576), by contrast, *dé’à* bears the suffix /-gǘ/ ‘PL’, which in this case may only indicate that its subject is plural since no other potentially plural argument is present in the clause.

(575) [...] *wí’á* profesor *gá* Cicerón*má’a* *nà-ūgǘ’ǘ*, *ngémà* *gá* *chòmá’a* *yà-dé’ā’ǘ*: [...]

*wí’á* profesor *gá* = Cicerón-*má’a*  
INDF teacher LK.F/M/NS.PST = Cicerón-COM

*nà* = *ū-gǘ-’ǘ* *ngé-mà* = *gá* *chò-má’a*  
3M/N/NS.SBJ\SBJV = say-PL\SBJV-REL.NS MED.ALOC-ANAPH = PST 1SG-COM

*yà* = *dé’ā-’ǘ*  
PCI.3M/N/NS.SBJ\SBJV = speak\SBJV-SUB

‘[In Tarapacá, more and more people knew me, and...] a teacher called Cicerón, he then spoke to me: [...]’ [JGS 690–691]

(576) *Ná’chíné’ewá* *gá* *chà-û’ǘ* *rù* *nû’nà* *chà-kǎ’ǘ* *gá* *ná’a* *españolwá* *yà-dé’àgǘ’ǘ*.

*ná-’chíné’e-wá* = *gá* *chà* = *û-’ǘ* *rù* *nû-’nà*  
3N/NS-mouth-ALOC = PST 1SG.SBJ\SBJV = go.SG\SBJV-SUB and 3N/NS-DAT

*chà* = *kǎ-’ǘ* *gá* = *ná’a* *español-wá*  
1SG.SBJ\SBJV = ask\SBJV-SUB LK.F/M/NS.PST = CONJ Spanish-ALOC

*yà* = *dé’à-gǘ-’ǘ*  
PCI.3M/N/NS.SBJ\SBJV = speak-PL\SBJV-SUB

‘[My boss told me to go pick up some tourists.] I went to the river mouth and I asked them if they spoke Spanish.’ [JGS 322–323]

Although in this section I treat on the same level the seven identified strategies for specifying the number feature of arguments within a predicative phrase, note that **not all of them can be equally said to be inflectional in nature**. The encoding of number through index selection (see paragraph (i)) and predicative class reassignment (see paragraph (ii)) may only operate in finite predicative phrases as it

relies on strictly inflectional morphology of the predicative phrase. The remaining five strategies (see paragraphs (iii–vii)), by contrast, **rely on morphology that can be considered as derivational in nature** inasmuch as it may occur in non-finite predicative phrases. For instance, the use of the plural allomorph of a verb root inflecting for number (strategy discussed in paragraph (iii)) and that of the suffix /-ē/ ‘INTR.PL’ (strategy discussed in paragraph (iv)) in zero-derived nominalizations are illustrated in examples (577) and (578) respectively.

(577) *Nô'rí tã-ũgũ'ũ ì tòmà ì, hierroârũ nũgù.*

*nô'rí*      *tã = ũ-gũ-'ũ*                              *ì = tòmà = ì*  
beginning 1PL.SBJ.SBJV = make-PL\SBJV-REL.NS    LK.NS = 1PL-ANAPH = CONTR.TOP  
*hierro-ârũ*    *nũ-gù*  
iron.rod-GEN    put.PL-PLURAC

‘What we do at the beginning [is] carrying metal rods [lit. ‘... the repeated putting of iron rods (somewhere else).’.]’ [JSG A63–64]

(578) *Mã tá'a tòmá'a nūná-ũ gá nūà gá yǎewǎ rù tǎ'úgù tã-ǧũē.*

*mã = tá'a*      *tòmá'a*    *nū = ná = ũ*  
PRF = FRUSTR    1PL-COM    3M/N/NS.ACC = 3M/N/NS.SBJ = make  
*gá = nū-à*                              *gá = yǎ-ē-wǎ*                              *rù*  
LK.F/M/NS.PST = PROX.ALOC-EXO    LK.F/M/NS.PST = grow-INTR.PL-ALOC    and  
*tǎ'ú-gù*                              *tã = ǧũ-ē*  
be.absent\SBJV?-PLOC    1PL.SBJ = learn-INTR.PL

‘[As children we didn’t have the opportunity to study.] They tried with us [i.e. to teach us school subjects] here as adults [lit. ‘... at being full-grown (pl.) ...’] but we never learnt.’ [GRA 165–166]

Note, however, that in spontaneous speech the plural (or collective) marking morphological devices employed by these remaining five strategies rarely occur in non-finite predicative phrases. In such contexts, their **singular counterparts may be generalized with, in practice, no indication of singular number implied**. Thus, in example (579), the singular allomorph of the verb meaning ‘to kill’ (*mǎ*) is used in a non-finite nominalization while its “object” argument, which is syntactically treated as a genitive complement (/dũǧ-ârũ/ ‘human-GEN’), is referentially plural (the noun *dũǧ* ‘human’ virtually always has a plural referent, which the context indicates is also the case in this example).

(579) *Yẽmá nũ-ĩ gá dũǧârũ mǎrũ'ũ.*

*yě-má*            *nî = î̇*            *gá = dùã-ârû*            *m̄-rũ'ũ̇*  
 DIST.NS-ANAPH   3M/N/NS.SBJ.PCì = be   LK.F/M/NS.PST = human-GEN   **kill.SG-PURP**

‘[The spear that the evil spirit carried on his shoulder was this long.] That’s what [he used] for killing people.’ [IGS 391]

Note, also, that the five strategies discussed in paragraphs (iii–vii), although their application does not systematically correlate with the number features of arguments, are **applied consistently in a majority of cases in spontaneous speech** (the strategy of predicative class reassignment described in (ii), in comparison, is only resorted to occasionally).

For these reasons, while one cannot talk of a grammatical system of agreement for number beyond the encoding of first and second person participants in SMAT (in the way that one can talk of an elaborate SMAT grammatical system of agreement for nominal class, in particular), number in the language **may still be considered to a certain extent as an inflectional category**, even outside of first and second person participants.

## Chapter 6

# The deictic verb /ñǎ-/ñâ- + -((rũ)gù)/ ‘do thus’

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The manner deictic verb<sup>284</sup> /ñǎ-/ñâ- + -((rũ)gù)/, which I broadly gloss as ‘do thus’, is one of the most frequent verbs of the language in discourse, particularly in narratives. It deserves special attention from both a functional and a formal perspective. The **differences that set it apart from any other kind of predicative phrases** in the language, and from regular verb roots in particular, are indeed equally remarkable from these two perspectives.

Note in particular its unique **bipartite morphological nature** (hence its bipartite labeling as /ñǎ-/ñâ- + -((rũ)gù)/). In most—although not all—of its inflectional forms, the deictic verb displays double exponence. In these forms, a first morpheme /ñǎ-/ñâ-/ and a second morpheme /-gù/-rũgù/, which together fulfill a single unanalyzable function, are separated by a subject person index (e.g. /ñǎ-chā-rũgù/ [‘do.thus-1SG.SBJ-do.thus’] ‘I do thus’; the morphological distribution of the allo-

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<sup>284</sup>Or ‘manner demonstrative verb’, following the terminology put forward in Guérin (2015)’s typological study of this cross-linguistically relatively rare type of deictic word.

morphs /*ñǎ-/ vs /ñâ-/* on the one hand and /-gù/ vs /-rügù/ on the other is related to subject index and Inflectional Type).

The deictic verb's semantic and syntactic peculiarities are discussed in SECTION 6.1, its unique inflectional morphology in SECTION 6.2, and its limited derivational morphology in SECTION 6.3.

## 6.1 Semantics and syntax

The verb /*ñǎ-/ñâ- + -((rū)gù)/* is **semantically vague** and may in principle refer to virtually any kind of process. It will consequently be found with such diverse translations as ‘do (like that), move (like that), say (like that), ask (like that), call (like that), sound (like that), think (like that), decide (like that), etc.’.<sup>285</sup> Its one and, most of the time, stable semantic (and pragmatic) feature is its **deictic function**. This deictic component may essentially target (or one might say “point at”) two different kinds of objects, some of a linguistic (or minimally vocalic) nature, others of an extra-linguistic nature. Note that the elements targeted by the deictic verb are marked out by square brackets in all the examples presented throughout this chapter.

In the first case, the ‘doing thus’ targets a **piece of linguistic discourse as such** (*i.e.* primarily as a signifier in the Saussurean sense), or occasionally a non-linguistic vocalic production (*e.g.* a melody), just produced or soon to be produced by the speaker. The deictic verb can then be said to fulfill an **endophoric function**.<sup>286</sup>

<sup>285</sup>This is not to say that the deictic verb is a filler, *i.e.* a semantically-empty verb whose only function is to fill in the morphosyntactic position of a predicative phrase in cases where a speaker finds him or herself unable to—or does not want to—use a semantically-determined predicative phrase. This predicative-phrase-filler function is carried out by the interrogative-indefinite word *ǎkú* ‘what?.NS’ (or its extended variant /*ǎkú-’ú*/ ‘what?.NS\SBJV?-REL.NS’), as in the following example:

- (i) [...] *chí wí’á* cauchito ì *náwǎ chā-ǎkú-’ú*... *úkùchí*.

*chí wí’á* cauchito = ì                      *ná-wǎ*                      *chā = ǎkú-’ú*  
and INDF rubber.band = CONTR.TOP    3N/NS-ALOC    1SG.SBJ = what?.NS\SBJV?-REL.NS

*ú-kùchí*  
put.SG-in.SG

‘[...] and I, uh... [lit. ‘and I somethinged ...’] I put a rubber band around it.’ [RCA F42–43]

<sup>286</sup>From Lyons’ perspective, this kind of deictic reference would possibly be analyzed as “pure textual deixis” (like the kind of deictic reference involved by *it* in *e.g.* *That’s a rhinoceros. – A what?*

When the piece of discourse pointed at follows the deictic verb, as in example (580), the endophoric function can be further characterized as **cataphora**. When it precedes the deictic verb, as in (581), the endophoric function can be characterized as **anaphora**. It is not rare for the deictic verb to occur twice with the exact same endophoric target, once before the target and a second time after the target (as in e.g. ‘He said [like this]: “TARGET,” [thus] he said.’). This last case where both cataphora and anaphora occur simultaneously is illustrated in (582) (see also (589) and (596) below).

(580) **Cataphora:**

*Ñù'gù-àkù rù ñákūrūgù: “Ná ákú tá ì tû'nà chà-à'ú ērú chā-gēārū dīērù-ā?”*

*ñù'gù-àkù = rù      ñá-kū-rūgù      [ná      ákú = tá*  
when?-APPROX = TOP    do.thus-2SG.SBJ-do.thus    ASSERT    what?.NS = FUT

*ì = tû-'nà      chà = à-'ú      ērú      chā = gē-ārū*  
LK.NS = 3S-DAT    1SG.SBJ\SBJV = have\SBJV-SUB    because    1SG.SBJ = not.have-GEN

*dīērù-ā]*  
money-POSS

‘Sometimes you wonder [lit. ‘... you do like this: ...’]: “What am I going to give them [to eat] if I don’t have money?” [JGS 594–595]

(581) **Anaphora:**

*Portugués wá rù “mingau” ñânárūgù. Tōmà “mīgā'ú” ñátāgù'ú, “mīgā'ú”.*

*portugués-wá = rù      [mingau]      ñâ-ná-rūgù      tō-mà*  
Portuguese-ALOC = TOP    porridge    do.thus-3M/N/NS.SBJ-do.thus    1PL-ANAPH

*[mīgā'ú]      ñá-tā-gù-'ú      mīgā'ú*  
banana.soup    do.thus-1PL.SBJ.SBJV-do.thus-SUB    banana.soup

‘In Portuguese they call [it] “mingau” [lit. ‘... they do like this: “mingau”.’]. We call [it] “mīgā'ú” [lit. ‘We do like this: “mīgā'ú” ...’], “mīgā'ú.” [TVJ B484–486]

(582) **Cataphora & Anaphora:**

*Spell it for me*, where *it* refers to the word *rhinoceros* as a formal object instead of referring to the animal it denotes; Lyons 1977:667–668, Diessel 1999:101). It would consequently be considered as exophoric instead of endophoric in nature. In any case, as Lyons himself observes, “[i]t is not always easy to draw the distinction between pure and impure [*i.e.* more endophoric-like] textual deixis in particular instances”.



*Chô'rũ māmá gá ñátàgù'ũ:* “*Ná <táu tá... > tágù tá nũ-ĩ ì Nâpátúwá kù-ũ'ũ, kũ'rũ mǎiāgāwà'ũ kùyà-dǎu'ũ, kútānũ'ũ'ũ kùyà-dǎu'ũ, kúéne'egú'ũ kùyà-dǎu'ũ?*” *ñátàgù'ũ ìkũ chá'ũ.*

*chô-rũ māmá = gá ñá-tà-gù-'ũ* [ná <táu = tá... >  
1SG-GEN mum = PST do.thus-3s.SBJ\SBJV-do.thus-SUB ASSERT NEG = FUT

*tágù = tá nũ = ĩ ì = nâ-pà-tú-wá*  
never = FUT 3M/N/NS.SBJ.PCì = be LK.NS = 3N/NS-hammock-river-ALOC

*kù = ũ-ũ'ũ kũ-rũ mǎiāgāwà-ũ*  
2SG.SBJ\SBJV = go.SG\SBJV-SUB 2SG-GEN godmother-ACC

*kù = yà = dǎu-ũ'ũ kú-tānũ'ũ-ũ*  
2SG.SBJ\SBJV = AM = see\SBJV-SUB 2SG-relative-ACC

*kù = yà = dǎu-ũ'ũ kú-éne'e-gú-ũ*  
2SG.SBJ\SBJV = AM = see\SBJV-SUB 2SG-brother-PL-ACC

*kù = yà = dǎu-ũ'ũ ñá-tà-gù-'ũ ìkũ*  
2SG.SBJ\SBJV = AM = see\SBJV-SUB do.thus-3s.SBJ\SBJV-do.thus-SUB I.mean

*chá-ũ*  
1SG-ACC

‘My mother said [lit. ‘... did like this: ...’]: “So, won’t you... won’t you ever go to San Martín de Amacayacu, go visit your godmother, go visit your relatives, go visit your brothers?” she asked me [lit. ‘... thus she did to me.’]’ [JGS 730–734]

According to the nature of the endophoric target, which may be a mere name, a complete utterance, a non-uttered cognitive content, an onomatopoeia, etc., the deictic verb will be respectively translatable as ‘call TARGET’ (as in example (581)), ‘say TARGET’ (582), ‘think TARGET’ (580), ‘make TARGET’ (583), etc. The deictic verb is **especially pervasive in its use as a device introducing direct speech**, although direct speech does not obligatorily require its presence.

(583) “*Tàaa!*” *ñāgũ'ũ ā'a gá nātúwá.*

[*tàaa*] *ñā-gũ-'ũ = ā'a* *gá = ná-tú-wá*  
splash.sound do.thus.3M/N/NS.SBJ.SBJV-PL-SUB = QUOT LK.PST = 3N/NS-river-ALOC

‘They made “splaash!” in the river.’ [GSG 0’53”–0’56”]

The target of the deictic component of the deictic verb may be, on the other hand, a strictly extra-linguistic process. This is typically a **gesture performed by the speaker** while they are uttering the deictic verb, but it may also be any physical process being achieved by some other entity present in the utterance situation and

pointed at by the speaker while they are uttering the deictic verb. This kind of uses corresponds to the **exophoric function** of the deictic verb. Thus, in example (584), the speaker is repeatedly drawing small circles in the air in front of her in a gesture culturally suggesting madness.<sup>287</sup> It is at this extra-linguistic target that the verb *ñânárũgù* ‘it did like this’ is pointing:

(584) *Tũmàârũ* cabeza *rũ ñânárũgù*.

*tũ-mà-àrũ*      cabeza = *rũ ñâ-ná-rũgù*  
3S-ANAPH-GEN    head = TOP      do.thus-3M/N/NS.SBJ-do.thus

‘Her head was like [with gesture suggesting madness] [lit. ‘Her head did like this [with gesture].’]...’ [IGS 144]

In rare occasions, the verb /*ñǎ-/ñâ- + -((rũ)gù)/* may occur with **no deictic function**. It then takes what looks like an ordinary core object (but see below for a discussion of the syntactic status of targets of the deictic verb) that immediately precedes it, and behaves semantically and syntactically rather like an ordinary verb with a vague meaning ‘do’ or ‘say’. In most instances of this non-deictic use of the deictic verb in my corpus, the **target is in fact itself an anaphoric (and, consequently, a deictic) word**, such as /*ngē-mà/* (MED.NS-ANAPH) ‘that’ as in the following example:

(585) “[...] *wí’á* cambio *tá-ũgù!*” *ñâ’ũ*. *Ngēmà ñâ’ũ gá <nũg... > nũmà*.

*wí’á* cambio    *tá = ũ-gù*      *ñâ-’ũ*      [ngē-mà]  
INDF    exchange    4SBJ = make-PL    do.thus.3M/N/NS.SBJ.SBJV-SUB    MED.NS-ANAPH

*ñâ-’ũ*      *gá = <nũ-g... > nũmà*  
do.thus.3M/N/NS.SBJ.SBJV-SUB    LK.PST = 3N/NS      3N/NS-ANAPH

“[...] let’s make an exchange!” they said. So they spoke [lit. ‘They said that.’]’ [AMB 93–94]

Three intriguing occurrences of this non-deictic use of the deictic verb in my corpus can be more specifically hypothesized to be instances of a **unique case of auxiliary construction in the language**. Note that all three are by the same speaker (LAR) and from the same story (published in Bertet et al. 2019). In these

<sup>287</sup>The speaker starts the gesture at the beginning of the word *cabeza* and stops at the end of *ñânárũgù*.

three occurrences, instead of a regular finite predicative phrase containing an ordinary lexical verb (compare e.g. ‘I hunt’), the speaker uses a sequence that contains a non-finite form of the lexical verb functioning as the core object of a following finite form of the deictic verb (lit. ‘I do hunting’). Thus in the following example (Bertet et al. 2019:118, line (23)), instead of the stylistically unmarked construction *n̄n̄á-d̄au* [...] *gá âi* ‘he saw the jaguar’, the speaker opts for the more complex construction *d̄au n̄n̄árũgù* [...] *gá âi*, lit. ‘seeing he did the jaguar’, probably with the stylistic purpose of making the narration particularly vivid at a most dramatic point in the story:<sup>288</sup>

(586) *Rù ã’a d̄au n̄n̄árũgù ã’a gá gũmá gá âi* [...]

*rù* = *ã’a* [d̄au] *n̄n̄á-ná-rũgù* = *ã’a*  
 and = QUOT see do.thus-3M/N/NS.SBJ-do.thus = QUOT  
*gá* = *gũ-má* *gá* = *âi*  
 LK.F/M/S/NS.PST = DIST.M-ANAPH LK.F/M/S/NS.PST = wild.felid

‘And he saw the jaguar [standing there on its hind legs with its arms raised, staring at him].’ [LAR D130]

The other two cases of this construction in my corpus are given here for reference (Bertet et al. 2019:126, lines (63–64)):

(587) [...] *ú n̄n̄’ũ ã’a gá, “Flâu!” n̄n̄’ũ ã’a. W̄énà-àrũ ú n̄n̄árũgù ã’a gá, “Flâu! Flâu!” n̄n̄’ũ ã’a.*

[ú] *n̄n̄-’ũ* = *ã’a* = *gá* *flâu*  
 go.SG do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT = PST flute.sound  
*n̄n̄-’ũ* = *ã’a* [w̄énà-àrũ ú]  
 do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT again-GEN go.SG  
*n̄n̄-ná-rũgù* = *ã’a* = *gá* *flâu* *flâu*  
 do.thus-3M/N/NS.SBJ-do.thus = QUOT = PST flute.sound flute.sound  
*n̄n̄’ũ* = *ã’a*  
 do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT

<sup>288</sup>Note, interestingly, that in example (587) the syntactic function of the argument *gá âi* ‘the jaguar’ is left entirely unencoded. It is implicitly understood to be the accusative complement of the verb *d̄au* ‘see’, but this relation is neither encoded via head-marking on the deictic verb *n̄n̄árũgù* (which cannot bear indexes for syntactic functions other than subject) nor via dependent-marking on *gá âi* itself (which does not bear the accusative suffix /-’ũ/). This situation is anomalous for a complement in accusative and is probably due to the use in this example of the near-auxiliary construction under discussion.

‘[...] when [the jaguar] took a step, it made “Flau!” [as its movements cause some air to be ejected through a flute that was thrust into its anus]. It took another step and went “Flau! Flau!”’ [LAR D166–168]

In this construction, the deictic verb functions as a semantically-empty auxiliary verb whose only morphosyntactic function is to bear the encoding of the inflectional values of the whole predicative phrase it forms together with the verbal lexeme that constitutes its core object. Parallel examples by other speakers are needed, however, to confirm the status of this syntactic strategy as a genuine, grammaticalized construction.

Interestingly, whether the target of the deictic verb is a piece of discourse, a gesture, an anaphoric, or a non-finite verb, its **exact syntactic function cannot be established with certainty**. As a corollary, whether the deictic verb is **morphosyntactically intransitive or transitive appears to be an unanswerable question**. From a strictly morphosyntactic perspective, nothing definitively precludes from analyzing the deictic verb’s target as a core object, since core objects in SMAT are in the zero-case, *i.e.* are left morphologically unmarked for their syntactic function. Thus, there is the possibility that the anaphoric *ngēmà* ‘that’ in example (585), which stands in the zero-case, is indeed to be interpreted as the core object argument of the deictic verb. On the other hand, no language internal facts seem to offer positive evidence for the analysis of the deictic verb’s target as its object. Regular predicative phrases can be unequivocally told to be transitive or intransitive depending on whether or not they require the indexation of a core object in contexts where, all other things being equal, they are not preceded by any syntactic NP (in the zero-case) that might function as their core object (thus *fè* ‘to shoot’ in /*kōwú ná = fè*/ [deer 3M/N/NS.SBJ = shoot] ‘she/he shot the deer’ can be definitively identified as a transitive verb because \*/*ná = fè*/ is not acceptable as is with the meaning ‘he shot (it)’, which can only be conveyed by /*ná = nā = fè*/ [3M/N/NS.SBJ = 3M/N/NS.OBJ = shoot], *i.e.* with the inclusion of an object index). The inflectional paradigm of the deictic verb does not seem to display any marking for object indexes, but this cannot be taken as definitive evidence for the verb’s intransitive nature due to its morphological uniqueness in the language (see SECTION 6.2). In principle, it might simply be that the deictic verb, although transitive, has the unique morphological ability to occur without an object index in contexts where it lacks an object NP preceding it. These considerations leave **open the question of the syntactic relationship, if any, that holds between the deictic verb and its target in SMAT**. This is why I have opted for labeling the target with a syntactically neuter term, instead of referring to as *e.g.* a complement.

The subject of the deictic verb is typically an **animate referent**, as in most examples in this section, or less frequently a concrete, **inanimate referent**. But it may also occasionally be an **abstract entity**, such as a speech, a story, a call, a song, a thought, a person’s mind, etc. In such cases, the deictic verb does not, strictly speaking, refer to a *process* (‘do thus’) being carried out by the subject. It can rather be considered in practice as the equivalent of an equative verb, and functions more specifically as a deictic equative verb (‘be thus’). Its specialized use is then to introduce a linguistic, cognitive, or vocalic object that is being equated with the subject. This is illustrated in example (618), where the ‘speaking’ (dé’à) that is taking place is equated with, or defined as, the question enclosed in quotation marks (see also example (594) below):

(588) “Nǎ kùmà ì tōkù-ǵěná-tù-’ú,” ñâ-’ú ā’a, “<kù-...> tōkù-tà’kù-’ú?” ñâ-’ú ā’a gá nǝ-’rū dé’à.

[nǎ kù-mà ì = tō = kù = ǵě-nátù-’ú]  
 ASSERT 2SG-ANAPH LK.NS = 1PL.ACC = 2SG.SBJ\SBJV = not.have-father\SBJV-SUB

ñâ-’ú = ā’a [ <kù = ... >  
 do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT 2SG.SBJ\SBJV =

tō = kù = tà’kù-’ú]  
 1PL.ACC = 2SG.SBJ\SBJV = be.an.orphan\SBJV-SUB

ñâ-’ú = ā’a gá = nǝ-’rū dé’à  
 do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT LK.F/M/S/NS.PST = 3N/NS-GEN speak

“So, did you rob us of our father,” they asked, “did you orphan us?”, such were their words [lit. ‘... thus did their speaking.’]’ [LAR C404–405]

In addition to a subject argument, the deictic verb may optionally take an **argument marked for the accusative case** (to be distinguished from a core object, which does not bear any syntactic-function marking, as mentioned above) in cases where it specifically refers to an uttering-process (*i.e.* a piece of linguistic discourse actually spoken). The referent of that argument is the **addressee** of the uttering-process mentioned by the speaker. This is illustrated at the end of example (582) above. Note that such accusative arguments may only consist of explicit NPs as they cannot be indexed on the deictic verb.

When used endophorically, the deictic verb is virtually always **immediately adjacent to the piece of linguistic discourse (or non-linguistic vocalic production) it points at**. As a consequence, its arguments—whether a subject or a complement in accusative—normally precede the deictic verb when the latter itself

precedes its target ((SBJ) (ACC) DEICTIC.VERB “TARGET”). This is illustrated in the following example (see also the beginning of example (582) above):<sup>289</sup>

(589) [...] *tû'ũ̄ ā'a gá ñâ'ũ̄*: “*Kū-chò'p̄e'e mā nû-î kùmà!*” *ñâ'ũ̄* [...]

*tû'ũ̄ = ā'a = gá*      *ñâ'ũ̄*      [*kū = chò-'p̄e'e*  
3S-ACC = QUOT = PST    **do.thus.3M/N/NS.SBJ.SBJV-SUB**    2SG.SBJ = 1SG-equal

*mā = nû = î*      *kù-mà]*      *ñâ'ũ̄*  
PRF = 3M/N/NS.SBJ.PCì = be    2SG-ANAPH    **do.thus.3M/N/NS.SBJ.SBJV-SUB**

‘[...] he said to him: “You are equal to me now!” he said [...]’ [JSG B135–136]

Conversely, the arguments of the deictic verb normally follow the latter when it itself follows its target (“TARGET” DEICTIC.VERB (LK = SBJ) (ACC), or “TARGET” DEICTIC.VERB (ACC) (LK = SBJ)).<sup>290</sup> This is illustrated in the following example (see also the end of example (582) above).

(590) “*Tâ'úwá kù-mê'ũ̄ ì kùmà rù ì-ũ̄ núà!*” *ñátàgù'ũ̄ ā'a tûmààrũ̄ nuera'ũ̄*.

[*tâ'ú-wá*      *kù = mê-'ũ̄*      *ì = kù-mà*      *rù*  
be.absent\SBJV?-ALOC    2SG.SBJ\SBJV = be.good\SBJV-SUB    LK.NS = 2SG-ANAPH    and

*ì = ũ̄*      *nú-à]*      *ñá-tà-gù-'ũ̄ = ā'a*  
PCì = go.SG    PROX.ALLOC-EXO    **do.thus-3S.SBJ\SBJV-do.thus-SUB = QUOT**

*tû-mà-àrũ̄*      *nuera-'ũ̄*  
3S-ANAPH-GEN    daughter.in.law-ACC

“You are useless: go away from here!” she ordered her daughter-in-law.’  
[JSG B264–265]

This strong ordering tendency, combined with the fact that the deictic verb cannot bear indexes for syntactic functions other than subject, regularly leads to the otherwise relatively unusual presence of main constituents bearing case-marking (in this

<sup>289</sup>See example (268), however, for an utterance in which the deictic verb (which precedes its target) is exceptionally separated from it by its subject argument.

<sup>290</sup>Note that the linker regularly introduces such postposed subjects, as they have necessarily already been referred to within the clause through the encoding of the subject argument included in the inflected deictic verb. By contrast, complements in the accusative post-posed to the deictic verb are usually not introduced by the linker, as they are then being referred to for the first time within the clause (they cannot have been already referred to through indexation on the inflected deictic verb, in particular). On the syntactic distribution of the linker, see SECTION 3.5.

case, accusative case-marking) *after* an inflected predicative phrase. In other contexts, when a main nominal constituent occurs after an inflected predicative phrase, dependent-marking on that constituent is typically avoided in favor of other strategies such as head-marking on the inflected predicative phrase (see SECTION 3.6.1).

As was noted above, the deictic verb is by far the most favored device resorted to for introducing direct speech. Semantically more specific utterance verbs rarely fulfill this function by themselves. It is therefore not rare for the deictic verb to **co-occur with a semantically more specific verb in what can be analyzed as a unique case of serial-verb construction** in the language. This construction facilitates the use of semantically specific utterance verbs as (co-)introducers of direct speech. In this construction, two finite predicative phrases featuring the same subject and referring to the same event follow each other with no intonational break. One of the two finite predicative phrases is the deictic verb (always inflected in SBJV/'ú/). It is preceded by its endophoric target (e.g. a complete utterance in direct speech), or occasionally followed by it, in cases where it occurs second of the two finite predicative phrases. The other finite predicative phrase (which is, for its part, freely inflected in any of the three Inflectional Types) refers lexically to a specific type of uttering process ('to say', 'to ask', 'to answer', 'to call', 'to rebuke', etc.). In most cases, the two predicative phrases involved in this construction are arranged in the order just suggested:

[TARGET] DEICTIC.VERB.SBJV-'ú<sub>PP1</sub> SPECIFIC.UTTERING.PROCESS<sub>PP2</sub>

although the opposite ordering also occurs:

SPECIFIC.UTTERING.PROCESS<sub>PP1</sub> DEICTIC.VERB.SBJV-'ú<sub>PP2</sub> [TARGET]

Examples (591) and (592) feature typical instances of this construction. Note that the two finite predicative phrases in the construction under discussion may be separated by enclitics (such as /=ā'a/ 'QUOT', which may occur between all sorts of constituents in the language, and /=gá/ 'PST', which usually behaves as a second-position clitic, in (591)) or by complements of the one that refers to a specific uttering process (such as /tû-'ú/ [3S-ACC] 'him' in (592)).

(591) "Gúüüü!" ñátàgù'ú ā'a gá tû-kà.

[gú] ñá-tà-gù-'ú<sub>PP1</sub> = ā'a = gá                      tû = kà<sub>PP2</sub>  
 hey do.thus-3S.SBJ\SBJV-do.thus-SUB = QUOT = PST    3S.SBJ.PCì = shout

“Heeey!” he shouted [lit. ‘... he said he shouted.’]’ [LAR E172–173]

(592) “*Kú kùʔ nūnà-ǔágú!*” *ñá’ú tú’ú gá nà-mǔ’ú.*

[*kú* = *kù-ʔ*                      *nū* = *nà* = *ǔágú*]  
come.on = 2SG-in.one’s.turn    3M/N/NS.ACC = PCØ.IMP = try

*ñá-’ú*<sub>pp1</sub>                      *tú-’ú* = *gá*    *nà* = *mǔ-’ú*<sub>pp2</sub>  
do.thus.3M/N/NS.SBJ.SBJV-SUB    3S-ACC = PST    3M/N/NS.SBJ\SBJV = send\SBJV-SUB

“Come on, you try it now!” he sent him off [lit. ‘... he said he sent him.’]’  
[JSG B118]

Example (593) displays a variant of this construction in which the finite predicative phrase that refers to a specific uttering process takes an expletive non-salientive comitative complement /*ná-má’a*/ (3N/NS-COM), lit. ‘with it’. This complement is anaphorically coreferential with the target and redundantly refers to the piece of direct speech “with which” (*i.e.* uttering which) the specific uttering process is performed.<sup>291</sup>

(593) “*Yímá yá iyà-iyàaa rù mēà pēnā-tōoo!*” *ñátàgù’ú ā’a gá námá’a tì-k’ǎ’ú.*

[*yí-má*                      *yá* = *iyà.iyà*                      *rù*    *mēà*  
PROX.M-ANAPH    LK.M/S = plantain.variety    and    well

*pē* = *nā* = *tō*]  
2PL.SBJ.SBJV = 3M/N/NS.OBJ = plant\SBJV

*ñá-tà-gù-’ú*<sub>pp1</sub> = *ā’a* = *gá*                      *ná-má’a*  
do.thus-3S.SBJ\SBJV-do.thus-SUB = QUOT = PST    3N/NS-COM

*tì* = *k’ǎ-’ú*<sub>pp2</sub>  
3S.SBJ.PCì\SBJV = shout\SBJV-SUB

“There you have the *iyà-iyà* plantaaain: plant it carefullyyy!” he shouted  
[lit. ‘... he said he shouted with it.’]’ [LAR E178–179]

For what is likely an instance of the construction under discussion displaying the rarer of its two ordering variants mentioned above (with the deictic verb occurring after, instead of before, the predicative phrase referring to a specific uttering process), see example (596) below.

<sup>291</sup>Note that the comitative relational noun /-*má’a*/ is similarly used to mark *e.g.* the name argument of the verb *ū* (PCØ) ‘to call someone or something (Core OBJ) something (COM)’. This morphosyntactic observation regarding a semantically comparable kind of predicative phrase supports the analysis I propose for the complement *námá’a* ‘with it’ optionally occurring in the construction under discussion in the present section.



Of all the **interrogative-indefinite words**, only  $\tilde{n}\tilde{u}'(u)$ , which I gloss as ‘what activity?’, may occupy the syntactic position of target of the deictic verb.  $\acute{A}k\acute{u}$  ‘what?.NS’ and  $\tilde{n}\tilde{u}'\acute{a}k\acute{u}$  ‘how?’, in particular, are not available in this position. Conversely,  $\tilde{n}\tilde{u}'(u)$  may only occur as the target of the deictic verb, for which it serves as a specialized interrogative-indefinite.<sup>292</sup> In practice,  $\tilde{n}\tilde{u}'(u)$  is most of the time realized in its shortened variant  $\tilde{n}\tilde{u}'$ , especially by younger speakers (on this phonologically exceptional form featuring a glottal stop that surfaces in word-final position without being followed by an epenthetic vowel, see SECTION 2.1.3.1). It always immediately precedes the deictic verb. The following example features an instance of  $\tilde{n}\tilde{u}'(u)$  in its interrogative function:

(594) “ $\tilde{N}\tilde{u}'\tilde{u} \tilde{n}\tilde{a}'\tilde{u} \grave{i} k\acute{u}\acute{a}'\tilde{e}, n\acute{a}g\grave{u} k\grave{u}r\tilde{u}-\tilde{i}n\tilde{u}'\tilde{u}?$ ”

$\tilde{n}\tilde{u}'\tilde{u}$                        $\tilde{n}\tilde{a}'\tilde{u}$      $\grave{i} = k\acute{u}\acute{a}'\tilde{e}$                        $n\acute{a}-g\grave{u}$   
 what.activity?    do.thus.3M/N/NS.SBJ.SBJV-SUB    LK.NS = 2SG-mind    3N/NS-PLOC  
 $k\grave{u} = r\tilde{u} = \tilde{i}n\tilde{u}'\tilde{u}$   
 2SG.SBJ\SBJV = PCr $\tilde{u}$  = think\SBJV-REL.NS

“What do you have in mind, what are you thinking about? [lit. ‘What does your mind do like, [what does] what you’re thinking about [do like]?’]”  
 [IGS 227–228]

Although it is undoubtedly derived from the deictic verb, the **invariable vagueness marker**  $\tilde{n}\tilde{a}'\tilde{u}$  ‘about, something like’ is better treated as distinct from it from a strictly synchronic perspective. This marker occurs at the end of an NP whose literal meaning it qualifies as being only an indicative approximation used for establishing a vague referent. In most cases, this NP is a Spanish phrase inserted by code-mixing, as in the following example:

(595)  $N\acute{a}r\tilde{u}-ng\grave{u}g\acute{u}, eh... hasta las cinco de la tarde \tilde{n}\tilde{a}'\tilde{u}.$

$n\acute{a} = r\tilde{u} = ng\grave{u}-g\acute{u}$                       hasta las cinco de la tarde     $\tilde{n}\tilde{a}'\tilde{u}$   
 3M/N/NS.SBJ = PCr $\tilde{u}$  = rest-PL    until.five.p.m.                      something.like

‘[In a typical day, tourists do this and that. Then they come back.] They rest, uh... like until five p.m.’ [JGS 158–159]

<sup>292</sup>Although  $\tilde{n}\tilde{u}'(u)$  is also present etymologically in the synchronically unanalyzable interrogative-indefinite words  $\tilde{n}\tilde{u}'\acute{a}k\acute{u}$  ‘how?’ (etymologically composed of  $\tilde{n}\tilde{u}'(u)$  and /- $\acute{a}k\acute{u}$ / ‘MAN’),  $\tilde{n}\tilde{u}'g\acute{u}$  ‘when?’ (from  $\tilde{n}\tilde{u}'(u)$  and /- $g\acute{u}$ / ‘PLOC’ or /- $'g\acute{u}$ / ‘CIRC’), and  $\tilde{n}\tilde{u}'r\acute{e}$  ‘how much? how many?’ (from  $\tilde{n}\tilde{u}'(u)$  and a bound morpheme \*/- $r\acute{e}$ / ‘amount?’, on which see note 218).

This marker  $\tilde{n}\hat{a}'\tilde{u}$  likely arose through the grammaticalization of the sequence ‘TARGET’ / $\tilde{n}\hat{a}'\tilde{u}$ / (‘‘TARGET’ do.thus.3M/N/NS.SBJ.SBJV-REL.NS’), lit. ‘what they call ‘TARGET’’.

## 6.2 Inflectional morphology

### 6.2.1 Synchronic description

The deictic verb / $\tilde{n}\acute{a}$ -/ $\tilde{n}\hat{a}$ - + -(( $\tilde{r}\ddot{u}$ )gù)/ ‘do thus’ is **inflectionally extremely irregular**. Its complete paradigm is shown in TABLE 48 (contrast it with the inflectional paradigm of regular predicative phrases shown in CHARTS A–M, pp. 449–453).

Two forms, with a syllable in parentheses in TABLE 48, have alternative realizations in apparent free variation: / $\tilde{n}\acute{g}\ddot{i}$ - $\tilde{r}\ddot{u}$ gù/ ~ / $\tilde{n}\acute{g}\ddot{i}$ - $\tilde{r}\ddot{u}$ \tilde{r}\ddot{u}gù/ and / $\tilde{n}\acute{a}$ - $\tilde{t}\grave{a}$ [- $\tilde{u}$ ]/ (rare) ~ / $\tilde{n}\acute{a}$ - $\tilde{t}\grave{a}$ -gù[- $\tilde{u}$ ]/ (frequent). The latter pair of forms are occasionally truncated to their first syllable, yielding  $\tilde{n}\acute{a}$ , as in the following example:

(596) *Chô'ri pāpá Anónimo gá chātá-úq gá ñá: “Kùmà rù tǎ'úwǎ kũ-sirve!” ñátárügù chā'ũ gá tũmà.*

*chô-'rī pāpá* Anónimo = gá *chā = tá = ú-q = gá*  
1SG-GEN dad ANONYMOUS = PST 1SG.ACC = 3S.SBJ = put.SG-mouth = PST

*ñá* *kù-mà = rù* *tǎ'ú-wǎ* *kũ = sirve*  
do.thus.3S.SBJ.SBJV.SUB 2SG-ANAPH = TOP be.absent\SBJV?-ALOC 2SG.SBJ = avail

*ñá-tá-rügù* *chā-'ũ* *gá = tũ-mà*  
do.thus-3S.SBJ-do.thus 1SG-ACC LK.PST = 3S-ANAPH

‘My father Anónimo rebuked me, saying: “You are useless!” he said to me.’  
[ANO1 9–10]

The verb / $\tilde{n}\acute{a}$ -/ $\tilde{n}\hat{a}$ - + -(( $\tilde{r}\ddot{u}$ )gù)/ ‘do thus’ only rarely occurs in IND and IMP in my data. The **vast majority of its occurrences in my corpus are in SBJV/- $\tilde{u}$ '/**, presumably because it is mostly found in narratives with the typical sequencing (i.e. [+ANT]) effect of SBJV/- $\tilde{u}$ '/ (see SECTION 5.2.2). Occurrences of / $\tilde{n}\acute{a}$ -/ $\tilde{n}\hat{a}$ - + -(( $\tilde{r}\ddot{u}$ )gù)/ in bare SBJV are rare, and all of them co-occur with a relativizer or the clause-level inflectional morpheme /- $\tilde{g}\ddot{u}$ '/ ‘CIRC’. This is why SBJV/- $\tilde{u}$ '/ forms (with /- $\tilde{u}$ '/ ‘SUB’ set apart in square brackets) are reported in TABLE 48 instead of bare SBJV forms. There is no reason to believe, however, that standalone bare SBJV

	IND	IMP	SBJV [/'ú/]
1SG.SBJ	ñá-chā-rügù		ñá-chà[-'ú]
2SG.SBJ	ñá-kū-rügù	ñá	ñá-kù[-'ú]
1PL.SBJ	ñá-tā-rügù		ñá-tā-gù[-'ú]
2PL.SBJ	ñá-pē-rügù		ñá-pē-gù[-'ú]
3M/N/NS.SBJ	ñâ-ná-rügù		ñâ[-'ú]
3F.SBJ	ngí-(rū)rügù		ngí[-'ú]
3S.SBJ	ñá-tá-rügù		ñá-tà(-gù)[- 'ú]
4SBJ	ñá-tá-rügù		ñá-gù[-'ú]

TABLE 48. *Inflectional paradigm of the verb /ñá-/ñâ- + -((rū)gù)/ 'do thus'*

forms of /ñá-/ñâ- + -((rū)gù)/ do not exist, but such forms would naturally only occur in the comparably rare main-clause contexts where bare SBJV is grammatically required (see SECTION 5.2.5). Such standalone forms could of course turn out to be slightly different from the ones tentatively suggested in TABLE 48 by the bracketing out of /-'ú/ 'SUB' from the SBJV[-'ú/ forms.

Especially noteworthy is the fact that the subject indexes of the verb /ñá-/ñâ- + -((rū)gù)/ 'do thus', when present, are for the most part **encoded by means of suffixes** (/chā/ '1SG.SBJ', /kū/ '2SG.SBJ', etc., which *follow* the stressed syllable of the phonological word they belong to) **instead of the functionally equivalent proclitics** featured by the inflectional paradigm of regular predicative phrases (/chā = / '1SG.SBJ', /kū = / '2SG.SBJ', etc., which *precede* the stressed syllable of the phonological word they belong to). Two inflectional forms of /ñá-/ñâ- + -((rū)gù)/ 'do thus' are even more exceptional: in /ngí-(rū)rügù/ 'she does thus' (IND) and /ngí[-'ú]/ '(that) she does thus' (SBJV[-'ú/]), the exponent of the third person feminine subject index, /ngí-/ , is identical to the Allomorph 1 of the (stressed) pronominal root /ngí-/ '3F' (on the morphology of the pronominal roots, see SECTION 3.3.1). Nowhere else in the inflectional paradigms of SMAT predicative phrases is the exponent of a subject index a stressed syllable, nor more specifically a personal root.<sup>293</sup>

Moreover, unlike regular predicative phrases, the deictic verb does not allow for

<sup>293</sup>These two highly unexpected forms are unfortunately hard to interpret from a diachronic perspective. They could be analyzed as either inflectional fossils or late innovations.

the indexation of arguments with any syntactic functions other than subject. It **cannot receive the proclitics indexing arguments in accusative**, in particular (on these morphemes, see SECTION 5.7), although its valency does provide a position for a syntactically explicit complement in accusative (see SECTION 6.1).

Another noteworthy morphological peculiarity of the verb /*ñǎ-/ñâ- + -((rū)gù)*/ ‘do thus’, as discussed at the beginning of SECTION 6, is that it is best treated, from a synchronic perspective, as a **unique case of bipartite morpheme**. This results from the fact that its two separable morphological components, /*ñǎ-/ñâ-/* on the one hand and /*-((rū)gù)*/ on the other—the latter being absent from certain inflectional forms—cannot be attributed separate functional contributions in today’s SMAT and must consequently be considered to constitute a single functional unit. SMAT does not feature any other such bipartite morphemes.

Because the inflectional paradigm of /*ñǎ-/ñâ- + -((rū)gù)*/ ‘do thus’ is formally so different from that of regular predicative phrases (and, among them, regular verbs), the deictic “verb” **could in strict logic be treated and labelled as a separate part of speech of its own**, rather than as a verb. Note, however, that it inflects for the exact same categories as a regular predicative phrase (for Inflectional Type in particular), and that it may receive at least a few derivational suffixes of the (regular) predicative phrase (see SECTION 6.3). I call /*ñǎ-/ñâ- + -((rū)gù)*/ ‘do thus’ a “verb”, in the broad sense, insofar as only verbs, among the regular predicative phrases with which it patterns, similarly consist in a functionally unanalyzable lexical form.

The manner deictic word *ñââkù* ‘in this manner’, which occurs with both endophoric and exophoric uses (on these notions, see SECTION 6.1), is very likely to have resulted historically from the combination of a bare SBJV form \**ñâ* ‘do.thus. 3M/N/NS.SBJ.SBJV’ and the clause-level inflectional morpheme /*-âkù*/ ‘MAN’, with the literal meaning ‘in the manner of him/her/it doing like this’. Note however that *ñââkù* has become **unanalyzable and invariable in today’s SMAT**, as shown in example (597).<sup>294</sup> In this example, a form like ?/*ñǎ-châ-âkù*/ (‘do.thus-1SG.SBJ\SBJV-MAN’) lit. ‘in the manner of **me** doing like this’ would have been expected otherwise, given that the subject of the main verb is a first person singular:

<sup>294</sup>This comment also applies to *ñââkù* in its frequent occurrences in association with the interrogative word *ñù’(u)* ‘what activity?’ yielding the invariable phrase *ñù’(u) ñââkù* ‘in what manner? how?’ (on the interrogative word *ñù’(u)*, see end of SECTION 6.1).

(597) *Ñâàkù ìkú ná-má'a chí-dé'àchìgù'ú.*

*ñâàkù ìkú ná-má'a chí=dé'à-chìgù-'ú*  
 in.this.manner I.mean 3N/NS-COM 1SG.SBJ.PCÌ.SBJV =speak-DISTR.SG\SBJV-SUB

‘[After several utterances in direct speech:] So I talked to them along the way like that.’ [JGS 417]

*Ñâàkù* ‘in this manner’ can thus be shown not to relate to the inflectional paradigm of the verb /ñǎ-/ñâ- + -((rũ)gù)/ ‘do thus’ from a strictly synchronic perspective.

## 6.2.2 Diachronic comments

The first component of the verb /ñǎ-/ñâ- + -((rũ)gù)/ ‘do thus’ is **likely cognate with the feminine and non-salientive allomorphs /ñá-/ and /ñǎ-/ of the proximal non-locative demonstrative root** (on the demonstrative roots, see SECTION 3.4). I am aware of no language-internal evidence in support of this hypothesis, however.

One may only speculate about the origins of the second component, /-((rũ)gù)/. Its syllable /rũ/ could be somehow related to the homophonous PCrũ marker /rũ = /. It would then be unclear, however, why this /rũ/ should be lost in the SBJV forms of the deictic verb, while the PCrũ marker is maintained in the SBJV forms of regular PCrũ predicative phrases. On the other hand, the distribution of the syllable /gù/ in the SBJV inflectional paradigm of /ñǎ-/ñâ- + -((rũ)gù)/ ‘do thus’ suggests that it is somehow related to the plural suffix /-gù/: this syllable /gù/ only occurs with first person plural, second person plural, and fourth person (typically plural) subjects (but also optionally with a third person Salientive subject, whether with a singular or a plural referent, which suggests that this rough singular vs plural distribution could be misleading). It would then be unclear, however, why this /gù/ should display a different toneme from /-gù/ ‘PL’, and, more importantly, why it should be obligatory with non-plural subject indexes in IND. To further complicate matters, note that in IND the reverse syllabic order /-gũrù/ (instead of SMAT /-rũgù/)—with an identical tonological sequence, however—is widely attested in other Tikuna varieties, such as Cushillococha Tikuna (see e.g. Anderson 1962:51). Some varieties, such as the one spoken by Ngematücü aka Pedro Inácio Pinheiro (as attested in Pinheiro et al. 2014),<sup>295</sup> might even have generalized the order /-gũrù/ to the whole

<sup>295</sup>Ngematücü’s speech can be roughly identified with the Tikuna variety of the Brazilian commu-

inflectional paradigm of the deictic verb in IND. This observation rises the delicate question of which of the two forms /-rūgù/ and /-gūrù/ is more conservative and would consequently allow for better-grounded diachronic analyses.

It is unfortunate that the origins of the inflectional paradigm of the irregular verb /ñá-/ñâ- + -((rū)gù)/ ‘do thus’ remain obscure (at least for the time being), especially as they could shed light on the formation of the regular inflectional paradigm of the SMAT predicative phrase.

### 6.3 Derivational morphology

The deictic verb /ñá-/ñâ- + -((rū)gù)/ ‘do thus’ only marginally occurs in my data with derivational morphology of the predicative phrase (on which see SECTION 4.4). The fact that it occasionally does is noteworthy, however, as it shows that the deictic verb does in some regards behave morphologically like regular predicative phrases (see SECTION 6.2.1 for a discussion of this observation).

The deictic verb is in practice only attested in my data with the derivational suffixes of the predicative phrase /-V̂'ũ̂/ ‘at.intervals’ (on which see SECTION 4.4.2.3), as in example (598), /-ètānũ̂/ ‘DISTR.PL’ (SECTION 4.4.2.4), as in (599), and, much more frequently, /-gũ̂/ ‘PL’ (SECTION 4.4.4), as in (600). Note that while the effects of the morphotonological alternations triggered by inflection in SBJV on the root of the deictic verb itself are largely irregular, their effects on these derivational suffixes when they are attached to the deictic verb are, for their part, regular (on these morphotonological alternations, see SECTION 2.6.2.1).

(598) “Pà bĩ, nũwǎ t̃jákú chí nũ-ĩ?” ñâá'ũ̂'ũ̂ ã'a.

*pà = bĩ*                      *nũwǎ*                      *t̃jákú = chí*                      *nũ = ĩ̂*  
 VOC = mother~VOC    well.M/N/NS    what?.NS = IRR    3M/N/NS.SBJ.PCì = be

*ñâ-á'ũ̂-ũ̂ = ã'a*  
 do.thus-at.intervals\SBJV-SUB = QUOT

“‘Mother, what could they be?’ he’d ask over and over again.’ [LAR T77]

(599) “[...] t̃au mā tōmà pētā-tà'kú!” ñâtàgùètānũ̂'ũ̂ ã'a.

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nity of Vendaval (3.71° S, 69.45° W) and its surroundings, where he lived most of his life (Pinheiro et al. 2014).

*tāu* = *mā*      *tō-mà*      *pē = tā = tà'kú*  
 NEG = precisely    1PL-ANAPH    2PL.ACC = 1PL.SBJ = be.an.orphan

*ñá-tà-gù-ètānū-’ú* = *ā’a*  
 do.thus-3S.SBJ\SBJV-do.thus-DISTR.PL\SBJV-SUB = QUOT

“[...] we didn’t orphan you!” they would answer [group after group].’ [LAR T159]

(600) “*Kú tōwé rū-ú!*” *ñátàgùgú’ú ā’a*.

*kú* = *tō-wé*                      *rū = ú*  
 come.on = 1PL-following    PCrū = go.SG

*ñá-tà-gù-gú-’ú* = *ā’a*  
 do.thus-3S.SBJ\SBJV-do.thus-PL\SBJV-SUB = QUOT

“Come on, come with us!” they said.’ [LAR E133]

# Chapter 7

## Negation

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### 7.1 Overview

This chapter deals with the **morphemes and constructions that are resorted to for setting a clause’s polarity to negative**. The major functions related to negative polarity and the morphosyntactic strategies applied to execute them are briefly summarized in TABLE 49. These aspects, and a few more, are discussed in detail in the next sections (the corresponding sections are referred to by numbers in parentheses in TABLE 49). For a typological discussion of most of the functions identified in TABLE 49, see van der Auwera & Krasnoukhova (2020). The structure of this entire chapter is inspired by Miestamo (2017) and van der Auwera &



Functions	Strategies	Examples of resulting meanings
Standard negation (also ascriptive and non-topical locational negation) (7.2.1)	adjunction of <i>tāu</i> 'NEG' to the corresponding positive clause	'I <u>don't see</u> him.' ' <u>Don't you like</u> it?' 'I know that he <u>isn't tall</u> .' 'He <u>is not</u> a teacher.' 'He <u>is not in Bogotá</u> yet.'
Existential/topical-locational negation (7.2.2)	existential or topical-locational predicative phrase replaced by verb <i>tā'u</i> 'be absent'	'Humans <u>did not exist</u> back then.' 'There <u>is no</u> church in this village.' 'Orlando <u>is absent</u> today.' 'I <u>have no</u> money [lit. 'There <u>is no</u> money to me.'].'
Privative negation (7.2.3)	possessive predicative phrase replaced by a predicative phrase containing the verb root / <i>gẽ-</i> / 'not have'	'I <u>don't have</u> a canoe.' 'I <u>have no</u> money.'
Negative existential indefinites (7.3)	positive existential indefinite replaced by a subject participant relativization of the verb <i>tā'u</i> 'be absent'	' <u>Nobody</u> knows.' 'I <u>can't do</u> that [lit. ' <u>No way</u> I do that.].'
Emphasizing negation (7.5)	adjunction of / = <i>mā</i> / 'precisely' to the negative word; focalization of the negative word	'I've <u>never (ever)</u> done that.' 'I'm <u>not</u> afraid of you.'
Pro-sentential negation (7.6)	ellipsis of all constituents but the negative word (and its clitics) from the corresponding negative clause	' <u>No</u> .' 'Orlando has been to Bogotá last year, but I <u>never have</u> .'
Negative imperative (7.7)	focalization of the negative word (and adjunction of / = <i>tā</i> / 'PROH')	' <u>Don't do</u> that!' ' <u>Don't tell</u> anyone!'

TABLE 49. Summary of the major functions related to negative polarity with their corresponding morphosyntactic strategies

Krasnoukhova (2020)’s typological classifications.

## 7.2 Clausal negation

### 7.2.1 Standard negation

So-called “standard negation” is a convenient typological concept ordinarily defined as “the negation of declarative main clauses with a verbal predicate, more precisely for the pragmatically neutral and productive strategies that languages use for this function” (Miestamo 2017:408). In SMAT, standard negation is typically achieved by the **mere addition of the independent**<sup>296</sup> **negative particle** *tâu* ‘NEG’ (or its rarer denasalized variant *tâu*—see (601), (606), and (609)—or exceptional conservative variant *tâu’û*—see note 298 below) **right after the position where the subject NP would regularly occur in the corresponding positive clause** (in cases where the subject NP precedes, rather than follows, the inflected predicative phrase), as shown in (601).<sup>297</sup>

In a majority of cases, because the subject NP is not explicitly mentioned within the clause, as in examples (602) and (603), or because it is post-posed to the inflected predicative phrase, as in (604), the position of *tâu* ‘NEG’ corresponds in practice to the beginning of the clause (note, however, that *mārû* ‘PRF’ may precede *tâu* ‘NEG’; see SECTION 7.4 below).

(601) *Nûmà gá tâu m̄ nà-nù’û* [...].

*nû-mà = gá     tâu = m̄     nà = nù-’û*  
3M-ANAPH = PST   NEG = precisely   3M/N/NS.SBJ\SBJV = get.mad\SBJV-SUB

‘He didn’t get mad [...].’ [AMB 31]

<sup>296</sup>One piece of evidence for *tâu* ‘NEG’ being a phonologically independent word rather than a clitic—while it is not usually stressed in spontaneous speech—is that it may host enclitics, as in examples (604), (606), and (609).

<sup>297</sup>*Tâu* ‘NEG’ may occasionally precede the subject NP, probably for reasons of scope of negation, as in the following example:

- (i) “[...] *ērû tâu m̄ tōmà pētā-tà’kú!*”  
*ērû     tâu = m̄     tō-mà     pē = tā = tà’kú*  
because NEG = precisely 1PL-ANAPH 2PL.ACC = 1PL.SBJ = be.an.orphan  
“[...] because we didn’t orphan you!” [LAR T159]

(602) [...] *ērú chàwú rù tǎu gē'tǎ mārē nárū-gò.*

*ērú chàwú = rù tǎu gē'tǎ = mārē ná = rū = gò*  
because corn = TOP NEG where?.ALOC = just 3M/N/NS.SBJ = PCrū = grow

'[...] because corn does not grow just anywhere.' [LAR D261–262]

(603) *Tǎu ngowǎ nā-mé'ěchī'ũ [...].*

*tǎu ngo-wǎ nā = mé-'ěchī-'ũ*  
NEG bite-ALOC 3F.SBJ.SBJV = be.good-genuinely\SBJV-SUB

'It's not very good for eating [...].' [LAR C442]

(604) *Tǎu ā'a ñumárú'ũ tî-i gá nǔ'kúmá gá pǎátá [...].*

*tǎu = ā'a ñumá-rú'ũ tî = i gá = nǔ'kúmá*  
NEG = QUOT present.time-like 3S.SBJ.PCì = be LK.F/M/S/NS.PST = past.time

*gá = pǎ-á-tá*  
LK.F/M/S/NS.PST = be.nubile-REL.S.PL-COLL

'In ancient times girls were not like nowadays [...].' [LAR E244]

*Tǎu* 'NEG', in its function of general marker encoding the negative polarity of a clause without affecting in any way its morphosyntactic structure, can be used in a **large variety of contexts**. In particular, *tǎu* 'NEG' occurs:

- with most types of predicative phrases, whether verbal (as in examples (601–604) and (608–609)) or non-verbal (as in (605–607));
- in both main clauses (as in (601), (603–606), and (609)) and subordinate clauses (as in (607–608));
- with both the Indicative Inflectional Type (as in (602) and (604–606)) and the Subjunctive (and Subjunctive + /-'ũ/'SUB') Inflectional Type (as in (601), (603), and (607–610));
- and in declarative utterances (as in (601) and (603–606)), interrogative utterances (as in (609)), and exclamative utterances (as in (606)).

(605) *Chòmà ìkú tǎu chā-nâ'wqē ērú ná-mũ'chǐng'a'ũchì.*

*chò-mà ìkú tǎu chā = nâ-'wqē*  
1SG-ANAPHI.mean NEG 1SG.SBJ = 3N/NS-APPREC because

*ērú ná = mũ-'chǐng'a-'ũchì*  
3M/N/NS.SBJ = be.several-bone-genuinely





‘He’s dead now so he’s no longer living [lit. ‘... so he doesn’t exist.’]’ [GRA 91]

Existential negation is **occasionally used to express privative negation**; *tǎ’u* could then be glossed as ‘to lack’ (but see SECTION 7.2.3 below on a more common way to express privative negation). The referent whose being possessed is negated then appears as a subject argument, and the one whose being a possessor is negated is encoded as an oblique argument in the benefactive(-malefactive) case (as in example (612)) or the genitive case (as in (613)) although the latter may also be omitted altogether and left to be understood from the context (as in (614)):

(612) [...] *ngēmà <tǎu núà t... > tǒ-tǎ’ú’ú* [...].

*ngē-mà*                      <*tǎu* *nú-à*                      *t...*>    *tǒ = tǎ’ú-’ú*  
MED.NS-ANAPH    NEG                      PROX.ALOC-EXO                      1PL.BEN = be.absent\SBJV-REL.NS

‘[...] what here we don’t... we don’t have [...].’ [JSG B503]

(613) [...] *tǔmà-àrǔ ropà rǔ ná-tǎ’u gá ná’a ǐtǎ-ǔ’ú, tá-ǔ’chǐrǔ!*

*tǔ-mà-àrǔ*                      *ropà = rǔ*                      *ná = tǎ’u*                      *gá = ná’a*  
3S-ANAPH-GEN    clothes = TOP    3M/N/NS.SBJ = be.absent    LK.F/M/NS.PST = CONJ  
*ǐ = tǎ = ǔ-’ú*                      *tá = ǔ-’chǐrǔ*  
3ALOC = 3S.SBJ\SBJV = reach-SUB    3S.SBJ = not.have-clothes

‘[...] she had no clothes when she came back, she had no clothes on!’ [IGS 109–110]

(614) [...] *ērǔ ná-tǎ’u gá dǐērǔ, ñyáchǐ gá ná-tǎ’u gá colegio gá Puerto Nariñowǎ.*

*ērǔ*                      *ná = tǎ’u*                      *gá = dǐērǔ*                      *ñyáchǐ = gá*  
because    3M/N/NS.SBJ = be.absent    LK.F/M/S/NS.PST = money    and = PST  
*ná = tǎ’u*                      *gá = colegio*  
3M/N/NS.SBJ = be.absent    LK.F/M/S/NS.PST = school  
*gá = Puerto Nariño-wǎ*  
LK.F/M/S/NS.PST = Puerto.Nariño-ALOC

‘[From then on I wasn’t able to attend another school further away] because we had no money [lit. ‘... there was no money’], and there was no [high] school in Puerto Nariño.’ [ANO2 3’51”–3’57”]

*Tǎ’u* ‘be absent’ is also used as the regular way to negate a clause that involves **topical-locational predication**. Thus, a clause that includes, in its positive polarity, a locational predicative word not built on the punctual locative relational

noun /-gũ/ ‘PLOC’ (e.g. *Ná-ngě'má ì yôî*. ‘There’s boas [there].’) can normally not be negated by means of *tâu* ‘NEG’ (e.g. *ʔTâu ná-ngě'má ì yôî*. ‘There isn’t boas [there].’). ***Tâ'u* ‘be absent’ is used instead** (e.g. *Ná-tâ'u ì yôî*. ‘There isn’t boas [there].’). The topical location may be explicitly mentioned in the clause expressing negative topical-location (as in example (615)) or not be explicitly mentioned (as in (616)). Note that by contrast to topical-locational predication, non-topical locational predication is regularly negated with *tâu* ‘NEG’, as in (606) above.

(615) *Tû'ũ ïtáyà-dăugû rù <tá-...> tá-tâ'u: m̄ā tî-ũ.*

*tû-ũ*    *ĩ=tá=yà=dău-gû*    *rù*    *<tá-...>*    *tá=tâ'u*  
 3S-ACC    3ALOC=3S.SBJ=AM=see-PL    and    3S.SBJ=    3S.SBJ=be.absent

*m̄ā=tî=ũ*  
 PRF=3S.SBJ.PCĪ=go.SG

‘They went to see her but she wasn’t there [*i.e.* at home]: she had left.’ [IGS 259–260]

(616) [...] *ná-tâ'u gá quinto gá Caña Bravawá* [...].

*ná=tâ'u*    *gá=quinto*    *gá=Caña Brava-wá*  
 3M/N/NS.SBJ=be.absent    LK.PST=fifth.grade    LK.PST=Caña.Brava-ALOC

‘[...] there was no fifth grade in Caña Brava [...].’ [JGS 665–667]

Note that in practice the semantic distinction between existential predication (‘something is existing’) and topical-locational predication (‘there is something [somewhere]’) is hazy in the positive polarity. It is therefore not surprising that such a distinction should be neutralized in the negative polarity.

### 7.2.3 Privative negation

Another context in which the mere adjunction of *tâu* ‘NEG’ is not normally available as a strategy to convert a positive clause into its corresponding negative clause is when **possessive predication** is involved (on positive possessive predication, see SECTIONS 4.2.5.3 and 4.3.3.6). In other words, a clause that predicates possession by means of the possessive predicative suffix /-ã/ and/or the possessive verb *ã* ‘to have’ in its positive polarity (e.g. /chā=âirú-ã/ ‘I have a dog’ or /chā=ã-pátā/ ‘I have a house’) can normally not be negated by means of *tâu* ‘NEG’ (e.g. *ʔ/tâu chā=âirú-ã/* ‘I don’t have a dog’ or *ʔ/tâu chā=ã-pátā/* ‘I don’t have a house’). A **dedicated privative (*i.e.* negative possessive) verb root /gẽ-/ ‘not have’**

is regularly used instead and no other marker of negation appears in the clause (e.g. /chā = ǵě-àrū àirú-ǵ/ ‘I don’t have a dog’ or /chā = ǵě-pátā/ ‘I don’t have a house’).<sup>298</sup>

As is regularly the case when incorporation of a nominal constituent into the predicative phrase occurs (on incorporation, see SECTION 4.2.5), if the referent whose being possessed is negated is referred to with a bound noun, then the privative predicative word takes on the form /ǵě-/BOUND.NOUN (not.have-BOUND.NOUN), as in examples (617–618). By contrast, if that referent is referred to with a full NP (and with an independent noun in particular), then the privative predicative phrase takes on the structure /ǵě-àrū NP-ǵ/ (not.have-GEN NP-POSS), as in (619).

(617) *Wí’ákánà ā’a gá tá-ǵěwēmùē-’úchì* [...].

*wí’á-kánà = ā’a = gá tá = ǵě-wēmù-ē-’úchì*  
INDF-time = QUOT = PST 3S.SBJ = not.have-food-INTR.PL-genuinely

‘Once upon a time—it is said—[people] had no food left at all [...].’ [LAR D108–109]

(618) “*Nǎ kùmà ì tōkù-ǵěnáttù-’ú* [...].?”

*nǎ kù-mà ì = tō = kù = ǵě-náttù-’ú*  
ASSERT 2SG-ANAPH LK.NS = 1PL.ACC = 2SG.SBJ\SBJV = not.have-father\SBJV-SUB

“‘So, is it you who robbed us of our father [lit. ‘... who father-unhad us?’] [...].?” [LAR C404]

<sup>298</sup>In the following example, however, privative negation is unexpectedly expressed through the combination of *tǎu* ‘NEG’ (in this particular case, its conservative variant *tǎu’ú*) and *ā* ‘have’, instead of /ǵě-/:

- (i) *Ngēmàkq nū-ì ì chòmà nágù chàrū-ìnù-’ú ná’a tǎu’ú tàā chà-āmá’ú.*  
*ngē-mà-kq nū = ì ì = chò-mà*  
MED.NS-ANAPH-CAUSE3M/N/NS.SBJ.PCì = be LK.NS = 1SG-ANAPH 3N/NS-PLOC
- ná-gù chà = rū = ìnù-’ú ná’a*  
1SG.SBJ\SBJV = PCrū = hear\SBJV-SUB CONJ NEG = itself
- tǎu’ú = tàā chà = ā-má-’ú*  
1SG.SBJ\SBJV = have-wife\SBJV-SUB
- ‘That’s why I’m planning not to have a wife yet.’ [JGS 619–620]

This might be due to the fact that *ā* ‘have’ here is not strictly speaking a stative, privative process, but involves dynamicity and control of the subject argument (and could in fact be glossed as ‘take (a wife)’).





<i>tǎ'ú-ǔ̃</i>	be.absent\SBJV-REL.NS
<i>tǎ'ú-'è</i>	be.absent\SBJV-REL.S
<i>tǎ'ú-kū̄</i>	be.absent\SBJV-REL.F
<i>tǎ'ú-kū̄</i>	be.absent\SBJV-REL.M
<i>tǎ'ú-nè</i>	be.absent\SBJV-REL.N

**TABLE 50.** *Negative existential indefinites formed as regular subject participant relativizations including the verb root tǎ'u 'be absent'*

TABLE 50 (but see *e.g.* in example (641) below the form /tǎ'-úchī-'ǔ̃/ 'be.absent-genuinely\SBJV-REL.NS' meaning 'nothing at all'; this form shows that the verb *tǎ'u* 'be absent' may receive its own morphology (in this case, the intensifier suffix /-'ǔ̃chì/ 'genuinely') to productively contribute more complex forms of negative existential indefinites).

The following examples illustrate typical uses of these negative existential indefinites:

(620) “*Tǎ'ú'ǔ̃ tá kúmá'a chā-ǔ̃ [...]*!”

*tǎ'ú-'ǔ̃* = *tá*                                      *kú-má'a chā* = *ǔ̃*  
 be.absent\SBJV-REL.NS = FUT    2SG-COM    1SG.SBJ = make

“I’m not going to hurt you [lit. ‘I won’t do anything with you ...’] [...]!”  
 [JSG B57]

(621) *Tǎ'ú'è-má'a nū̄nī-ū̄.*

*tǎ'ú-'è-má'a*                                      *nū̄ = nī = ū̄*  
 be.absent\SBJV-REL.S-COM    3M/N/NS.ACC = 3M/N/NS.SBJ.PCI = say

‘He didn’t tell anyone about it.’ [AMB 152]

(622) “*Nǎ gē'kū̄ í téré?*” *Tá'a yě'à ná-dǎu: tǎ'úkū̄<sup>302</sup> ā'a!*

<sup>302</sup>The speaker JSG does not make a clear distinction between the feminine relativizer /-kū̄/ and the masculine relativizer /-kū̄/, which are in practice only distinguished by their tonological effects on the predicative phrase are suffixed to (see SECTION 2.6.2.1). His use of /tǎ'ú-kū̄/ here, although due to its phonological shape it would be interpreted by other speakers as referring to a masculine referent, is meant by JSG to refer to a feminine referent (= /tǎ'ú-kū̄/ in other speakers), in this case a *téré* parrot (SMAT *téré*, which typically triggers feminine (F) agreement).

*ná*      *ǵè'-kū*                      *í = téré*                      *tá'a = yě'-à*  
 ASSERT   be.where?-REL.F   LK.F = *téré*.parrot   FRUSTR = DIST.PLOC-EXO

*ná = dǎu*                      *tǎ'ú-kū = ā'a*  
 3M/N/NS.SBJ = see   **be.absent\SBJV-REL.F = QUOT**

“But where is the *téré* parrot?” He gave a look there: nothing [lit. ‘... no feminine-being(.F)!’]! [JSG B217]

Note that although in a majority of cases /*tǎ'ú-ú*/ ‘**be.absent\SBJV-REL.NS**’ and /*tǎ'ú-è*/ ‘**be.absent\SBJV-REL.S**’ are interpreted as meaning respectively ‘**nothing**’ and ‘**nobody**’ (due to the inherent prototypical meanings of the nominal classes non-salientive and salientive), these are **by no means their only possible interpretations**, as both may refer to any kind of entity whose denomination in SMAT may agree with them in nominal class. In the following example, for instance, /*tǎ'ú-è*/ ‘**be.absent\SBJV-REL.S**’ does not mean ‘nobody’, but simply agrees in nominal class with its contextually implied referent, *dīērù* ‘money’, a noun that usually triggers agreement in the salientive (S) nominal class:

(623) *Tǎ'ú'è-má'a* *ítā-quedagú* *gá* *tōmà*.

*tǎ'ú-è-má'a*                      *í = tā = queda-gú*                      *gá = tō-mà*  
**be.absent\SBJV-REL.S-COM**   3ALOC = 1PL.SBJ = result-PL   LK.PST = 1PL-ANAPH

‘We were left with nothing [i.e. ‘... with no money(.S).’].’ [JSG B474]

Note also that these negative existential indefinites, while they often function as **heads** (‘**nothing/nobody**’), as in examples (620–621), may equally well function as **modifiers** (‘**no ...**’), as in (624), or **headless modifiers** (‘**none**’), as in (625), just like any other relativization.

(624) [...] *nî-í* *gá* *tǎ'ú-ú* *tîmàpùtàwǎ* *nà-dǎu-ú* *gá* *náyǎē* *ā'a* *gá*, [...].

*nî.í*      *gá = tǎ'ú-ú*    *tî-mà-pùtà-wǎ*  
 CONJ   LK.F/M/S/NS.PST = **be.absent\SBJV-REL.NS**   3S-ANAPH-tooth-ALOC

*nà = dǎu-ú*    *gá = ná-yǎē = ā'a = gá*  
 3M/N/NS.SBJ\SBJV = see\SBJV-SUB   LK.F/M/S/NS.PST = **3N/NS-hair** = QUOT = PST

‘[...] as he saw no hairs in his teeth, [...].’ [LAR C413]

(625) *Tǎ'únè* *tà* *náwǎ* *chà-ú-ú*.

*tǎ'ú-nè = tà*    *ná-wǎ*                      *chà = ú-ú*  
**be.absent\SBJV-REL.N = ADD**   3N/NS-ALOC   1SG.SBJ\SBJV = go.SG\SBJV-SUB

Form	Morphological gloss	Meaning
<i>tǎ'ú-ũ̃</i>	be.absent\SBJV?-ACC	nothing (in ACC)
<i>tǎ'ú-má'a</i>	be.absent\SBJV?-COM	nothing (in COM)
<i>tǎ'ú-wǎ</i>	be.absent\SBJV?-ALOC	nothing (in ALOC)
<i>tǎ'ú-gù (~tǎgù)</i>	be.absent\SBJV?-PLOC	'never' (~'not')
<i>tǎ'ú-rũ̃</i>	be.absent\SBJV?-PURP	'useless item'
<i>tǎ'ú-àkù</i>	be.absent\SBJV?-MAN	'cannot, may not'
(... ?)		

TABLE 51. *Negative existential indefinites attested in my data that are not formed as participant relativizations*

'None [*i.e.* of the cities(.N) of Colombia] I've been to.' [JSG B580]

A second group of negative existential indefinites exists, which can be interpreted as **partially lexicalized forms replacing *tǎ'ú'ũ̃* in cases where it has a very general meaning 'nothing'**. This group of negative existential indefinites is morphologically built as combinations of /tǎ'ú-/ 'nothing'<sup>303</sup> with a case suffix or a relational noun. The ones attested in my data are listed in TABLE 51 (but note that there is likely to be a few more than these, with other case suffixes or relational nouns).<sup>304</sup>

By contrast to the previously discussed negative existential indefinites, which can function as modifiers or modified heads, these /tǎ'ú/-based negative existential indefinites always constitute entire arguments on their own, *i.e.* **they may not modify, nor be modified by, any other word**. The following example illustrates the ordinary use of one of them, /tǎ'ú-ũ̃/ 'be.absent\SBJV?-ACC':

<sup>303</sup>This morpheme /tǎ'ú-/ 'nothing' probably comes from a former zero-derived nominalization of the verb *tǎ'u* 'be absent'. Note, however, that by this etymological interpretation /tǎ'ú-/s current shape would appear to be tonologically slightly irregular, and one would have expected a form \*/tǎ'u-/ (*i.e.* a form \*[tǎ:³⁴ʔu³...], featuring a tone [³], not [⁴], on its second surface syllable) instead.

<sup>304</sup>Anderson & Anderson (2016:218-219) also register the related forms *tax²u²ma³* 'nothing' (*i.e.* /tǎ'ú = mā/ 'nothing = precisely' in my analysis), *tax²u²cax⁵ma³* 'for nothing' (*i.e.* /tǎ'ú-kǎ = mā/ 'nothing-CAUSE = precisely') and *tax²u²cü²rü²wa¹* 'cannot' (*i.e.* /tǎ'ú-kürúwǎ/ 'nothing-since?') in the Cushillococha Tikuna variety. These, and possibly more, might also exist in the SMAT variety.

(626) [...] *tǎ'ú'ũ tá-fǎ gá tǔmà.*

*tǎ'ú'-ũ*                      *tá = fǎ*                      *gá = tǔ-mà*  
 be.absent\SBJV?-ACC    3S.SBJ = know    LK.PST = 3S-ANAPH

‘[...] he was ignorant [lit. ‘... he knew nothing.’].’ [JSG B84]

As shown in example (626), some of these /tǎ'ú-/ based negative existential indefinites have a regular, compositional meaning (see also e.g. /tǎ'ú-má'a/ ‘be.absent\SBJV?-COM’ meaning ‘with nothing, without anything’, as would be expected). Others, by contrast, have **grammaticalized with less straightforwardly predictable meanings**, as suggested in TABLE 51. Illustrations of the latter cases are provided in (627–629). Note that *tǎ'úgù* (which only seems to mean ‘never’, while the relational noun /-gǔ/ ‘PLOC’ it contains would have lead to predict it to also be able to mean \*‘nowhere’) features, as in (627), a free variant *tǎgù* (probably a phonological reduction from *tǎ'úgù* itself; on the origin of the variant *tǎgù*, see also SECTION 7.5 and note 307 below). Note also that *tǎ'úàkù* ‘cannot, may not’ (lit. ‘no way’) is not only used in the expression of **physical inability**, as in (629), but also **more general impossibility** (see e.g. (T117)).

(627) *Tǎgù nǎ nà-gǔ ì nǎ-ē'ũ ērú ná-mǔ'úchì, tǎ'ú'è tánā-dài.*

*tǎgù = nǎ*                      *nà = gǔ*    *ì = nǎ-ē'ũ*                      *ērú*  
 never = ASSERT    3M/N/NS.SBJ\SBJV = finish\SBJV    LK.NS = 3N/NS-animal    because

*ná = mǔ'-úchì*    *tǎ'ú'-è*  
 3M/N/NS.SBJ = be.several-genuinely    be.absent\SBJV-REL.S

*tá = nā = dài*  
 3S.SBJ = 3M/N/NS.OBJ = kill.PL

‘Game is never exhausted, you know, because there’s a lot, nobody is hunting them.’ [IGS 600]

(628) *Chàu'kǎ rù tǎ'úrú'ũ nǎ-ĩ gá ūgùànè gá nǔ'kú má.*

*chàu-'kǎ = rù*                      *tǎ'ú-rú'ũ*    *nǎ = ĩ*  
 1SG-CAUSE = TOP    be.absent\SBJV?-PURP    3M/N/NS.SBJ.PCì = be

*gá = ūgùànè*                      *gá = nǔ'kú má*  
 LK.F/M/NS.PST = story    LK.F/M/NS.PST = past.time

‘I used to think that tales were useless stuff [lit. ‘For me formerly stories were for nothing.’].’ [GRA 180]

(629) *Ñymá rù mārū tǎ'úàkù chā-ĩnūkà ērú chā-chí'èǎpǔ'ũ.*

*ñumá = rù*      *mārū tā'ú-àkù*      *chā = ññikà ērú*  
 present.time = TOP    PRF    **be.absent\SBJV?-MAN**    1SG.SBJ = play    because  
*chā = chî'è-ǎpji'ù*  
 1SG.SBJ = be.bad-knee

‘Now I can no longer play [soccer] [lit. ‘Now no way I play any longer ...’]  
 because I have a knee injury.’ [IGV 626]

*Tá'úgù* (~*tágù*), rather than meaning ‘never’, occasionally appears to merely function as a **more emphatic alternative for the standard negator *táú* ‘NEG’** (on which see SECTION 7.2.1), as in the following example:

(630) *Tá'úgù chā-chíbù ì chòmà.*

*tá'ú-gù*      *chā = chíbù ì = chò-mà*  
**be.absent\SBJV?-PLOC**    1SG.SBJ = eat    LK.NS = 1SG-ANAPH

‘[He made me drink and now I’m a bit drunk.] I had not eaten.’ [ANO1 181]

If several existential indefinites co-occur within a single clause, then only the first one is negative, while the next ones remain as they would be in the corresponding positive clause. This is illustrated in the following example:

(631) *Tá'úgù mā gè'tá nà-ù'ú [...].*

*tá'ú-gù = mā*      *gè'tá*  
**be.absent\SBJV?-PLOC = precisely**    **where?.ALOC**  
*nà = ù-ù*  
 3M/N/NS.SBJ\SBJV = go.SG\SBJV-SUB

‘He would never go anywhere [...].’ [AMB 39]

In other words and more generally, **negative polarity is only marked once within a given clause, and more specifically on the first available locus**. This rule equally applies across different types of negation strategies in cases where they could in principle co-occur, e.g. when topical-locational negation (on topical-locational negation, see SECTION 7.2.2) and an existential indefinite post-posed to it co-occur within the same clause, as in the following example:

(632) [...] *nà-tá'ú'ú gá ákú [...].*

*nà = tá'ú-ù*      *gá = ákú*  
**3M/N/NS.SBJ\SBJV = be.absent\SBJV-SUB**    **LK.F/M/S/NS.PST = what?.NS**

‘[...] there wasn’t anything [in the animal’s mouth] [...].’ [LAR C438]

Two negative words do occasionally co-occur within a single clause, but with the consequence that their **negative values cancel each other**, as in the following example:

(633) [...] *mārū tā’ú’ú chǎ-tǎ’ugú ì ch̀àuchí’úwǎ* [...].

*mārū tā’ú-’ú*                      *chǎ = tǎ’u-gú*  
PRF    be.absent\SBJV-REL.NS    1SG.BEN = be.absent\CIRC-CIRC

*ì = ch̀àu-chí’ú-wǎ*  
LK.NS = 1SG-home-ALOC

‘[...] once nothing will be lacking [lit. ‘... once I’m not lacking anything ...’] in my house [i.e. ‘once my house will be fully equipped’] [...].’ [JGS 575]

## 7.4 Negation and phase aspect

Negative polarity, whether clausal or non-clausal, never has scope over the second position clitic / = *tàā*/ ‘itself’ and the independent particle *mārū* ‘PRF’ (or its proclitic variant /*mā* = /). Thus:

- / = *tàā*/ **co-occurring with negative polarity** within a clause yields the meaning ‘**(not) yet**’ (lit. ‘It is still the case that [CLAUSE.IN.THE.NEGATIVE.POLARITY]’), as shown in examples (634–636);
- *mārū* (or /*mā* = /) **co-occurring with negative polarity** within a clause yields the meaning ‘**(no) longer**’ (lit. ‘It has now become the case that [CLAUSE.IN.THE.NEGATIVE.POLARITY]’), as shown in (637–638).<sup>305</sup>

(634) *Tǎu tàā chānā-ǔgú.*

*tǎu = tàā*    *chā = nā = ǔgú*  
NEG = **itself**    1SG.SBJ = 3M/N/NS.OBJ = start

‘I haven’t started yet [lit. ‘I still haven’t started.’].’ [IGV 592]

(635) *Tāmā, chā-ǔgǔmq tàā.*

<sup>305</sup>Compare the parallel combinations with negative polarity of e.g. Japanese *ma<sup>t</sup>da* ‘still’ and *mo<sup>o</sup>* ‘PRF’, or Central Thai *ǎj jāŋ* ‘still’ and *ǎw léw* ‘PRF’.

*tāmā*            *chā = ġē-’mā = tàā*  
 NEG.precisely 1SG.SBJ = not.have-wife = itself

‘[Are you married?]-No, I’m not married yet [lit. ‘No, I still don’t have a wife.’].’ [JGS 564–565]

(636) [...] *yêrú dùq̄ rù tá-tá’u tàā*.

*yêrú*            *dùq̄ = rù*            *tá = tá’u = tàā*  
 because.PST human = TOP 3S.SBJ = be.absent = itself

‘[...] because there were no [White] people yet [lit. ‘... because people still didn’t exist.’].’ [IGS 617]

(637) [...] *mārū gá t̄au chà-ġú’chà’ú’ú* [...].

*mārū = gá t̄au*    *chà = ġú-’chà’ú’ú*  
 PRF = PST    NEG 1SG.SBJ\SBJV = learn-VOL\SBJV-SUB

‘[...] I no longer wanted to study [...] [lit. ‘... I now didn’t want to study ...’].’ [JGS 718]

(638) [*Nî-î*] *gá t̄a’úgù mārū nà-ġūnàġú’ú ā’a gá*, [...].

[*nî.î*] = *gá t̄a’ú-gù*                            *mārū*  
 CONJ = PST    be.absent\SBJV?-PLOC    PRF

*nà = ġū-nàġú-’ú = ā’a = gá*  
 3M/N/NS.SBJ\SBJV = reach-on\SBJV-SUB = QUOT = PST

‘As he [could] no longer stand up [lit. ‘As he now never stood up, ...’], [...].’ [LAR T68]

In clauses involving negative polarity, just like in positive clauses, *mārū* ‘PRF’ can appear in different positions. When it comes before the inflected predicative phrase, it often immediately precedes *t̄au* ‘NEG’, as in (637), or the negative indefinite words; but it may also immediately follow them, as in (638). It may as well immediately follow the inflected predicative phrase, as in the following example:

(639) [...] *t̄au ā’a nà-ġūnàġú’ú mārū gá mō’ú’ākù chīgù*.

*t̄au = ā’a*    *nà = ġū-nàġú-’ú*                            *mārū*  
 NEG = QUOT    3M/N/NS.SBJ\SBJV = reach-on\SBJV-SUB    PRF

*gá = mō’ú-’ākù = chīgù*  
 LK.F/M/S/NS.PST = following.day-APPROX = DISTR.SG

‘[...] in the days that followed he was no longer [able to] stand up.’ [LAR T53]



## 7.5 Emphasizing negation

Negation of any kind<sup>306</sup> may occasionally be reinforced by the adjunction of the enclitic / = *mā*/ ‘precisely’ to the negative word, as illustrated in examples (640–641) (see also (644) below). Note that the combination of *tāu* ‘NEG’ and / = *mā*/, besides the expected output /*tāu* = *mā*/, as in example (601) and note 297, alternatively features a phonologically irregular variant *tāmā*, as in (635) above.<sup>307</sup>

(640) *Tā’úgù mā tūwǎ gá í’wǎ tà-gù’ú* [...].

*tā’ú-gù* = *mā*                                      *tūwǎ* = *gá*    *í’-wǎ*  
be.absent\SBJV?-PLOC = precisely    well.S = PST    building-ALOC

*tà* = *gù-’ú*  
3S.SBJ\SBJV = reach\SBJV-SUB

‘So she never went all the way home [...].’ [LAR T37]

(641) [...] *tā’úchī’ú mā nà-fgǔ’ú* ì español.

*tā’-úchī-’ú* = *mā*  
be.absent-genuinely\SBJV-REL.NS = precisely

*nà* = *fg-ǔ-’ú*                                      ì = español  
3M/N/NS.SBJ\SBJV = know-PL\SBJV-SUB    LK.NS = Spanish

‘[...] they knew no Spanish at all.’ [JGS 327]

The **emphasis triggered by / = *mā*/ ‘precisely’ is weak**, however. It is in fact often barely perceptible, and is typically not reflected in my consultants’ free translations of SMAT utterances into Spanish. In some speakers (e.g. AMB), the co-occurrence of / = *mā*/ with negative polarity is so common that it no longer seems to convey any kind of emphasis, as in example (601) above. This might be a result of the influence of other Tikuna varieties on the speech of these speakers over the course of their personal life trajectory. In the Cushillococha Tikuna variety described by D. and L. Anderson (1962, 2016), for instance, / = *mā*/ appears to have

<sup>306</sup>I have no attestation of / = *mā*/ ‘precisely’ being used to reinforce /*gê*-/ ‘not have’ in SMAT, however.

<sup>307</sup>*Tāmā* may have arisen as a phonological reduction of the combination /*tāu* = *mā*/ itself. It may alternatively have resulted from the phonological reduction of a former \*/*tā’ú* = *mā*/ ‘nothing’ (still attested in Cushillococha Tikuna; cf. Anderson & Anderson 2016:219). This potential evolution \*/*tā’ú* = *mā*/ > *tāmā* would parallel the probable evolution from /*tā’ú-gù*/ ‘never’ (still attested in SMAT) > *tāgù* ‘never’ (see SECTION 7.3 above).







of *tâu* ‘NEG’, as compared to its ordinary clausal use, is likely due to the fact that *tâu* ‘NEG’ is normally left unstressed in the latter use, while it obligatorily bears stress in the former.

In answers to **interro-negative questions** (e.g. ‘Don’t you like it?’), pro-sentential negation is pragmatically used for **confirmation by the speaker of the assumption of the addressee** (‘No, [I don’t like it indeed.]’), as shown in the following example:

(648) [*Tâu tâã k[ĩ]-pà?*]—*Tâu’ũ!*

*tâu* = *tâã*   *k[ĩ]* = *pà*                      *tâu’ũ*  
 NEG = itself   2SG.SBJ.PCĪ = be.tired   NEG

‘[(Denis Bertet:) Aren’t you tired yet?]-No [I’m not]!’ [JSG A403]

## 7.7 Negative imperative

Negation cannot co-occur with a predicative phrase in the Imperative Inflectional Type (on which see SECTION 5.4). The negative imperative construction used to express prohibitives, whether with a singular or a plural second person subject, seems to be **based on the negation focus construction** described in SECTION 7.5 above (FOCALIZED.NEGATIVE.WORD (INFLECTED.COPULA) (LK=)CLAUSE.IN.SBJV-SUB). By contrast to the negation focus construction, however, the prohibitive construction does not seem to ever involve the use of the inflected copula, and it often—although not obligatorily—includes an additional **specialized prohibitive second position enclitic** / = *tā*/ ‘PROH’ (FOCALIZED.NEGATIVE.WORD = PROH (LK=)CLAUSE.IN.SBJV-SUB).<sup>309</sup> My corpus and elicitation notes only contain cases of prohibitives involving the negative word *tâu* ‘NEG’, such as the following:

(649) *Tâu (tā) (ĩ) “nô’ě” ñǎkù’ũ tũ’ũ!*

*tâu*( = *tā*)   (*ĩ* = )*nô’ě*                      *ñǎ-kù-’ũ*                      *tũ-’ũ*  
 NEG = PROH   LK.NS = old.woman   do.thus-2SG.SBJ\SBJV-SUB   3S-ACC

‘Don’t call her “grandma”!’ [EAR elic.]

(650) *Tâu tā ì pē-chókùgũ’ũ!*

<sup>309</sup>According to EAR, using the (optional) linker in the prohibitive construction imparts extra directive strength to the prohibition and may make it sound more threatening.

*t̃áu = t̃ā    ì = pē = chó-kù-gǐ-’ú*  
 NEG = PROH    LK.NS = 2PL.SBJ.SBJV = be.there.PL-in.PL-PL\SBJV-SUB

“Don’t you (pl.) enter!” [IGV 317]

However, it is possible that the prohibitive construction may also take existential negative indefinites (see SECTION 7.3 above) in its position for focalized negative words (with meanings such as ‘Don’t touch anything!’ or ‘Never tell them about it!’).<sup>310</sup>

## 7.8 Negation and coordination

Negative polarity and coordination **do not display any specific interaction**. Negation and coordination in the expression of groups such as ‘X and not Y’, ‘not X and Y’, or ‘not X and not/nor Y’ (with X and Y being either arguments or whole clauses) are thus **encoded separately by their ordinary dedicated markers**. The following example illustrates the coordination of two negative clauses (of the type ‘not X and not/nor Y’), which is ordinarily done by means of the general coordination marker *rù* ‘and’:

(651) *ǔkǐ t̃áu pūrākú ì yá’ú nū-ì rù <t̃áu...> t̃áu nágù tá chàgù chū-má’úchì.*

<sup>310</sup>In the following elicited example, however, a positive existential indefinite (*gè’tá* ‘where?.ALOC’) co-occurs with *t̃áu* ‘NEG’ within a single negative clause:

- (i) *T̃áu t̃ā gè’tá kù-’ú!*  
*t̃áu = t̃ā    gè’tá    kù = ’ú-’ú*  
 NEG = PROH    where?.ALOC    2SG.SBJ\SBJV = go.SG\SBJV-SUB  
 ‘Don’t move from there [lit. ‘Don’t go anywhere!’]’ [EAR elic.]

It might thus be that negative polarity in prohibitive utterances always has to be marked by *t̃áu* ‘NEG’, regardless of whether existential indefinites are present in the clause or not—while in declarative and interrogative utterances (see SECTION 7.5 above), these existential indefinites, if present, would have been the regular locus for the encoding of negative polarity. However, it might also be that the example cited above is a rarer and somewhat artificial alternative to an expected (but unattested) *T̃áu’úwǎ t̃ā kù-’ú!* [lit. ‘Go nowhere!’], where negative polarity would be encoded within the negative existential indefinite (*t̃áu’úwǎ* ‘nowhere’) itself. The details of the SMAT prohibitive construction will require more exploration.

ÿkúú tǎu pūrākú ì=yâ-'ú nû=i rû  
 I.mean NEG work LK.NS=be.heavy\SBJV-REL.NS 3M/N/NS.SBJ.PCì=be and  
 <tǎu...> tǎu ná-gù=tá chà-gù chû=mǎ-'úchì  
 NEG NEG 3N/NS-PLOC=FUT 1SG-REFL 1SG.SBJ.PCì=kill.SG-genuinely

‘I mean, it’s not a heavy job and I won’t(/nor will I) mishandle myself much with it.’ [JGS 530–531]

Coordination of the configuration ‘not X and Y’ where Y is strongly implied to be understood as a correction of X (‘not X but [instead] Y’, Sp. *no X sino (que) Y*) may be conveyed through one of two (non-specialized) strategies:

- in most cases, the **general coordination marker rû** ‘and’ is used, as in example (652);
- a less common strategy—available only when X and Y are clauses, not arguments—consists in **shaping Y as a subordinate clause introduced by ērú** ‘because’ or **yérú** ‘because.PST’ (‘not X because [actually] Y’), as in (653).<sup>311</sup>

(652) [...] nû’kú má nûwǎ, tǎu ngē’wákà rû gá... nû’kú má’àkù [...].

nû’kú má nûwǎ tǎu ngē’wákà rû=gá nû’kú má’-àkù  
 past.time well.M/N/NS NEG recent.time and=PST past.time-APPROX

‘[...] [that happened] in ancient times, you know, not recently but... in ancient times [...].’ [IGS 221–222]

(653) [...] wâ’í ngē-mà=rû tǎu âi-gú nû=i ērú seres míticosgú nû-i [...].

wâ’í ngē-mà=rû tǎu âi-gú nû=i ērú  
 CONTR MED.NS-ANAPH=TOP NEG wild.felid-PL 3M/N/NS.SBJ.PCì=be because  
 seres míticos-gú nû=i  
 beings mythical-PL 3M/N/NS.SBJ.PCì=be

‘[...] although these are not jaguars but mythical beings [...].’ [JSG B386–387]

<sup>311</sup>Biblical Hebrew makes largely comparable uses of its conjunctions *wə-* ‘and’ and *kī* ‘because’ in so-called adversative clauses (Joüon 1993:641–642).

## 7.9 Pragmatic uses of negation in interaction

**Interro-negative questions** with / = *tá*/ ‘FUT’, as in (654), or / = *chí*/ ‘IRR’, as in (655), are often pragmatically used for **suggestion or invitation** (‘Won’t you/they ...?’ = ‘I suggest you/they ...’; see also example (609) above):

(654) *Tǎu tá kū-chībù?*

*tǎu* = *tá*    *kū* = *chībù*  
NEG = FUT    2SG.SBJ = eat

‘Don’t you want to eat [lit. ‘Won’t you eat?’]?’ [daily observation]

(655) [...] *tǎu chí nà-mê-’ǔ ēgá chí tōwě kùrū-’ǔ’gù rù tāyà-chǎgúēgú?*

*tǎu* = *chí*    *nà* = *mê-’ǔ*    *ēgá* = *chí*    *tō-wě*  
NEG = IRR    3M/N/NS.SBJ\SBJV = be.good\SBJV-SUB    if = IRR    1PL-following

*kù* = *rū* = *’ǔ-gù*    *rù*    *tā* = *yà* = *chǎgúē-gú*  
2SG.SBJ\SBJV = PCRū = go.SG-CIRC    and    1PL.SBJ = AM = fish.with.poison-PL

“[...] why don’t you come with us? [lit. ‘wouldn’t it be good if you came with us?’] We’re going poison-fishing.” [LAR E130–132]

*Tǎu* (or its variant *tǎu-’ǔ*) ‘NEG’ in its pro-sentential function (see SECTION 7.6 above) is regularly used pragmatically as a way to **answer a content question in a deliberately vague way**, out of self-effacement (in which case *tǎu* is often followed by a more precise answer) or in order to elude a question (‘Well, nothing special, (it’s just that ...)’), as in the following example (repeated from (450)):<sup>312</sup>

(656) “*Ákúkq kù-dǎu?*” *ñâ-’ǔ*. “*Tǎu, téré í mé-’kúrà-’ǔ-kū* *īchā-fè rù nǔ-à chíre ī-gū rù tǎu īchā-dǎu.*”

*ákú-kq*    *kū* = *dǎu*    *ñâ-’ǔ*    *tǎu*    *téré*  
what?.NS-CAUSE    2SG.SBJ = see    do.thus.3M/N/NS.SBJ.SBJV-SUB    NEG    *téré*.parrot

*í* = *mé-’kúrà-’ǔ-kū*    *ī* = *chā* = *fè*    *rù*  
LK.F = be.good-by.force.of.circumstance-REL.F    3F.ACC = 1SG.SBJ = shoot    an

*nǔ-à* = *chíre*    *ī* = *gū*    *rù*    *tǎu*    *ī* = *chā* = *dǎu*  
PROX.PLOC-EXO = APRF    3F.SBJ = fall.SG    and    NEG    3F.ACC = 1SG.SBJ = see

<sup>312</sup>This pragmatic use of *tǎu* ‘NEG’ is likely related to the fact that *tǎu* probably comes from *tǎ-’ǔ* (‘nothing’, among other possible glosses) etymologically (see SECTION 7.2.1 above).



“What are you looking for?” [she] asked. “Well, nothing special, I’ve shot a beautiful *téré* parrot, it has fallen down here but I can’t find it.” [JSG B220–222]

**Rhetorical questions** are often used to convey an **emphatic negative exclamative meaning**. In this discursive strategy, the referent asked about is implicitly meant not to exist, or in other words an interrogative word is used instead of its corresponding negative existential indefinite (as in e.g. ‘What did he do...?’ = ‘He did (absolutely) nothing!’). This is illustrated in examples (657–658) (see also (T56)). Compare (657) with (622) for a parallel utterance featuring the corresponding explicitly negative construction. In (658), the corresponding negative sentence is uttered immediately after the rhetorical question, yielding a binary discursive structure INTERROGATIVE.SENTENCE + NEGATIVE.SENTENCE of relatively common use in the language:

(657) *Ítáyà-dǎugú ũ’à: gǎ’è...?*

*í = tá = yà = dǎu-gú = ũ’à                      gǎ’-è*  
3ALOC = 3S.SBJ = AM = see-PL = QUOT    be.where?-REL.S

‘They went to check: nobody [lit. ‘...: where [was] she...?’].’ [IGS 267–268]

(658) [...] *ñù’gù ’ārù nūtī-ū ā’a mēà...? Tǎ’úgù ā’a nūtī-ù’ú.*

*ñù’gù = ’ārù                      nūtī = tī = ũ = ā’a                      mēà*  
when? = unlike.before    3M/N/NS.ACC = 3S.SBJ.PCĪ = say = QUOT    well

*tǎ’ú-gù = ā’a                      nūtī = tī = ù-’ú*  
be.absent\SBJV?-PLOC = QUOT    3M/N/NS.ACC = 3S.SBJ.PCĪ\SBJV = say\SBJV-SUB

‘[...] when did she finally say things clearly...? At no point did she say it [clearly].’ [LAR T108]





# Appendix A

## Interlinearized text: episodes from the myth of Ngutapa as told by Loida Ángel Ruiz

This appendix provides a fully interlinearized transcription of about two thirds of a recording of the **first few episodes of the mythological cycle of Ngutapa and his children as told by Loida Ángel Ruiz** (LAR, ♀, 49 y.o.). The corresponding recording (recording C by LAR in TABLE 1) was made on November 5, 2016 in LAR's house in SMA. This recording is 35'17" long altogether, of which the first 21'55" are transcribed in what follows. This entirely monological text is generally representative of traditional Tikuna mythological storytelling. Note, however, that I was the only hearer present during most of the performance, which is a highly unusual speech setting for this kind of Tikuna verbal art.

The cycle of Ngutapa, his two sons Yoi (often called /tǎ-nátü/ (4-father) “our father” by the Tikunas) and Ipi, and his two daughters is by all accounts (whether endogenous or exogenous) the **most important one in today's Tikuna mythological repertoire**, minimally among the Tikunas of Colombia. It contains, among many other mythological accounts of elements characteristic of today's world, an account of the creation of human beings. For versions of the cycle of Ngutapa in Western languages, see in particular Nimuendajú (1952:121–137; partly condensed English version) and Goulard & Montes (2016; extensive Tikuna-Spanish version). For a discussion of linguistic features typical of Tikuna mythological discourse, see Gómez-Pulgarín (2012).

For **parallel—although often divergent—versions of the episodes transcribed below**, see more specifically Nimuendajú (1952:121–123, 133–134) and Goulard

& Montes (2016, episodes I–III). Note, importantly, that LAR, the speaker of the recording transcribed below, was part of the transcription and translation committee for Goulard & Montes (2016), which mostly consists in a written version of a recording of the cycle of Ngutapa told in 1985 and 1988 by Humberto Chetanükü, a renowned Tikuna storyteller from the upper Loretoyacu river. LAR’s version of the episodes below is therefore heavily influenced by Chetanükü’s version reported in Goulard & Montes (2016).

An **English summary** of the episodes transcribed in this appendix is given first in SECTION A.1. The fully **interlinearized transcription** of these episodes is provided in SECTION A.2.

For another fully interlinearized SMAT text, see Bertet (2019).

## A.1 English summary

The marginal codes refer to the lines of SECTION A.2 where each episode starts.

- T1** *One day, Ngutapa, the ancestor of all human beings, went deep into the jungle with his wife, tied her up by her legs, and abandoned her. Caracara birds saved her and gave her darts for her to get revenge from her husband with. The woman went to bathe in a river close to Ngutapa’s maloca. The distant noise of her feet in the water sounded to Ngutapa’s ears like a threatening song. But any time Ngutapa would go to the river to see where the song came from, the woman would hide away. Ngutapa never found out who was trying to intimidate him with that song.*
- T38** *A bit later, Ngutapa spotted an irresistible abiu fruit on a tree near his maloca. He did not beware that abiu fruits were out of season and went to pick the fruit. But while he was climbing down the tree, a wasp stung him in both knees—in fact, his wife in the shape of a wasp, although Ngutapa did not realize it. From then on, his knees started to swell more and more every day, to the point that he could no longer do anything and had to remain lying in his hammock for months and months without understanding what was happening to him. Until it eventually became apparent that Ngutapa was pregnant, and with no less than two pairs of twins, a boy and a girl in either knee!*
- T84** *One day, Ngutapa felt so bored that he resolved to go take a bath despite his condition. But on his way to the river he fell down badly, and the children were pushed out of his knees. Ngutapa’s four children were born, and he started to bring them up in his maloca.*
- T95** *One time, Ngutapa went hunting alone and never came back. The children grew*

worried about him, but whenever they asked their grandmother—who knew that a jaguar had eaten Ngutapa up—about their father, she would answer elusively. That’s because in ancient times, directly referring to jaguars by their name would enrage them: they would immediately come and attack you.

One day, the grandmother told the two boys, Yoi and Ipi, that she would let them know **T125** clearly what had happened to Ngutapa as soon as they managed to cut down a certain tree in her swidden. Her real intention had just been to occupy them with an unattainable task, but to her surprise the two supernatural brothers, who had now grown into young men, soon came back to her with their mission accomplished. The grandmother, although furious, ended up telling them unambiguously that a jaguar had orphaned them.

Yoi and Ipi resolved to revenge the death of their father. They wove a magic thread **T144** from their sisters’ hairs, strung it across the world, and pulled on it so as to contract the entire world onto itself. This way, they would be able to inspect all the animals of the world—who all looked like jaguars at the time—and find the one who had orphaned them. They had them stand in line and open their mouth one after the other. The murderer would be the one that had hairs from their father in its mouth. They examined the birds first, then the deer, [the tapir, the anteater, the puma... And they gave each **T167** animal its current name and its specific morphology as they went.

Last came the jaguar. Loud puffing sounds were heard coming from a distance, like those made by a stomach one would fill up and then empty of its air—Ngutapa’s stomach. But as soon as the jaguar was in sight of the two brothers, it suddenly went quiet and became visibly reluctant to come any closer. Yoi and Ipi asked it what was wrong with it. The jaguar first pretended to have a toothache, but when they ordered it to open its mouth, they found it full with their father’s hairs!

The two brothers killed the jaguar. They ripped it open, collected Ngutapa’s flesh from its stomach, and put it into a basket that they stored hanging in their maloca.

One day, Yoi and Ipi went hunting. Some parrots came and tore the basket open so as to eat Ngutapa’s flesh. As the pieces of flesh fell to the ground, they turned into all the sorts of people who exist in today’s world. When the brothers came back, the maloca was overflowing with people. So they expanded the world back to its original size to make them space, and the groups of people spread in all directions. That is how the earth was populated.]<sup>313</sup>

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<sup>313</sup>The part of this summary enclosed in square brackets corresponds to the part of the recording of the myth of Ngutapa by LAR for which no transcription is provided below.

## A.2 Linguistic analysis

- T1 *Nũ'kú má nǎwǎ nêi-ĩkũ gá ǒ' gá Ğũ'tàpa <'ũ tá... > -àrũ ũgúànè'ũ tá chí-ù'ũ nũ-ĩ gá ákú nũ-úpétũ'ũ gá gũ má dùũ gá ñũ má <nǎw... > nǎwénà ñõ má nânèwǎ <ì-mũ... > ì-mùkũ.*

*nũ'kú má nǎ-wǎ nê = ì = ĩ-kũ*  
past.time 3M-ALOC CTRPET.3ALOC = PCØ.SBJV = go.PL\SBJV-REL.M

*gá = ǒ'* *gá = Ğũ'tàpa <'ũ = tá... >* *-àrũ*  
LK.F/M/S/NS.PST = old.man LK.F/M/S/NS.PST = Ngutapa-ACC = FUT -GEN

*ũgúànè-'ũ = tá chí = ù-'ũ* *nũ.ĩ*  
story-ACC = FUT 1SG.SBJ.PC̄.SBJV = say\SBJV-SUB CONJ

*gá = ákú* *nũ = ú-pétũ-'ũ*  
LK.F/M/S/NS.PST = what?.NS 3M/N/NS.ACC = be.there.SG-across\SBJV-SUB

*gá = gũ-má* *dùũ* *gá = ñũ má*  
LK.F/M/S/NS.PST = DIST.M-ANAPH be.a.human LK.F/M/S/NS.PST = present.time

*<nǎ-w... >* *nǎ-wénà ñõ-má* *nân-ànè-wǎ*  
3M- 3M-after PROX.NS-ANAPH 3N/NS-space-ALOC

*<ì = mũ... >* *ì = mù-kũ*  
PCØ.SBJV = be.several PCØ.SBJV = be.several\SBJV-REL.M

'I'm going to tell the story of Ngutapa, the old man from whom we originated long ago—and what happened to that man after whom we have come to exist now in this world.'

- T2 *Nũgùmá'a ā'a gá <nà... >, ípátāwǎ <nà... >, nǎpátā gá tâ'ũnè, maloca ì ñõ má'ũkũ'ũ ì ná'égà... -wǎ má'ēgũ'ũ gá nũ'kú má, nũwǎ nǎi'nekũànèwǎ mǎrē.*

*nũ-gù-má'a = ā'a = gá* *<nà = ... >* *í-pátā-wǎ*  
3M-REFL-COM = QUOT = PST 3M/N/NS.SBJ\SBJV = building-house-ALOC

*<nà = ... >* *nǎ-pátā gá = tâ-'ũnè* *maloca*  
3M/N/NS.SBJ\SBJV = 3M-house LK.N.PST = be.big\SBJV-REL.N *maloca*

*ì = ñõ-má-ũkũ'ũ* *ì = ná-égà...* *-wǎ*  
LK.NS = PROX.NS-ANAPH-time LK.NS = 3N/NS-name -ALOC

*má'-ē-gũ-'ũ* *gá = nũ'kú má* *nũwǎ*  
live-INTR.PL-PL\SBJV-SUB LK.F/M/S/NS.PST = past.time well.M/N/NS

*nǎi'nekũ-ànè-wǎ = mǎrē*  
jungle-space-ALOC = just

'The story goes that [they lived] among themselves... in a house... his big house, what's called a *maloca* nowadays—long ago they used to live in those, you know, in the middle of the jungle.'

T3 *Wí'á gá gùnē'ú ā'a gá, tūmámá'a yà-nà-úkū'ú gá nǎ'mq.*

*wí'á gá = gùnē-ú = ā'a = gá* *tū-mà-má'a*  
 INDF LK.F/M/S/NS.PST = get.light\SBJV-REL.NS = QUOT = PST 3S-ANAPH-COM

*yà = nà = ú-kū-ú*  
 AM = PCrū.3M/N/NS.SBJ\SBJV = be.there.SG-in.PL\SBJV-SUB

*gá = nǎ-'mq*  
 LK.F/M/S/NS.PST = 3M-wife

'One day, he [i.e. Ngutapa] went in [into the jungle] with his wife.'

T4 *Nǎ'é'íkǎ ā'a gá í'wǎ yě'mǎ'è.*

*nǎ-é-'íkǎ = ā'a = gá* *í-wǎ* *yě-'mǎ-è*  
 3M-mother-only = QUOT = PST building-ALOC DIST.PLOC-ANAPH\SBJV-REL.S

'His mother stayed home alone.'

T5 *Náyàrū-úkù ā'a gá, gè'tà tūnà-gànàgúpērēmā'ú ā'a gá gū'è'má nǎ'mq.*

*ná = yà = rū = ú-kù = ā'a = gá* *gè'tà*  
 3M/N/NS.SBJ = AM = PCrū = be.there.SG-in.PL = QUOT = PST where?.PLOC

*tū = nà = gā-nàgú-pērēmā-ú = ā'a*  
 3S.ACC = 3M/N/NS.SBJ\SBJV = tie-on-upper.leg\SBJV-SUB = QUOT

*gá = gū'è-má* *nǎ-'mq*  
 LK.F/M/S/NS.PST = DIST.S-ANAPH 3M-wife

'He went into [the jungle] and hung his wife up somewhere by her legs.'

T6 *Nāi'nēkūwǎ tūyà-tǎ'ú, yěmáàkù.*

*nāi'nēkū-wǎ* *tū = yà = tǎ-ú*  
 jungle-ALOC 3S.ACC = AM.3F/M/N/NS.SBJ.SBJV = drop.SG\SBJV-SUB

*yě-má-àkù*  
 DIST.NS-ANAPH-MAN

'He went and abandoned her in the jungle, like that.'

T7 *Yěmá nū-í gá, yěmà tū'nà nū-ú rù yěmá'ú yěà tì-ì'ú ā'a nū-í gá gè'tà tūnà-wè'nàgúpērēmā'ú.*

*yě-má* *nū = í = gá* *yě-mà* *tū-'nà*  
 DIST.NS-ANAPH 3M/N/NS.SBJ.PCì = be = PST DIST.ALOC-ANAPH 3S-DAT

*nū = ú* *rù* *yě-má-ú* *yě-à*  
 3M/N/NS.SBJ.PCì = go.SG and DIST.NS-ANAPH-STATE DIST.ALOC-EXO



*tì = ì-’ù = ā’a* *nî.î gá = gè’tà*  
 3S.SBJ.PCì\SBJV = be\SBJV-SUB = QUOT CONJ LK.F/M/S/NS.PST = where?.PLOC

*tū = nà = wè’-nàgú-pērēmā-’ù*  
 3S.ACC = 3M/N/NS.SBJ\SBJV = bind-on-upper.leg\SBJV-SUB

‘And then, he left her and she remained there in that state, hung up somewhere by her legs by him.’

T8 *Tū’ū ā’a nà-ngó’ù nūwá gá ákú mé’e nî-î gá <yè... > yémá...*

*tū-’ū = ā’a* *nà = ngó-’ù* *nūwá*  
 3S-ACC = QUOT 3M/N/NS.SBJ\SBJV = bite\SBJV-SUB well.M/N/NS

*gá = ákú = mé’e* *nî.î gá = <yè-... >*  
 LK.F/M/S/NS.PST = what?.NS = DUB CONJ LK.F/M/S/NS.PST = DIST.NS

*yé-má...*  
 DIST.NS-ANAPH

‘She was bitten by, you know, uh... because...’

T9 *Nú’kúmá rù tî-gè’chírù gá yá’gùã.*

*nú’kúmá = rù* *tî = gè-’chírù* *gá = yá’gùã*  
 past.time = TOP 3S.SBJ.PCì = not.have-clothes LK.F/M/S/NS.PST = ancestor

‘In ancient times the ancestors didn’t have clothes.’

T10 *Má’è ā’a tūmàārū gú’chā’úwá tū-ngó’ù nî-î gá yémà ā’a tî-gûrà’ù.*

*má’è = ā’a* *tū-mà-ārū* *gú’chā-’ú-wá*  
 wasp = QUOT 3S-ANAPH-GEN be.difficult\SBJV-REL.NS-ALOC

*tū = ngó-’ù* *nî.î gá = yé-mà = ā’a*  
 3S.ACC = bite\SBJV-SUB CONJ LK.F/M/S/NS.PST = DIST.ALOC-ANAPH = QUOT

*tî = gûrà-’ù*  
 3S.SBJ.PCì\SBJV = be.covered.with.insects\SBJV-SUB

‘Wasps bit her in her private parts, because she was [hanging] there covered with insects.’

T11 *Gú’úrú’ù’ù èné tūmàkq ì’ù.*

*gú-’ù-rú’ù-’ù* *èné* *tū-mà-kq* *ì-’ù*  
 finish\SBJV-REL.NS-sort\SBJV-REL.NS army.ant 3S-ANAPH-CAUSE go.PL\SBJV-SUB

‘All kinds of aggressive ants came onto her.’

T12 *[Yémá ā’a] nî-î rù yèà nā-gūgú’ù ā’a gá kòu.*

[yě-má = ā'a]                      nî = î                      rù yě-à  
 DIST.NS-ANAPH = QUOT 3M/N/NS.SBJ.PCì = be and DIST.ALOC-EXO  
 nā = gū-gǔ-’ú = ā'a                      gá = kǒu  
 3F.SBJ.SBJV = reach-PL\SBJV-SUB = QUOT LK.F/M/S/NS.PST = red.throated.caracara  
 ‘Then came the red-throated caracara birds.’

T13 “Kǒugú, kǒugú, kǒugú!” nā’ú ā'a gá tūmà-étūwǎ ā'a.

kǒu-gú (x3)                      nā-’ú = ā'a  
 red.throated.caracara.cry-PL (x3)                      do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT  
 gá = tū-mà-étū-wǎ = ā'a  
 LK.F/M/S/NS.PST = 3S-ANAPH-above-ALOC = QUOT  
 ‘They sounded “Kǒu, kǒu, kǒu!” above her.’

T14 Tūmà ā'a gá tà-dé’ááchí’ú:

tū-mà = ā'a = gá                      tà = dé’á-áchí-’ú  
 3S-ANAPH = QUOT = PST 3S.SBJ\SBJV = speak-TEL-\SBJV-SUB  
 ‘She started to speak.’

T15 “Ñò’kù kù-dùú, pà kǒu, rù chá’ú íkī-wègú nî-î ñómá’ú núa chāyà-í’è’è’ú yá Gù’tàpá!” ñátàgù’ú ā'a.

ñò’kù kù = dùú                      pà = kǒu                      rù chá-’ú  
 if.only 2SG.SBJ\SBJV = be.a.human VOC = red.throated.caracara and 1SG-ACC  
 í = kī = wè-gú                      nî.î ñò-má-’ú  
 3ALOC = 2SG.SBJ.PCì.SBJV = untie-PL\SBJV CONJ PROX.NS-ANAPH-STATE  
 núa                      chā = yà = í-’è’è-’ú  
 PROX.ALOC-EXO 1SG.BEN = PCì.3F/M/N/NS.SBJ.SBJV = be-CAUS\SBJV-SUB  
 yá = Gù’tàpá                      ñá-tà-gù-’ú = ā'a  
 LK.M/S = Ngutapa do.thus-3S.SBJ\SBJV-do.thus-SUB = QUOT  
 “‘If only you turned into humans and untied me, caracaras, for Ngutapa is keeping me here in this state!’ she said.’

T16 Yémá nî-î rù ā'a, nūwǎ gá, nū’kú má rù nî-î gá nà-dô’òné’ú ā'a rù, [nūwǎ] ā'a, mmmh, <yémá> nî-î... mmmh, gá yémá ñátàgù’ú rù ā'a, gá yémá dùú’ú’ú gá, gǔrú ā'a, tūmàkq nūwǎ ā'a <nî...> <tùgù nà-...> <nà-...> nūgù nà-dùúè’ú rù ā'a tūyà-wègùè’ú.



T18 “Kú n̄umá, ērú ngē-’ú kú-má’a ná-wǎgù yá yímá kúté rù, <kú... > kú kùgù nà-  
 ùtànù rù n̄à tá ì kùgùnè <rù... > rù ngēmámá’a tá ì kùgù kù-ùtànù-’ú!” n̄á-’ú  
 ā’a.

kú = n̄umá                      ērú      ngē-’ú                      kú-má’a      ná = wǎgù  
 come.on = present.time    because    MED.NS-ACC    2SG-COM    3M/N/NS.SBJ = do

yá = yĩ-má                      kú-té = rù                      <kú = ... >      kú = kù-gù  
 LK.M/S = MED.M-ANAPH    2SG-husband = TOPcome.on    come.on                      2SG-REFL

nà = ù-tànù                      rù      n̄á-à = tá                      ì = kù-gùnè  
 PCØ.IMP = make-compensation    and    PROX.NS-EXO = FUT    LK.NS = 2SG-dart

<rù... >      rù      ngē-mà-má’a = tá                      ì = kù-gù  
 and                      and    MED.NS-ANAPH-COM = FUT    LK.NS = 2SG-REFL

kù = ù-tànù-’ú  
 2SG.SBJ\SBJV = make-compensation\SBJV-SUB

n̄á-’ú = ā’a  
 do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT

“Now, since your husband did that to you, get revenge: here are darts for you, you’re going to get revenge with them!” they said.’

T19 “Ngǔ!” n̄átàgù-’ú.

ngǔ      n̄á-tà-gù-’ú  
 okay    do.thus-3S.SBJ\SBJV-do.thus-SUB

“Okay!” she said.’

T20 N̄uwǎ, t̄úñt̄i-wègù rù ā’a t̄i-’ú, <t̄uwǎ rù t... > wá’í t̄áú ā’a gá t̄umàchí-’úwǎ  
 tá-gū gá gù’è-má gē’è, gá n̄ám̄ gá Ḡù’tàp̄a.

n̄uwǎ                      t̄ú = í = n̄ú = wè-gù                      rù = ā’a  
 well.M/N/NS    3S.ACC = 3ALOC = 3M/N/NS.SBJ.PC̄I = untie-PL    and = QUOT

t̄i = ù-’ú                      <t̄uwǎ = rù t... >      wá’í  
 3S.SBJ.PC̄I\SBJV = go.SG\SBJV-SUB    well.S = TOP                      CONTR

t̄áú = ā’a = gá      t̄i-mà-chí-’ú-wǎ                      tá = gū  
 NEG = QUOT = PST    3S-ANAPH-home-ALOC    3S.SBJ = reach

gá = gù’è-má                      gē-’è  
 LK.F/M/S/NS.PST = DIST.S-ANAPH    be.a.female\SBJV-REL.S

gá = n̄ám̄                      gá = Ḡù’tàp̄a  
 LK.F/M/S/NS.PST = 3M-wife    LK.F/M/S/NS.PST = Ngutapa

‘So, they untied her and she left, and... —but the woman, Ngutapa’s wife, did not go all the way to her house.’

T21 *Ĝè'tǎ mārē ā'a tūwǎ nū-ĩ gá tà-ġù'ũ ā'a, nátíwǎ ā'a {gá ā'a}.*

*ġè'tǎ = mārē = ā'a*      *tūwǎ nū = ĩ*  
 where?.ALOC = just = QUOT well.S 3M/N/NS.SBJ.PCì = be

*gá = tà = ġù- 'ũ = ā'a*  
 LK.F/M/S/NS.PST = 3S.SBJ\SBJV = reach\SBJV-SUB = QUOT

*ná-tú-wǎ = ā'a { = gá = ā'a }*  
 3N/NS-river-ALOC = QUOT = PST = QUOT

'She went up to some random place, to the river.'

T22 *Yéà tà-túkútù'ũ ā'a.*

*yé-à*      *tà = tú-kútù- 'ũ = ā'a*  
 DIST.ALLOC-EXO 3S.SBJ\SBJV = impact.sound-foot\SBJV-SUB = QUOT

'There she was making kicking noises [on the water surface].'

T23 *"Tú, tú, tú!" ñá'ũ ā'a gá {tà-}ũ'ũ<sup>316</sup> gá tûmàkùtû.*

*tú (x3)*      *ñá'ũ = ā'a*  
 impact.sound (x3) do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT

*gá = {tà = }ũ- 'ũ*  
 LK.F/M/S/NS.PST = 3S.SBJ\SBJV = make\SBJV-SUB

*gá = tû-mà-kùtû*  
 LK.F/M/S/NS.PST = 3S-ANAPH-foot

'"Tú, tú, tú!" her feet sounded.'

T24 *Tûmàkùtû nū-ĩ gá āgānè, nū-ĩ gá tà-āiyā'ũ ā'a.*

*tû-mà-kùtû*      *nū = ĩ*      *gá = ā-gā-nè,*  
 3S-ANAPH-foot 3M/N/NS.SBJ.PCì = be LK.F/M/S/NS.PST = have-sound\SBJV-REL.N

*nū.ĩ*      *gá = tà = āiyā- 'ũ = ā'a*  
 CONJ LK.F/M/S/NS.PST = 3S.SBJ\SBJV = bathe\SBJV-SUB = QUOT

'What made the noise was her feet while she was bathing.'

T25 *[Yémà] gá ā'a, yà-ùàkú'ù'ũ ā'a gá yémá tûmààrû tûkútû ā'a:*

<sup>316</sup>Possibly a mistake for *nà-ũ'ũ* (3M/N/NS.SBJ\SBJV = make\SBJV-SUB), i.e. with the woman's feet—not the woman herself—as the subject.



T29 “Ákú ùkú rù ká’a yàrū-dǎ’úchí!” ñátàgù’ú ã’a gá náé.

ákú ùkú rù ká’a = yà = rū = dǎ-’úchí  
 what?.NS I.mean and let’s.see = AM = PCrū = see-out.SG

ñá-tà-gù-’ú = ã’a gá = ná-é  
 do.thus-3S.SBJ\SBJV-do.thus-SUB = QUOT LK.F/M/S/NS.PST = 3N/NS-mother

‘‘What could it be? Go out and see!’’ said the mother.’

T30 Tá’a yéà ná-ñā ã’a gá tūrèwǎ ã’a gá, nǔ’ ã’a ná-dǎwēnū ã’a gá, yéà nà-dúàà-nè-mārè’ú ã’a.

tá’a = yé-à ná = ñā = ã’a  
 FRUSTR = DIST.ALOC-EXO 3M/N/NS.SBJ = run.SG = QUOT

gá = tūrè-wǎ = ã’a = gá nǔ’ = ã’a  
 LK.F/M/S/NS.PST = dock-ALOC = QUOT = PST PROX.PLOC = QUOT

ná = dǎwēnū = ã’a = gá yé-à  
 3M/N/NS.SBJ = watch = QUOT = PST DIST.ALOC-EXO

nà = dú-à-ànè-mārè-’ú = ã’a  
 3M/N/NS.SBJ\SBJV = ripple?-PLLOC-space-just\SBJV-SUB = QUOT

‘He ran to the river dock and looked all over, but all there was was a ripple [on the water surface].’

T31 Yé’gú má-’àkù ã’a < ná-... > tá’a nǔ’ nū-í gá nà-dǎwēnū’ú gá, tá’ú-’ú-’ú nà-dǎu’ú ã’a.

yé’gú má-’àkù = ã’a < ná = ... > tá’a = nǔ’ nū.í  
 ANAPH.CIRC.PST-APPROX = QUOT 3M/N/NS.SBJ = FRUSTR = PROX.PLOC CONJ

gá = nà = dǎwēnū-’ú = gá  
 LK.F/M/S/NS.PST = 3M/N/NS.SBJ\SBJV = watch\SBJV-SUB = PST

tá’ú-’ú-’ú nà = dǎu-’ú = ã’a  
 be.absent\SBJV-REL.NS-ACC 3M/N/NS.SBJ\SBJV = see\SBJV-SUB = QUOT

‘Although he looked all over at that moment, he saw nothing.’

T32 Tá’ú-’ú-’ú ná-dǎu rù úáchí’ú ã’a wénà rù yé’gú má-’àkù tà ã’a gá, úàkú’ú-’ú ã’a gá tūmààrū āiyà ã’a nū-í gá yéà ã’a..

tá’ú-’ú-’ú ná = dǎu rù  
 be.absent\SBJV-REL.NS-ACC 3M/N/NS.SBJ = see and

ú-áchí-’ú = ã’a wénà rù  
 be.there.SG-upslope\SBJV-SUB = QUOT again and

yé’gú má-’àkù = tà = ã’a = gá  
 ANAPH.CIRC.PST-APPROX = ADD = QUOT = PST





*gá = ákú = mé'e*                      *gá = nāi'átū-gú = ā'a*                      *nū.ĩ*  
 LK.F/M/S/NS.PST = what?.NS = DUB    LK.F/M/S/NS.PST = tree.leaf-PL = QUOT    CONJ

*gá = tī = nā- 'ū = ā'a*  
 LK.F/M/S/NS.PST = 3S.SBJ.PCī\SBJV = run.SG\SBJV-SUB = QUOT

'A few meters away, the, uh... the leaves were still slightly quivering given that she had run away.'

T36 < Tī-... > *Mārū tà-kúchìgù-è'ū.*

< tī = ... >                      *mārū tà = kú-chìgù-è- 'ū*  
 3S.SBJ.PCī\SBJV = PRF    3S.SBJ\SBJV = hide-DISTR.SG-?\SBJV-SUB

'She was already hiding here and there.'

T37 *Tá'úgù mā tūwá gá í'wá tà-ǵù'ū yérú yémá'ū tū-ĩ.*

*tá'ú-gù = mā*                      *tūwá = gá í'-wá*  
 be.absent\SBJV?-PLOC = precisely    well.S = PST    building-ALOC

*tà = ǵù- 'ū*                      *yérú*                      *yé-má- 'ū*                      *tū = ĩ*  
 3S.SBJ\SBJV = reach\SBJV-SUB    because.PST    DIST.NS-ANAPH-STATE    3S.SBJ.PCī = be

'So she never went all the way home because she kept doing like that.'

T38 *Yémá ā'a nū-ĩ rù mò'ū'ákù chìgù nū-ĩ.*

*yé-má = ā'a*                      *nū = ĩ*                      *rù*  
 DIST.NS-ANAPH = QUOT    3M/N/NS.SBJ.PCī = be    and

*mò'ū- 'ákù = chìgù*                      *nū = ĩ*  
 following.day-APPROX = DISTR.SG    3M/N/NS.SBJ.PCī = be

'And so, days passed.'

T39 *Nà-yítá'ū'ū ā'a nágù ā'a gà nò'rū maloca.*

*nà = yít-tá'ū- 'ū = ā'a*  
 3M/N/NS.SBJ\SBJV = sway-bounded.flat.surface\SBJV-SUB = QUOT

*ná-gù = ā'a*                      *gà = nò- 'rū*                      *maloca*  
 3N/NS-PLOC = QUOT    LK.N.PST = 3N/NS-GEN    maloca

'[Ngutapa] was swaying in a hammock in his maloca.'

T40 *Nū' mé'e nà-dāwēnù'ū rù ā'a {yé} nà-dé'pū'ū'ū gà tà'ú ā'a gà wǐpū'ū.*

*nũ' = mé'e*      *nà = dāwēnũ-ũ*      *rũ = ā'a*      {*yě*}  
 PROX.PLOC = DUB    3M/N/NS.SBJ\SBJV = watch\SBJV-SUB    and = QUOT    DIST.ALOC

*nà = dē'-pũ'ũ-ũ*      *gà = tà'ũ = ā'a*  
 3M/N/NS.SBJ\SBJV = be.yellow-spherical.shape\SBJV-SUB    LK.N.PST = abiu = QUOT

*gà = wĩpũ'ũ*  
 LK.N.PST = beauty?-spherical.shape

'I guess he was looking all around himself, and in the distance was a beautiful, yellow abiu fruit.'

T41 “*Mmmh, cháá cháná-chiégà yà tà'ũ rù ká'a pā'à chàyànā-kâwè!*” *ñâ'ũ ā'a*.

*mmmh chá-á chá = ná = chiégà*      *yà = tà'ũ*  
 1SG-?    1SG.BEN = 3M/N/NS.SBJ = be.appealing.to.the.taste    LK.N = abiu

*rũ ká'a = pā'à*      *chà = yà = nā = kâwè*  
 and let's.see = be.quick    1SG.SBJ\SBJV = AM = PCrũ.3M/N/NS.OBJ = pluck.SG\SBJV

*ñâ-ũ = ā'a*  
 do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT

“‘Oh, I want to eat the abiu fruit: let me go and pluck it!’ he said.’

T42 “*Ngũ, kuá!*” *ñátàgũ'ũ ā'a gá náé.*

*ngũ ku-á ñá-tà-gũ-ũ = ā'a*  
 okay 2SG-?    do.thus-3S.SBJ\SBJV-do.thus-SUB = QUOT

*gá = náé*  
 LK.F/M/S/NS.PST = 3N/NS-mother

“‘All right!’ said the mother.’

T43 *Dāu'ũ ā'a ná-ĩ gà... tà'ũ<sup>318</sup> rù yànà-kâwēà'ũ ā'a.*

*dāu'ũ = ā'a*      *ná = ĩ*      *gà = tà'ũ*      *rũ*  
 upper.part = QUOT    3M/N/NS.SBJ = climb    LK.N.PST = abiu    and

*yà = nà = kâwē-à-ũ = ā'a*  
 AM = PCrũ.3M/N/NS.SBJ\SBJV = pluck.SG-3M/N/NS.OBJ\SBJV-SUB = QUOT

'He climbed up the abiu tree and plucked it.'

T44 *Wòè tàā nàchìgà nũwǎ nũ-ĩ yêrũ ā'a tà'ũ ĩ-tà'ũ'ũwǎ nũ-ĩ rù gũ'íkǎ ā'a nũ-ĩ gà*  
*tà'ũ rù yémákq nũná-gũchà'ũ'ũchì rù ā'a dāu'ũ ná-ĩ rù ā'a yà-kâwēà'ũ.*

<sup>318</sup>The exact syntactic role of *gà tà'ũ* in this utterance is unclear.



*mārū* *nà* = *gū-ē-gù* = *ā'a* = *gá* *gūrú* = *gá*  
 PRF PCrū.3M/N/NS.SBJ\SBJV = reach-off.SG-CIRC = QUOT = PST suddenly = PST

*tū* = *ā'a* *gá* = *ná-āpü'ü* = *ā'a* = *gá* *má'è* = *ā'a*  
 impact.sound = QUOT LK.F/M/S/NS.PST = 3N/NS-knee = QUOT = PST wasp = QUOT

*ná* = *nā* = *chí-à-āpü'ü*  
 3M/N/NS.SBJ = 3M/N/NS.OBJ = bite-PLLOC-knee

‘When he arrived to the ground, all of a sudden, [his] knee went “Tū!”, a wasp had stung him in the knees.’

T47 < *Gū'ū...* > *Nāiāpü'üwá* *rù* *tà* *ā'a* *nà-chià'ū* [*nô'táá*] {*gá*}: “*Tū!*” *nā'ū* {*ā'a*}.

< *gū'ū...* > *nāi-āpü'ü-wá* = *rù* = *tà* = *ā'a*  
 finish\SBJV-REL.NS other.N-knee-ALOC = TOP = ADD = QUOT

*nà* = *chî-à-ū* [*nô'táá*] { = *gá* } *tū*  
 3M/N/NS.SBJ\SBJV = bite-3M/N/NS.OBJ\SBJV-SUB outright = PST impact.sound

*nā-ū* { = *ā'a* }  
 do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT

‘In both... In the other knee too it stung him right away: it sounded “Tū!”.’

T48 “*Áh, áh! Má'è táréé chāná-chí!*” *nā'ū* *ā'a*.

*áh* *áh* *má'è* = *táréé* *chā* = *ná* = *chí*  
 oh oh wasp = damn.it? 1SG.ACC = 3M/N/NS.SBJ = bite

*nā-ū* = *ā'a*  
 do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT

“Oh! Damn, a wasp has stung me!” he said.’

T49 “*Nâgàgú yà* *tà'ú* *ì* *má'è* *nū'à* *chā-chi'ū*,” *nā'ū* *ā'a*.

*nâ-gà-gú* *yà* = *tà'ú* *ì* = *má'è* *nū'-à*  
 3N/NS-fault-PLOC LK.N = abiu LK.NS = wasp PROX.PLOC-EXO

*chā* = *chî-ū* *nā-ū* = *ā'a*  
 1SG.ACC = bite\SBJV-SUB do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT

“It’s because of the abiu fruit that the wasp has stung me here,” he said.’

T50 {*Ná-*}*dāu* *rù* *ā'a* *gēē* *ā'a* *gá* < *n...* > *Gēāgù* *āēgàkū* *gá* *má'è* *ā'a* *yì-ì'ū* *gá* *nā-chîkū*,  
 [*gá* *dē'é*].

{ná = }dǎu rù = ā'a gē-ǣ = ā'a = gá <n... >  
 3M/N/NS.SBJ = see and = QUOT be.a.female-REL.S.PL = QUOT = PST

gē-ǣ-gù ā-ǣgà-kū gá = má'è = ā'a  
 be.a.female-REL.S.PL-PLOC have-name-REL.F LK.F/M/S/NS.PST = wasp = QUOT

yì = ì-ú  
 PCì.3F/M/N/NS.SBJ.SBJV = be\SBJV-SUB

gá = nā = chî-kū  
 LK.F/M/S/NS.PST = 3M/N/NS.OBJ = bite\SBJV-REL.F

[g]á = dè'é  
 LK.F/M/S/NS.PST = be.yellow\SBJV

'He looked and it was a "wo..." It was a wasp that is called "woman" that had stung him, a yellow one.'

T51 Yémá nūwǎ ā'a nū-ì rù ìnū-ú rù ā'a nánā-yǎ'u gà tà'ú rù nūwǎ nà-ngǒ-à-ú.

yě-má nūwǎ = ā'a nū = ì rù  
 DIST.NS-ANAPH well.M/N/NS = QUOT 3M/N/NS.SBJ.PCì = be and

í = nū = ú rù = ā'a  
 3ALOC = 3M/N/NS.SBJ.PCì = go.SG and = QUOT

ná = nā = yǎ'u gà = tà'ú rù nūwǎ  
 3M/N/NS.SBJ = 3M/N/NS.OBJ = take LK.N.PST = abiu and well.M/N/NS

nà = ngǒ-à-ú  
 3M/N/NS.SBJ\SBJV = bite-3M/N/NS.OBJ\SBJV-SUB

'So, after that, he went back home and grabbed the abiu fruit, and then he ate it.'

T52 Nūwǎ ērú <gá... > gá... má'è rù tǎu má'è nū-ì, yérú <y... > gá yémá rù ā'a...  
 nò-rū pò'kú nū-ì gá yémá.

nūwǎ ērú <gá = ... > gá = má'è = rù tǎu  
 well.M/N/NS because LK.F/M/S/NS.PST? = LK.F/M/S/NS.PST? = wasp = TOP NEG

má'è nū = ì yérú <y... >  
 wasp 3M/N/NS.SBJ.PCì = be because.PST

gá = yě-má = rù = ā'a nò-'rū pò'kú  
 LK.F/M/S/NS.PST? = DIST.NS-ANAPH = TOP = QUOT 3M-GEN punish

nū = ì gá = yě-má  
 3M/N/NS.SBJ.PCì = be LK.F/M/S/NS.PST = DIST.NS-ANAPH

'Actually, the wasp was not a wasp: it was... it was his punishment.'

T53 Yémá nūwǎ nū-ì gá, ìnū-ú nū-ì gá, tǎu ā'a nà-gūnàgú'ú mārū gá mô'ú'àkù chīgù.

*yě-má nûwá nû = í = gá*  
 DIST.NS-ANAPH well.M/N/NS 3M/N/NS.SBJ.PCì = be = PST  
*í = nû = ú nû = í = gá tǎu = ā'a*  
 3ALOC = 3M/N/NS.SBJ.PCì = go.SG 3M/N/NS.SBJ.PCì = be = PST NEG = QUOT  
*nà = gū-nàgū-ú mārū*  
 3M/N/NS.SBJ\SBJV = reach-on\SBJV-SUB PRF  
*gá = mō'ú-'àkù = chigù*  
 LK.F/M/S/NS.PST = following.day-APPROX = DISTR.SG

‘So, he went back home, and in the days that followed he was no longer [able to] stand up.’

T54 *Ĝy'úchì'ú ā'a nû'ú gá yěmá má'è.*<sup>320</sup>

*ĝy-úchì-ú = ā'a nû-ú gá = yě-má*  
 hurt-genuinely\SBJV-SUB = QUOT 3M-BEN LK.F/M/S/NS.PST = DIST.NS-ANAPH  
*má'è*  
 wasp

‘The wasp [sting] hurt him a lot.’

T55 *Ínà-chî'úwá rù ā'a nárū-châ rù yě'iràwá nà-ûchigū'ú ā'a nû-í gá nà-châ'pū'ú'ú.*

*í = nà = chî-ú-wá = rù = ā'a*  
 3ALOC = 3M/N/NS.SBJ\SBJV = bite\SBJV-REL.NS-ALOC = TOP = QUOT  
*ná = rū = châ rù yě'irà-wá*  
 3M/N/NS.SBJ = PCrū = swell and more.and.more?-ALOC  
*nà = û-chigū-ú = ā'a nû.í*  
 3M/N/NS.SBJ\SBJV = go.SG-DISTR.SG\SBJV-SUB = QUOT CONJ  
*gá = nà = châ-ā'pū'ú-ú*  
 LK.F/M/S/NS.PST = PCrū.3M/N/NS.SBJ\SBJV = swell-knee\SBJV-SUB

‘The spot where it had stung him was swollen and his knees went on swelling more and more.’

T56 *Tòmà gá ĝùnē'ú chigù ā'a nû-í gá rù ĝè'tà'pū'ú chigù, ĝè'tà'pū'ú chigù.*

*tò-mà gá = ĝùnē-ú = chigù = ā'a*  
 other.NS-ANAPH LK.F/M/S/NS.PST = get.light\SBJV-REL.NS = DISTR.SG = QUOT  
*nû = í = gá rù ĝè'tà-ā'pū'ú = chigù*  
 3M/N/NS.SBJ.PCì = be = PST and what.state?-knee = DISTR.SG

<sup>320</sup>*Má'è* ‘wasp’ is here to be understood as /*má'è-chíkà*/ (wasp-spot) ‘wasp sting’.

*gè'tà-ǎpü'ü = chigù*  
 what.state?-knee = DISTR.SG

'Days passed and his knees were [swelling] more and more and more.'

T57 *Mārū tā'úgù nūwǎ gè'tá mārū nà-gù'ü, yèrú ā'a yè'iràwǎ ná-ûchigù nû-î gá nà-chā'ü.*

*mārū tā'ú-gù nūwǎ gè'tá mārū*  
 PRF be.absent\SBJV?-PLOC well.M/N/NS where?.ALOC PRF

*nà = gù-'ü yèrú = ā'a yè'irà-wǎ*  
 3M/N/NS.SBJ\SBJV = reach\SBJV-SUB because.PST = QUOT more.and.more?-ALOC

*ná = û-chigù nû.î*  
 3M/N/NS.SBJ = go.SG-DISTR.SG CONJ

*gá = nà = chā-'ü*  
 LK.F/M/S/NS.PST = PCrū.3M/N/NS.SBJ\SBJV = swell\SBJV-SUB

'So he no longer went anywhere, because he went on swelling more and more.'

T58 “*Áh, pà māmà rù... Pà bú'í rù chā-tǐkú enǎ nû-î kǎ chànà-ñumárú'ü? Nūwǎ ērú ákú chāná-úpétù nû-î?*” *ñā'ü ā'a.*

*áh pà = māmà rù pà = bú'í rù*  
 oh VOC = mommy and VOC = mother and

*chā = tǐkú = enǎ nû = î*  
 1SG.SBJ = what's.the.matter? = on.earth 3M/N/NS.SBJ.PCì = be

*kǎ = chā = nà = ñumá-rú-'ü nūwǎ ērú*  
 so.that = 1SG.SBJ\SBJV = PCnà = this.state-sort\SBJV-SUB well.M/N/NS because

*ákú chā = ná = ú-pétù nû = î*  
 what?.NS 1SG.ACC = 3M/N/NS.SBJ = be.there.SG-across 3M/N/NS.SBJ.PCì = be

*ñā-'ü = ā'a*  
 do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT

“‘Oh, mommy... Mother, what on earth is going on with me that’s causing me to be like this? What could well be happening to me?’” he asked.’

T59 {*Yémá nû-î gá*}, *ñù'gù 'ārù...?*

{*yé-má nû = î = gá*} *ñù'gù = 'ārù*  
 DIST.NS-ANAPH 3M/N/NS.SBJ.PCì = be = PST when? = unlike.before

'So, how long was this going to last...?'

T60 *Yè'iràwǎ ā'a ná-ûchigù ā'a <gá...> gá nò'rū chāǎpü'ü.*







*gá* = <n...>      *nǎ-ǎpǐ'ũ*    *gá* = *Ǟ'̀tǎpǎ*  
 LK.F/M/S/NS.PST = 3M-knee    LK.F/M/S/NS.PST = Ngutapa

*gá* = *nǎ'̀rũ*                      *mǎ-ǎpǐ'ũ-nétà*  
 LK.F/M/S/NS.PST = 3M-GEN    have.a.tumor-knee-SUPERF

'As he [could] no longer stand up, he looked at it: Ngutapa's knees, what looked like tumors in his knees, were translucent.'

T69 {*Nũ*}*ná-dǎu rù ǎ'a*, "Pà bǐ', ká'a chá'ũ nũnà-dǎu!" nǎ'ũ ǎ'a gá nǎ'é'ũ, nǎ'̀rũ mǎmǎ'ũ mé'e.

{*nũ*} = }*ná* = *dǎu*                      *rù* = *ǎ'a*      *pà* = *bǐ'*  
 3M/N/NS.ACC = 3M/N/NS.SBJ = see    and = QUOT    VOC = mother~VOC

*ká'a* = *chá-ũ*      *nũ* = *nà* = *dǎu*  
 let's.see = 1SG-BEN    3M/N/NS.ACC = PCØ.IMP = see

*nǎ-ũ* = *ǎ'a* = *gá*                                      *nǎ-é-ũ*                      *nǎ-̀rũ*  
 do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT = PST?    3M-mother-ACC    3M-GEN

*mǎmǎ-ũ* = *mé'e*  
 mum-ACC = DUB

'He looked at it, and I think he said to his mother, to his mum: "Mother, please have a look at it for me!"'

T70 *Yémá nũ-ĩ rù ǎ'a*, "Ká'a bè, kũ'ũ nũchā-dǎu!" nǎtǎgũ'ũ ǎ'a rù nũtá-dǎu ǎ'a rù nũwǎ tǎ'úrǎ'ũ'ũ ǎ'a gá ǎkũ!

*yé-má*                      *nũ* = *ĩ*                                      *rù* = *ǎ'a*      *ká'a* = *bè*                      *kũ-ũ*  
 DIST.NS-ANAPH    3M/N/NS.SBJ.PCì = be    and = QUOT    let's.see = let's.see    2SG-BEN

*nũ* = *chā* = *dǎu*                                      *nǎ-tǎ-gũ-ũ* = *ǎ'a*                                      *rù*  
 3M/N/NS.ACC = 1SG.SBJ = see    do.thus-3S.SBJ\SBJV-do.thus-SUB = QUOT    and

*nũ* = *tá* = *dǎu* = *ǎ'a*                      *rù*    *nũwǎ*  
 3M/N/NS.ACC = 3S.SBJ = see    and    well.M/N/NS

*tǎ'úrǎ-ũ-ũ* = *ǎ'a*                                      *gá* = *ǎkũ*  
 be.absent\SBJV?-like\SBJV-SUB = QUOT    LK.F/M/S/NS.PST? = what?.NS

'So, she said: "Let's see, I'll have a look at it for you!", she looked at it and it looked like there was nothing in there!'

T71 *Nũ'ĩ ǎ'a nũná-dǎu ǎ'a gá nũmà gá ǎ'a...*

*nũ-ĩ* = *ǎ'a*                                      *nũ* = *ná* = *dǎu* = *ǎ'a*  
 3M-in.one's.turn = QUOT    3M/N/NS.ACC = 3M/N/NS.SBJ = see = QUOT

*gá* = *nũmà* = *gá* = *ǎ'a...*  
 LK.F/M/S/NS.PST = 3M-ANAPH = PST = QUOT

‘He looked at it in his turn and...’

T72 *Nûwǎ ērú nû-’èchq nû-’í gá <nà-... > nà-yūū-’ú nûwǎ chíre gá nûmà gá Gǐ-’tàpǎ rù ã’a nūnà-dǎu-’ú ã’a nû-’í gá <nà-... > nà-ããkū-’ú rù yà-’àgǐ-’ú ã’a gá nǎǎpǐ-’ú gá mārū nū’gù mārē ì-’ú ã’a.*

*nûwǎ ērú nû-’èchq nû-’í*  
well.M/N/NS because 3M-by.contrast CONJ

*gá = <nà = ... >*  
LK.F/M/S/NS.PST = 3M/N/NS.SBJ\SBJV =

*nà = yūū-’ú nûwǎ = chíre*  
3M/N/NS.SBJ\SBJV = be.a.shaman\SBJV-SUB well.M/N/NS = APRF

*gá = nû-mà gá = Gǐ-’tàpǎ = rù = ã’a*  
LK.F/M/S/NS.PST = 3M-ANAPH LK.F/M/S/NS.PST = Ngutapa = TOP = QUOT

*nū = nà = dǎu-’ú = ã’a nû-’í*  
3M/N/NS.ACC = 3M/N/NS.SBJ\SBJV = see\SBJV-SUB = QUOT CONJ

*gá = <nà = ... >*  
LK.F/M/S/NS.PST = 3M/N/NS.SBJ\SBJV =

*nà = ã-ãkū-’ú rù*  
3M/N/NS.SBJ\SBJV = have-content\SBJV-SUB and

*yà = ’à-gǐ-’ú = ã’a*  
PCì.3M/N/NS.SBJ\SBJV = quiver?-PLLOC-PL\SBJV-SUB = QUOT

*gá = nǎ-ǎpǐ-’ú gá = mārū nū’gù = mārē*  
LK.F/M/S/NS.PST = 3M-knee LK.F/M/S/NS.PST = PRF when? = just

*ì = ì-’ú = ã’a*  
PCì = be\SBJV-REL.NS = QUOT

‘Actually, because Ngutapa, for his part, was a shaman, he could see that there was something inside his knees—which had now been in that state for so long<sup>323</sup>—and that they were slightly wiggling at times.’

T73 *Mô-’ú-’àkù chigù, {yěmá-’àkù ã’a} gá mā tā-’úgù nà-gūnàgùgù...<sup>324</sup>*

*mô-’ú-’àkù = chigù {yě-má-’àkù = ã’a} = gá*  
following.day-APPROX = DISTR.SG DIST.NS-ANAPH-MAN = QUOT = PST

*mā = tā-’ú-gù nà = gū-nàgù-gù*  
PRF = be.absent\SBJV?-PLOC 3M/N/NS.SBJ\SBJV = reach-on-CIRC

<sup>323</sup>Exact meaning uncertain.

<sup>324</sup>This utterance lacks a main clause and might be unfinished. The speaker’s daughter briefly interrupts her right after she finishes saying *nà-gūnàgùgù*.

‘Other days passed, and when being in that state he [could] no longer stand up...<sup>325</sup>’

T74 *Tả’úgù ná-ḡūnàgú nũwá gá mārĩ, yê’ìràwá ná-ú.*

*tả’ú-gù*                      *ná = ḡū-nàgú*                      *nũwá = gá*                      *mārĩ*  
 be.absent\SBJV?-PLOC    3M/N/NS.SBJ = reach-on    well.M/N/NS = PST    PRF  
*yê’ìrà-wá*                      *ná = ú*  
 more.and.more    3M/N/NS.SBJ = go.SG

‘He [could] no longer stand up, things were getting worse and worse.’

T75 “*Nũwá tĩákú chí ẹná nũ-ĩ, pà mā, êkq < mòì nà-... > mòì nà-tăchămētũ-rũ-gũ-rà’ũ’ũ?*”

*nũwá*                      *tĩákú = chí = ẹná*                      *nũ = ỉ*  
 well.M/N/NS    what?.NS = IRR = on.earth    3M/N/NS.SBJ.PCì = be  
*pà = mā*                      *êkq*                      *< mòì nà-... >*                      *mòì*  
 VOC = mommy~VOC    so.that ?                      PCnà.3F/M/N/NS.SBJ.SBJV = ?  
*nà = tă-chămētũ-rũ-gũ-rà’ũ’ũ*  
 PCnà.3F/M/N/NS.SBJ.SBJV = 4-sort-PL-like\SBJV-SUB

“‘What on earth could it be, mum? They have the same kind of face as us!’”

T76 “*Tả’rũ’ũ nà-dũũ’ũ ā < chàuápũ’ũwá... > chàuápũ’ũwá chā-chĩ’èwē’ũ,*” *ñâ’ũ*  
*ã’a.*

*tả-’rũ’ũ*                      *nà = dũũ’ũ*                      *ā = < chàu-ápũ’ũ-wá... >*  
 4-like                      3M/N/NS.SBJ\SBJV = be.a.human\SBJV-SUB    LK.NS? = 1SG-knee-ALOC  
*chàu-ápũ’ũ-wá*                      *chā = chĩ’è-wē-è’ũ*  
 1SG-knee-ALOC                      1SG.ACC = be.bad-convenience-INTR.PL\SBJV-REL.NS  
*ñâ’ũ = ã’a*  
 do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT

“‘They are humans like us, these things in my knees that are annoying me!’” he said.’

T77 “*Pà bĩ’, nũwá tĩákú chí nũ-ĩ?*” *ñâ’ũ’ũ ã’a.*

<sup>325</sup>Exact meaning uncertain.

*pà = bí*                      *nûwá*                      *tùákú = chí*                      *nû = í*  
 VOC = mother~VOC    well.M/N/NS    what?.NS = IRR    3M/N/NS.SBJ.PCì = be

*ñâ-á'ù-ú = á'a*  
 do.thus-at.intervals\SBJV-SUB = QUOT

“Mother, what could they be?” he’d ask over and over again.’

T78 *[Yémá nû-í] rù yéà nû-ìàgú á'a gá mārū nûwá nû-í gá tà-yǎè'ú, yérú á'a dùã tûwá tû-í gá gû'émá.*

*[yè-má                      nû = í]                      rù    yé-à*  
 DIST.NS-ANAPH    3M/N/NS.SBJ.PCì = be    and    DIST.ALOC-EXO

*nû = í-à-gú = á'a = gá                      mārū    nûwá                      nû.í*  
 3M/N/NS.SBJ.PCì = quiver?-PLLOC-PL = QUOT = PST    PRF    well.M/N/NS    CONJ

*gá = tà = yǎ-è-ú                      yérú = á'a*  
 LK.F/M/S/NS.PST = 3S.SBJ\SBJV = grow-INTR.PL\SBJV-SUB    because.PST = QUOT

*dùã    tûwá    tû = í                      gá = gû'è-má*  
 human    well.S    4SBJ.PCì = be    LK.F/M/S/NS.PST = DIST.S-ANAPH

‘So, [his knees] were now slightly wiggling at times as these things [in his knees] were growing, given that they were human beings.’

T79 *Tǎ're chigù tû-í, wí'á gá yâtù rù wí'á gá gē'è {gá}.*

*tǎ're = chigù    tû = í                      wí'á    gá = yâtù                      rù    wí'á*  
 two = DISTR.SG    3S.SBJ.PCì = be    one    LK.F/M/S/NS.PST = be.a.male    and    one

*gá = gē-è {gá}*  
 LK.F/M/S/NS.PST = be.a.female\SBJV-REL.S = PST

‘They were two in each [knee], one boy and one girl.’

T80 *Túgūnè-ápü'üwá rù tà yé'gúmarú'ú, náí-ápü'ü, <t'ò'wé... > t'ò'wé-ápü'üwá rù tà yé'gúmarú'ú á'a tì-ú.*

*túgūnè-ápü'ü-wá = rù = tà    yé'gúmarú'ú                      náí-ápü'ü    <t'ò'wé... >*  
 right-knee-ALOC = TOP = ADD    ANAPH.CIRC.PST-like    other.N-knee    left

*t'ò'wé-ápü'ü-wá = rù = tà    yé'gúmarú'ú = á'a*  
 left-knee-ALOC = TOP = ADD    ANAPH.CIRC.PST-like = QUOT

*tì = ú*  
 3S.SBJ.PCì\SBJV = be\SBJV-SUB

‘So they were in the right knee, and so they were in the other knee, the left knee.’

T81 *Nû-í gá mārū tà-yǎè'ú nûwá á'a gá, tà-pūrākúè'ú gá yémà tàá á'a.*

*nû.ĩ* *gá = mārũ* *tà = yǎ-è-’ũ*  
 CONJ LK.F/M/S/NS.PST = PRF 3S.SBJ\SBJV = grow-INTR.PL\SBJV-SUB

*nũwǎ = ā’a = gá* *tà = pūrākú-è-’ũ = gá*  
 well.M/N/NS = QUOT = PST 3S.SBJ\SBJV = work-INTR.PL\SBJV-SUB = PST?

*yé-mà = tàā = ā’a*  
 DIST.ALOC-ANAPH = itself = QUOT

‘Once they had grown up, they [started to] go about their daily business right there.’

T82 *Nû-ĩ gá bè’mà ā’a nũ’ũ nà-dǎú’ũ’ũ ā’a rù, tà-ǎ’pàè-’ũ ā’a gá gēātá, <g̃... > gè’rĩ*  
*ĩtĩ-mũ’ũgũ’ũ ā’a.*

*nû.ĩ* *gá = bè’mà = ā’a* *nũ-’ũ*  
 CONJ LK.F/M/S/NS.PST = quietly = QUOT 3N/NS-ACC

*nà = dǎ-ú’ũ-’ũ = ā’a = rù*  
 3M/N/NS.SBJ\SBJV = see-at.intervals\SBJV-SUB = QUOT = TOP

*tà = ǎ’pà-è-’ũ = ā’a*  
 3S.SBJ\SBJV = twist-hammock-INTR.PL\SBJV-SUB = QUOT

*gá = gē-ǎ-tá* *<g̃... > gè’rĩ*  
 LK.F/M/S/NS.PST = be.a.female-REL.S.PL-COLL bag

*ĩ = tĩ = mũ-’ũ-gũ-’ũ = ā’a*  
 3ALOC = 3S.SBJ.PCĪ\SBJV = weave-out.PL-PL\SBJV-SUB = QUOT

‘Any time [Ngutapa] examined [his knees] carefully, the girls would be twisting *chambira* fiber, they would be weaving bags.’

T83 *{Ā} gá yâtùā́tá ā’a gá tĩ-dũgùnègũ’ũ rù qirú’ũ ĩtĩ-ũ’ũgũ’ũ ā’a.*

*{Ā}* *gá = yâtù-ǎ-tá = ā’a = gá*  
 LK.NS? LK.F/M/S/NS.PST? = be.a.male-REL.S.PL-COLL = QUOT = PST

*tĩ = dũ-gùnè-gũ-’ũ* *rù qĩ-rú-’ũ*  
 3S.SBJ.PCĪ\SBJV = scrape-dart-PL\SBJV-SUB and all?-sort\SBJV?-REL.NS?

*ĩ = tĩ = ĩ-’ũ-gũ-’ũ = ā’a*  
 3ALOC = 3S.SBJ.PCĪ\SBJV = make-out.PL-PL\SBJV-SUB = QUOT

‘As for the boys, they would be sharpening darts and doing all sorts of things.’

T84 *Yémá ā’a nũ-ĩ rù tò gá gũnē’ũ chīgù nũ-ĩ.*

*yê-má = ā'a*                      *nû = ĩ*                      *rù tò*  
 DIST.NS-ANAPH = QUOT 3M/N/NS.SBJ.PCì = be and other.NS  
*gá = gùnē-’ũ = chìgù*    *nû = ĩ*  
 LK.F/M/S/NS.PST = get.light\SBJV-REL.NS = DISTR.SG 3M/N/NS.SBJ.PCì = be

‘So it was, and other days passed.’

T85 “Áh, ákú chí nùà chà-’ũ’ũ <nû-ĩ...> nû-ĩ ñòmá’ũ nùà chì-’ũ’ũ, tâiyà nùà chǎ-  
 gǔú?”

*áh ákú = chí*                      *nù-à*                      *chà = ũ-’ũ*    <nû.ĩ...>  
 oh what?.NS = IRR PROX.ALOC-EXO 1SG.SBJ\SBJV = make\SBJV-SUB CONJ  
*nû.ĩ ñò-má-’ũ*    *nù-à*    *chì = ì-’ũ*  
 CONJ PROX.NS-ANAPH-STATE PROX.ALOC-EXO 1SG.SBJ.PCì\SBJV = be\SBJV-SUB  
*tâiyà*                      *nù-à*    *chǎ = gǔú*  
 be.hungry PROX.ALOC-EXO 1SG.BEN = hurt\SBJV

“‘Alas, why do I have to be here,<sup>326</sup> in the state in which I am, suffering from hunger?’”

T86 “Nâ’chækũ tá’úgù <chàyà-f...> gè’tǎ chàyà-fènũè’ũ,” ñâ’ũ ā’a gá <n...> nû-  
 mà... nǎé’ũ.

*nâ-’chækũ*                      *tá’ú-gù*    <chà = yà = f...>                      *gè’tǎ*  
 3N/NS-because.of be.absent\SBJV?-PLOC 1SG.SBJ\SBJV = AM = where?.ALOC  
*chà = yà = fènũè-’ũ*  
 1SG.SBJ\SBJV = AM = hunt\SBJV-INTR.PL-SUB  
*ñâ-’ũ = ā’a*    *gá = <n...>*                      *nû-mà...*  
 do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT LK.F/M/S/NS.PST = 3M-ANAPH  
*nǎ-é-’ũ*  
 3M-mother-ACC

“‘It is because of them<sup>327</sup> that I [can]not go hunting anywhere,” he said, uh... to his mother.’

T87 *Yê má ā’a nû-ĩ rù {ná-}yû’nàgú tá’a [ā’a gá], “[Nû]chā-ũ tá nû-ĩ chàyà-āiyā’ũ!”*  
*ñâ’ũ ā’a {nû-ĩ}.*<sup>328</sup>

<sup>326</sup>Pragmatic meaning uncertain.

<sup>327</sup>The exact referent Ngutapa is blaming here is unclear. It could be either his knees, the children inside his knees, or even his general situation.

<sup>328</sup>Assuming this *nû-ĩ* is correctly transcribed, its function is unclear.

*yě-má = ā'a nû = ĩ rù*  
 DIST.NS-ANAPH = QUOT 3M/N/NS.SBJ.PCì = be and

{*ná = }yû'-nàgú = tá'a = [ā'a = gá]*  
 3M/N/NS.SBJ = jump-on = FRUSTR = QUOT = PST

[*nû = ]chā = ũ = tá nû.ĩ chà = yà = āiyā- 'ũ*  
 3M/N/NS.ACC = 1SG.SBJ = make = FUT CONJ 1SG.SBJ\SBJV = AM = bathe\SBJV-SUB

*ñâ- 'ũ = ā'a {nû = ĩ}*  
 do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT 3M/N/NS.SBJ.PCì = be

'So, he tried to stand on his feet and said: "I'm going to try to go and take a bath!"'

T88 *Mārũ ñù're nûwǎ gá gùnē'ũ ā'a nû-ĩ gá tá'ugù gè'tǎ nà-ũ'ũ rù āiyàwǎ ā'a ná-ũ rù ā'a nûēmà'ũ yànà-... < m'ǎ'kúchìg... > m'ǎ'kú... -kùchíàkù ā'a tūrèwǎ ná-ũ rù yě'má ā'a nû-gũ ā'a.*

*mārũ ñù're nûwǎ*  
 PRF how.much? well.M/N/NS

*gá = gùnē- 'ũ = ā'a nû = ĩ*  
 LK.F/M/S/NS.PST = get.light\SBJV-REL.NS = QUOT 3M/N/NS.SBJ.PCì = be

*gá = tá'ú-gù gè'tǎ*  
 LK.F/M/S/NS.PST = be.absent\SBJV?-PLOC where?.ALOC

*nà = ũ- 'ũ rù āiyà-wǎ = ā'a*  
 3M/N/NS.SBJ\SBJV = go.SG\SBJV-SUB and bathe-ALOC = QUOT

*ná = ũ rù = ā'a nû-ēmà'ũ*  
 3M/N/NS.SBJ = go.SG and = QUOT 3M-despite.one's.condition

*yà = nà = < m'ǎ'-kú = chìg... > m'ǎ'-kú...*  
 AM = PCrũ.3M/N/NS.SBJ\SBJV = bend.down-? bend.down-?

*-kùchí-àkù = ā'a tūrè-wǎ ná = ũ rù*  
 -in.SG-MAN = QUOT dock-ALOC 3M/N/NS.SBJ = go.SG and

*yě'-má = ā'a nû = gũ = ā'a*  
 DIST.PLOC-ANAPH = QUOT 3M/N/NS.SBJ.PCì = fall = QUOT

'It had now been many days that he [could] not go anywhere, he went to take a bath, he walked doubled over in pain to the dock regardless of his condition, and there he tripped up.'

T89 *Yà-gũ'ũ ā'a gá nò'táá.*

*yà = gũ- 'ũ = ā'a = gá nò'táá*  
 PCì.3M/N/NS.SBJ\SBJV = fall.SG\SBJV-SUB = QUOT = PST outright

'He fell down badly.'



T90 *Nû-yũáchí nûwá nû-í gá yà-gũ'ũ á'a gá, <nà-... > yà-yũáchíyàně á'a gá itàyà-y'ũ á'a gá gũ'è-má nă'ākùã.*

*nû = yũ-áchí*                      *nûwá*                      *nû.í*  
 3M/N/NS.SBJ.PCī = die-TEL    well.M/N/NS    CONJ

*gá = yà = gũ-'ũ = á'a = gá*  
 LK.F/M/S/NS.PST = PCī.3M/N/NS.SBJ\SBJV = fall.SG\SBJV-SUB = QUOT = PST

*<nà = ... >*                      *yà = yũ-áchí-yàně = á'a = gá*  
 3M/N/NS.SBJ\SBJV =    PCī.3M/N/NS.SBJ\SBJV = die-TEL-SIMULT.CIRC = QUOT = PST

*ì = tà = yà = y'ũ-'ũ = á'a*  
 3PLOC = 3S.SBJ\SBJV = AM = fall.PL\SBJV-SUB = QUOT

*gá = gũ'è-má*                      *nă-'ākùã*  
 LK.F/M/S/NS.PST = DIST.S-ANAPH    3M-children

'He fainted because of the shock, and as he fainted his children fell out to the ground.'

T91 *Tà-ũ'ũè'ũ tûwá á'a rù nà-yũyáně gá nû-mà á'a gá tà-ũ'ũè'ũ á'a.*

*tà = ũ-'ũ-è-'ũ*                      *tûwá = á'a*                      *rù*  
 3S.SBJ\SBJV = run-?-INTR.PL\SBJV-SUB    well.S = QUOT    and

*nà = yũ-yáně*                      *gá = nû-mà = á'a = gá*  
 3M/N/NS.SBJ\SBJV = die-SIMULT.CIRC    LK.F/M/S/NS.PST = 3M-ANAPH = QUOT = PST

*tà = ũ-'ũ-è-'ũ = á'a*  
 3S.SBJ\SBJV = run.PL-?-INTR.PL\SBJV-SUB = QUOT

'They [started to] run around all over the place, they ran around while he was unconscious.'

T92 *Yê-má nû-í rù, "Pà bù'ĩ, yí'è-má mā yà chàu-'ākùã!" rù á'a năpę'e á'a tî-ũètānũ'ũ á'a gá bùq̄tá á'a {yěq̄ tàā}, kûèchātānũ'ũ á'a.*

*yê-má*                      *nû = í*                      *rù*    *pà = bù'ĩ*  
 DIST.NS-ANAPH    3M/N/NS.SBJ.PCī = be    and    VOC = mother

*yí'è-má = mā*                      *yà = chàu-'ākùã*                      *rù = á'a*                      *nă-pę'e = á'a*  
 MED.S-ANAPH = precisely    LK.N/S = 1SG-children    and = QUOT    3M-front = QUOT

*tî = ũ-ètānũ-'ũ = á'a*  
 3S.SBJ.PCī\SBJV = run.PL-DISTR.PL\SBJV-SUB = QUOT

*gá = bù-ã-tá = á'a*                      *{yě-ã = tàā}*  
 LK.F/M/S/NS.PST = be.young-REL.S.PL-COLL = QUOT    DIST.ALOC-ANAPH? = itself

*kû-èchà-tānũ-'ũ = á'a*  
 laugh-PERSIST-DISTR.PL\SBJV-SUB = QUOT

‘And then [Ngutapa said]: “Mother, here are my children!” and the children were all there running right in front of him, they all kept laughing all the time.’

T93 <Ngēmà n... > <Gû'émá [tì-ì'ú̃ ā'a]... > Gû'émá tì-ì'ú̃ ā'a gá tûmámá'a yě'ú̃  
yěà nà-wǎgū'è nû-ì gá nò'rū pò'kú yì-ì'ú̃ ā'a, {yěmáka} nû-ì gá nû'cháámá ā'a  
nà-ǎ'ākū'ú̃.

<ngē-mà n... > <gû'è-má [tì=ì-ú̃=ā'a]... >  
MED.NS-ANAPH DIST.S-ANAPH 3S.SBJ.PCÌ\SBJV = be\SBJV-SUB = QUOT

gû'è-má tì=ì-ú̃=ā'a  
DIST.S-ANAPH 3S.SBJ.PCÌ\SBJV = be\SBJV-SUB = QUOT

gá = tû-mà-má'a yě-ú̃ yě-à  
LK.F/M/S/NS.PST = 3S-ANAPH-COM DIST.NS-ACC DIST.ALOC-EXO

nà = wǎgū-è nû.ì gá = nò-'rū pò'kú  
3M/N/NS.SBJ\SBJV = do\SBJV-REL.NS CONJ LK.F/M/S/NS.PST = 3M-GEN punish

yì = ì-ú̃ = ā'a {yě-má-ka}  
PCÌ.3F/M/N/NS.SBJ.SBJV = be\SBJV-SUB = QUOT DIST.NS-ANAPH-CAUSE

nû = ì gá = nû-'cháámá = ā'a  
3M/N/NS.SBJ.PCÌ = be LK.F/M/S/NS.PST = 3M-inconveniently = QUOT

nà = ǎ'ākū-ú̃  
3M/N/NS.SBJ\SBJV = have.a.child\SBJV-SUB

‘That’s... It was... It was because of them that he had been in that state, for such had been his punishment, that’s why it happened to him, of all people, to get pregnant.’

T94 Ğè'tǎ mārē nà-ǎ'ākū'ú̃, nǎǎpū'üwǎ nà-ǎ'ākū'ú̃ gá Ğù'tàpǎ.

ğè'tǎ = mārē nà = ǎ'ākū-ú̃ nǎ-ǎpū'ü-wǎ  
where?.ALOC = just 3M/N/NS.SBJ\SBJV = have.a.child\SBJV-SUB 3M-knee-ALOC

nà = ǎ'ākū-ú̃ gá = Ğù'tàpǎ  
3M/N/NS.SBJ\SBJV = have.a.child\SBJV-SUB LK.F/M/S/NS.PST = Ngutapa

‘Ngutapa got pregnant in an absurd part [of his body], he got pregnant in his knees.’

T95 Tûwǎ ā'a útá-chôóchí rù ā'a í'gù ā'a <tàrū-ch... > [tū]ná-mügú rù mô'ú̃'àkù  
nûwǎ nû-ì.. rù yà'nà-úkū'ú̃ ā'a tû'nà gá <gû'èm... > gûāmátá, nǎ'ākūǎ.



*nǎ-é-nà = ǎ'a*      *ná = kà*      *rù fènūē-wǎ = tá*  
 3M-mother-DAT = QUOT   3M/N/NS.SBJ = ask   and   hunt-ALOC = FUT  
*chā = ú*  
 1SG.SBJ = go.SG

'He consulted with his mother: "I'm going to go hunting!"'

T99 "Ūpā chà-mé'gù íchà-úú'ù'úwǎ tá nū-í tá ì chàyà-fènūè'ú."

*ŭpā*      *chà = mé-'gù*  
 formerly   1SG.SBJ\SBJV = be.good-CIRC

*í = chà = ú-ú'ù-ú'úwǎ = tá*  
 3ALOC = 1SG.SBJ\SBJV = go.SG-at.intervals\SBJV-REL.NS-ALOC = FUT

*nū = í = tá*      *ì = chà = yà = fènūè-'ú*  
 3M/N/NS.SBJ.PCì = be = FUT   LK.NS = 1SG.SBJ\SBJV = AM = hunt\SBJV-SUB

"I'll go and hunt where I used to often go when I was doing well."

T100 "Ómé tá nèchānā-fè."

*ómé = tá*      *nè = chā = nā = fè*  
 brown.woolly.monkey = FUT   3M.PART.OBJ = 1SG.SBJ = 3M/N/NS.OBJ = shoot

"I'll shoot some brown woolly monkeys."

T101 "Óméārū fègùwǎ tá chā-ú," nā'ú ǎ'a.

*ómé-ārū*      *fè-gù-wǎ = tá*      *chā = ú*  
 brown.woolly.monkey-GEN   shoot-PLURAC-ALOC = FUT   1SG.SBJ = go.SG

*nā-'ú = ǎ'a*  
 do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT

"I'll go woolly-monkey-hunting," he said.'

T102 *Yěmá ǎ'a nū-í gá, ná-chūtāmārē ǎ'a gá, nū'gù íkù-gù gá ǒ' gá Ğù'tàpǎ...?*

*yě-má = ǎ'a*      *nū = í = gá*  
 DIST.NS-ANAPH = QUOT   3M/N/NS.SBJ.PCì = be = PST

*ná = chūtā-mārē = ǎ'a = gá*      *nū'gù*  
 3M/N/NS.SBJ = get.dark-just = QUOT = PST   when?

*í = kù = gù*      *gá = ǒ'*  
 3ALOC = 2SG.SBJ\SBJV = reach\SBJV   LK.F/M/S/NS.PST = old.man

*gá = Ğù'tàpǎ*  
 LK.F/M/S/NS.PST = Ngutapa

'So it was, until night fell, and Old Ngutapa was not coming [back].'

T103 *Nù'gù 'ārù...?*

*nù'gù = 'ārù*  
when? = unlike.before

'How long was this going to last...?'

T104 *Nǎ'ākùǎ gá yǒ'ní ā'a gá <tà-nǎ...> nǎpátāgú ítārū-chô'ú.*

*nǎ-'ākùǎ = gá yǒ'ní = ā'a = gá <tà = nǎ...> nǎ-pátā-gú*  
3M-children = PST meanwhile = QUOT = PST 3S.SBJ\SBJV = 3M- 3M-house-PLOC

*í = tà = rū = chô-'ú*  
3ALOC = 3S.SBJ\SBJV = PCrū = be.there.PL\SBJV-SUB

'His children, during that time, were... they stayed in his house.'

T105 *Chùtāmārè'ú nūwá, ġǐrú ā'a gá nà-àunē'ú.*

*chùtā-mārè-'ú nūwá ġǐrú = ā'a = gá*  
get.dark-just\SBJV-SUB well.M/N/NS suddenly = QUOT = PST

*nà = àu-ànē-'ú*  
3M/N/NS.SBJ\SBJV = be.evil-space\SBJV-SUB

'And so night fell, suddenly the weather got bad.'

T106 *"Pà... bú'í, nūwá ġè'tá tá-ú <yá tōnrū...> yá tōnátū ēkq tà-tá'ú'ú rù tá'úgù ítà-ġù'ú?" nā'ú ā'a gá <bū'ú...> <bū'ú...> bū'ú ā'a nū-í gá tūnà-kàq'úè'ú gá nāekū.*

*pà = bú'í nūwá ġè'tá tá = ú <yá = tō-'rū...>*  
VOC = mother well.M/N/NS where?.ALOC 3S.SBJ = go.SG LK.M/S = 1PL-GEN

*yá = tō-nátū ēkq tà = tá'ú-'ú rù*  
LK.M/S = 1PL-father so.that 3S.SBJ\SBJV = be.absent\SBJV-SUB and

*tá'ú-gù í = tà = ġù-'ú*  
be.absent\SBJV?-PLOC 3ALOC = 3S.SBJ\SBJV = reach\SBJV-SUB

*nā-'ú = ā'a gá = <bū-'ú...>*  
do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT LK.F/M/S/NS.PST = be.young\SBJV-REL.NS

*<bū-'ú...> bū-'ú = ā'a nū.í*  
be.young\SBJV- be.young\SBJV-REL.NS = QUOT CONJ

*gá = tū = nà = kà-q'ú-è-'ú*  
LK.F/M/S/NS.PST = 3S.ACC = 3M/N/NS.SBJ\SBJV = ask-at.intervals-INTR.PL\SBJV-SUB

*gá = nā-ekū*  
LK.F/M/S/NS.PST = 3N/NS-grandmother

“Mother,<sup>330</sup> but where is our father gone? He’s not there and he’s not coming [back]!” said the children, who kept asking the grandmother.’

T107 *Tá’úgù nûwá ā’a nūtà-ngǎ’ú-’ú ā’a gá nâekū rù “tāu’échigù”, “ǎu-ègù”, “tāuqmùkū”, “chīgùpùtā” {?}*<sup>331</sup> *nǎtàngù’ú ā’a gá námá’a tû’ú tǎ-ngǎ’ú-’ú ā’a <gá gû’èmát... > gá bûǎtá ā’a.*<sup>332</sup>

*tá’ú-gù* *nûwá = ā’a*  
be.absent\SBJV?-PLOC well.M/N/NS = QUOT

*nū = tǎ = ngǎ’ú-’ú = ā’a*  
3M/N/NS.ACC = 3S.SBJ\SBJV = answer\SBJV-SUB = QUOT

*gá = nâ-ekū* *rù* *tāu’échigù* *ǎu-ègù*  
LK.F/M/S/NS.PST = 3N/NS-grandmother and twisted.broom stay?-INV

*tāu-qmù-kū* *chīgù-pùtā* *{?}*  
be.ash.colored-down\SBJV-REL.M black.agouti-tooth

*nǎ-tǎ-gù-’ú = ā’a = gá* *ná-má’a* *tû-’ú*  
do.thus-3S.SBJ\SBJV-do.thus-SUB = QUOT = PST? 3N/NS-COM 3S-ACC

*tǎ = ngǎ’ú-’ú = ā’a* *<gá = gû’è-mát... >*  
3S.SBJ\SBJV = answer\SBJV-SUB? = QUOT LK.F/M/S/NS.PST = DIST.S-ANAPH-

*gá = bû-ǎ-tá = ā’a*  
LK.F/M/S/NS.PST = be.young-REL.S.PL-COLL = QUOT

‘The grandmother would never answer them [clearly], she’d say [words like] “the twisted *chambira* broom”, “the wrung one”, “the one with ash colored down”, “the black agouti tooth”,<sup>333</sup> that’s how she would answer the... the children.’

T108 *[[Yé’ákù] ā’a rù] nû’gù ’ǎrù nūtí-ū ā’a mêtà...? Tá’úgù ā’a nūtí-ù’ú.*

*[[yé-’ákù] = ā’a* *rù] nû’gù = ’ǎrù*  
DIST.ALOC-APPROX = QUOT and when? = unlike.before

*nū = tû = ū = ā’a* *mêtà* *tá’ú-gù = ā’a*  
3M/N/NS.ACC = 3S.SBJ.PCĪ = say = QUOT well be.absent\SBJV?-PLOC = QUOT

*nū = tī = ù-’ú*  
3M/N/NS.ACC = 3S.SBJ.PCĪ\SBJV = say\SBJV-SUB

<sup>330</sup>They are in fact addressing their grandmother here—not their mother.

<sup>331</sup>Inaudible.

<sup>332</sup>The exact syntactic structure from *tāu’échigù* to the end of this utterance is unclear.

<sup>333</sup>These are periphrastic ways to refer euphemistically to jaguars (in daily Tikuna *âi*) without taking the risk of being understood and potentially attacked by them (see (T116–T119) below).

‘Such was the situation<sup>334</sup>, and when did she finally say things clearly...?  
At no point did she say it [clearly].’

T109 *Nǔ’ [nàrū-]ĩnūè’ú<sup>335</sup> nūwǎ ā’a gá nūmà.*

*nǔ’* [nà = rū = ]ĩnū-è-’ú  
PROX.PLOC 3M/N/NS.SBJ\SBJV = PCrū = hear-INTR.PL\SBJV-SUB  
*nūwǎ = ā’a* *gá = nū-mà*  
well.M/N/NS = QUOT LK.F/M/S/NS.PST = 3M-ANAPH

‘So [the children] started to listen [to the surrounding sounds] everywhere.’

T110 “*Yí’emá tōnátū rù, mārū nū-ĩ ákú tū-úpétū’ú tūwǎ tá’úgù íta-ǵū rù chūtāmārè.*”

*yí’è-má* *tō-nátū = rù* *mārū* *nū = ĩ* *ákú*  
MED.S-ANAPH 1PL-father = TOP PRF 3M/N/NS.SBJ.PCì = be what?.NS  
*tū = ú-pétū-’ú* *tūwǎ tá’ú-gù*  
3S.ACC = be.there.SG-across\SBJV-SUB well.S be.absent\SBJV?-PLOC  
*ĩ = tá = ǵū* *rù chūtā-mārè*  
3ALOC = 3S.SBJ = reach and get.dark-just\SBJV

“‘Something has happened to our father: he hasn’t come [back] while night has fallen.’”

T111 *Mô’ú’ákú ā’a, nū’gù ’ārù...?*

*mô’ú-’ákú = ā’a* *nū’gù = ’ārù*  
following.day-APPROX = QUOT when? = unlike.before

‘The next day [came], how long was this going to last...?’

T112 *Pénūànē’ú ā’a gá āēmàkū ā’a gá, mā nà-yǎuànègù, chūtà’ú.*<sup>336</sup>

*pé-nū-ànē-’ú = ā’a* *gá = āēmàkū = ā’a = gá*  
clap-?-space\SUB = QUOT LK.F/M/S/NS.PST = lightning = QUOT = PST  
*mā = nà = yǎu-ànè-gù* *chūtà-’ú*  
PRF = 3M/N/NS.SBJ\SBJV = be.blue/green-space-CIRC get.dark\SBJV-SUB

<sup>334</sup>Exact meaning unclear.

<sup>335</sup>The combination /nà = rū = / ‘3M/N/NS.SBJ\SBJV = PCrū =’ is a rare variant for the more regular morpheme /nà = / ‘PCrū.3M/N/NS.SBJ\SBJV’, with about ten instances in my corpus (see note 271, p.441).

<sup>336</sup>The exact syntactic structure of this utterance is unclear.

‘Thunderbolts were crashing overhead, and when it became late, night fell.’

T113 *Tá’úgù ùt-ǵù’ú̃ ā’a gá nánátū̃.*

*tá’ú-gù*                      *ǵ = tà = ǵù-’ú̃ = ā’a*  
 be.absent\SBJV?-PLOC 3ALOC = 3S.SBJ\SBJV = reach\SBJV-SUB = QUOT  
*gá = ná-nátū̃*  
 LK.F/M/S/NS.PST = 3N/NS-father

‘Their father did not come [back].’

T114 *Tá’a rū-kàq’ú̃ gá náé,<sup>337</sup> nâekū̃’ú̃ ā’a ná-kàq’ú̃gú̃.*

*Tá’a = rū = kà-q’ú̃*                      *gá = náé,*  
 FRUSTR = PCRū = ask-at.intervals  LK.F/M/S/NS.PST? = 3N/NS-mother  
*nâ-ekū̃-’ú̃ = ā’a*                      *ná = kà-q’ú̃-gú̃*  
 3N/NS-grandmother-ACC = QUOT  3M/N/NS.SBJ = ask-at.intervals-PL

‘[They] kept trying to ask the mother,<sup>338</sup> they kept asking the grandmother.’

T115 *Tá’úgù tūwǎ ā’a mēà nū̃t-ù’ú̃ nū̃-ǐ gá mārū̃ âi ā’a tū̃-ngó’ú̃.*

*tá’ú-gù*                      *tūwǎ = ā’a*      *mēà*  
 be.absent\SBJV?-PLOC  well.S = QUOT  well  
*nū̃ = t-ù-’ú̃*                      *nū̃-ǐ*      *gá = mārū̃*  
 3M/N/NS.ACC = 3S.SBJ.PCĪ\SBJV = say\SBJV-SUB  CONJ  LK.F/M/S/NS.PST = PRF  
*âi = ā’a*                      *tū̃ = ngó-’ú̃*  
 wild.felid = QUOT  3S.ACC = bite\SBJV-SUB

‘But she would never say clearly that a jaguar had eaten him up.’

T116 *Nūwǎ ēgá “Âi tū̃nâ-ngo!” nǎgū̃gú̃ rù ā’a, yê’gúmá tàā <{nēnâ-ñ}... > ǐnâ-yú’âchí gá âi rù <n... > nūwǎ tū̃nâ-ngo.*

*nūwǎ*                      *ēgá*      *âi*                      *tū̃ = ná = ngo*  
 well.M/N/NS  if  wild.felid  3S.ACC = 3M/N/NS.SBJ = bite  
*nǎ-gū̃-gú̃ = rù = ā’a*                      *yê’gúmá = tàā*  
 do.thus-do.thus.SBJV-CIRC = TOP = QUOT  ANAPH.CIRC.PST = itself

<sup>337</sup>This segment, whose phonological transcription I have thoroughly verified, is unclear from a morphosyntactic perspective. Its morphosyntactic structure is in fact likely to be stylistically highly marked, and therefore to be very rare in spontaneous speech.

<sup>338</sup>Here again, a word meaning ‘mother’ is used to refer to the children’s *grandmother* (see (T106) above).



< {nĕ = ná = ñ}... > ĭ = ná = yû' - áchí  
 CTRPET.3ALOC = 3M/N/NS.SBJ = 3ALOC = 3M/N/NS.SBJ = jump-TEL

gá = âi rû < n... > núwǎ  
 LK.F/M/S/NS.PST = wild.felid and well.M/N/NS

tū = ná = ngo  
 4ACC = 3M/N/NS.SBJ = bite

'Indeed, if you said "A jaguar ate him up!", the jaguar would instantly jump in and eat you up.'

T117 *Núwǎ ngēmàkq nû-ĭ gá tǎ'úàkù < {ĭ-}... > nǎégà'ũ ì-únétā'ũ gá nú'kúmá gá âi.*

núwǎ ngē-mà-kq nû = ĭ  
 well.M/N/NS MED.NS-ANAPH-CAUSE 3M/N/NS.SBJ.PCì = be

gá = tǎ'ú-àkù < {ĭ = }... > nǎ-égà-'ũ  
 LK.F/M/S/NS.PST = be.absent\SBJV?-MAN PCØ.SBJV = 3M-name-ACC

ì = ù-nétā-'ũ gá = nú'kúmá  
 PCØ.SBJV = say-SUPERF\SBJV-SUB LK.F/M/S/NS.PST = past.time

gá = âi  
 LK.F/M/S/NS.PST = wild.felid

'That's why you couldn't say the jaguar's name in ancient times.'

T118 *Nâ'wqē nû-ĭ gá tûmàrú'ũ "chĭgùpùtā", {?} "tāuqmùkū" nǎgù'ũ ā'a.*

nâ-'wqē nû.ĭ gá = tû-mà-rú'ũ chĭgù-pùtā {?}  
 3N/NS-APPREC CONJ LK.F/M/S/NS.PST = 3S-ANAPH-like black.agouti-tooth

tāu-qmù-kū nǎ-gù-'ũ = ā'a  
 be.ash.colored-down\SBJV-REL.M do.thus-do.thus.SBJV-SUB = QUOT

'You had to say "the black agouti tooth", "the one with ash colored down" like her.'

T119 *Yēmáàkù ā'a nû-ĭ gá nú'kúmá gá tànā-ù'ũ gá âi ā'a, tǎu tūnà-ngó'úkq, núwǎ ērú gá "âi" nǎgùgú rù ā'a, tǎ'chì ná-âi, núwǎ ērú ngēmàkq nû-ĭ "âi" yì-ĭ'ũ.*

yē-má-àkù = ā'a nû = ĭ gá = nú'kúmá  
 DIST.NS-ANAPH-MAN = QUOT 3M/N/NS.SBJ.PCì = be LK.F/M/S/NS.PST = past.time

gá = tà = nā = ù-'ũ  
 LK.F/M/S/NS.PST = 3S.SBJ\SBJV = 3M/N/NS.OBJ = say\SBJV-SUB

gá = âi = ā'a tǎu  
 LK.F/M/S/NS.PST = wild.felid = QUOT NEG

tū = nà = ngó-'ũ-kq núwǎ ērú = gá  
 3S.ACC = 3M/N/NS.SBJ\SBJV = bite\SBJV-SUB-CAUSE well.M/N/NS because = if

*âi nǎ-gü-gú = rù = ā'a tă-'chì*  
 wild.felid do.thus-do.thus.SBJV-CIRC = TOP = QUOT 4-with.hate.toward

*ná = âi nûwǎ erú ngē-mà-kq*  
 3M/N/NS.SBJ = hate well.M/N/NS because MED.NS-ANAPH-CAUSE

*nû = ĩ âi yì = ì-'ü*  
 3M/N/NS.SBJ.PCì = be wild.felid PCì.3F/M/N/NS.SBJ.SBJV = be\SBJV-SUB

‘That’s how people would call the jaguar in ancient times so that it would not eat them up, because if you say “jaguar” (Tik. *âi*), it gets mad at you, and indeed that’s why [his name] is “get mad” (Tik. *âi*).’

T120 *Yěmá nû-ĩ rù yě'âkù ā'a tà-chópétü'ü, ĩ'pé[mágù] ā'a, yěà ā'a tà-pǎè'ü tûwǎ ā'a yǒ'ní gá, pā'à tá-yǎē gá bûātá.*

*yě-má nû = ĩ rù yě'-âkù = ā'a*  
 DIST.NS-ANAPH 3M/N/NS.SBJ.PCì = be and DIST.PLOC-APPROX = QUOT

*tà = chó-pétü-'ü ĩ'pé[má-gù] = ā'a*  
 3S.SBJ\SBJV = be.there.PL-across\SUB edge.of.the.jungle-PLOC = QUOT

*yě-à = ā'a tà = pǎ-è-'ü tûwǎ = ā'a*  
 DIST.ALOC-EXO = QUOT 3S.SBJ\SBJV = be.nubile-INTR.PL\SBJV-SUB well.S = QUOT

*yǒ'ní = gá pā'à tá = yǎ-ē*  
 meanwhile = PST be.quick 3S.SBJ = grow-INTR.PL

*gá = bû-ǎ-tá*  
 LK.F/M/S/NS.PST = be.young-REL.S.PL-COLL

‘So, they would spend their time over there, at the edge of the jungle, during that time the girls reached marriageable age, the children were growing fast.’

T121 *Üünē'ü ì... bû'ügú nûwǎ ā'a nû-ĩ rù pā'à ā'a ná-yǎē.*

*üünē-'ü ì = bû-'ü-gú*  
 be.supernatural\SBJV-REL.NS LK.NS = be.young\SBJV-REL.NS-PL

*nûwǎ = ā'a nû = ĩ rù pā'à = ā'a*  
 well.M/N/NS = QUOT 3M/N/NS.SBJ.PCì = be and be.quick = QUOT

*ná = yǎ-ē*  
 3M/N/NS.SBJ = grow-INTR.PL

‘They are supernatural children so they grow up fast.’

T122 *Ná-ǎ-tü'ü-ē.*

*ná = ǎ-tü'ü-ē*  
 3M/N/NS.SBJ = be.pubescent-INTR.PL

‘[The boys] reached maturity.’

T123 *Ītūgù ā’a <chó... > chópétù{’ù}’ù ā’a, iǎ’emá’a.*

*Ī-ātū-gù = ā’a <chó... >*  
building-yard-PLOC = QUOT be.there.PL

*chó-pétù{-’ù}-’ù = ā’a i-ǎ’è-má’a*  
be.there.PL-across-out.PL?\SBJV-SUB = QUOT be.small-mind-COM

‘They would spend their time playing children’s games in the immediate surroundings of the *maloca*.’

T124 *{Gá} būā <nî-ĭ... > ñumá tàā wōè nūwǎ nî-ĭ tì-gěǎ’è-è’ù, iǎ’emá’a ā’a nū nētànà-... ù’ù ā’a rù yě’gúmá’àkù [tàā] tūmà-nátū’ù tà-fa-áchítānū’ù.*

*{gá = }bū-ā <nî.ĭ... >*  
LK.F/M/S/NS.PST? = be.young-REL.S.PL CONJ?

*ñumá = tàā = wōè nūwǎ nî.ĭ*  
present.time = itself = from.the.outset well.M/N/NS CONJ

*tì = gě-ǎ’è-è-’ù i-ǎ’è-má’a = ā’a*  
3S.SBJ.PCì\SBJV = not.have-mind-INTR.PL\SBJV-SUB be.small-mind-COM = QUOT

*nū nē = tà = nà = ù-’ù = ā’a rù*  
PROX.ALOC CTRPET.3ALOC = 3S.SBJ\SBJV = PCnà = run.PL\SBJV-SUB = QUOT and

*yě’gúmá-’àkù[ = tàā] tū-mà-nátū-’ù*  
ANAPH.CIRC.PST-APPROX = itself 3S-ANAPH-father-ACC

*tà = fa-áchítānū-’ù*  
3S.SBJ\SBJV = know-TEL-DISTR.PL\SBJV-SUB

‘Given that up to these days children are by nature careless, they would run around everywhere playing children’s games but at the same time they would recall their father.’

T125 *Dū’wǎ ā’a gá, nî-ĭ gá tūmà-ekū’ù ā’a tà-kàg’ù-èchā’ù, “ <Yèà ì... àkú kánǎ... > Chàunētū wá’í ì yèà rù nà-nègù ká’ù’ù rù kú ngēmà wá’í pē-tū’u!” ñátàgù’ù ā’a nū’ù.*

*dū’wǎ = ā’a = gá nî.ĭ*  
EVENTUALLY = QUOT = PST CONJ

*gá = tū-mà-ekū-’ù = ā’a*  
LK.F/M/S/NS.PST = 3S-ANAPH-grandmother-ACC = QUOT

*tà = kà-g’ù-èchā-’ù <yè-à ì = ...*  
3S.SBJ\SBJV = ask-at.intervals-PERSIST\SBJV-SUB DIST.NS-EXO LK.NS =

*ákú = káná... > chàu-nētū wá'í ì = yě-à rù*  
 what?.NS = was.it.again 1SG-plant CONTR LK.NS = DIST.NS-EXO and  
*nâ-àné-gù ká'ú-'ú rù kú = ngē-mà wá'í*  
 3N/NS-space-PLOC lean\SBJV-SUB and come.on = MED.NS-ANAPH CONTR  
*pē = tū'u ñá-tà-gù-'ú = ā'a nū-'ú*  
 2PL.SBJ = \SBJV do.thus-3S.SBJ\SBJV-do.thus-SUB = QUOT 3M-ACC

'In the end, because they just wouldn't stop asking their grandmother, she said to them: "Over there is, uh... Listen, that tree over there is mine: it is leaning towards the field,<sup>339</sup> wouldn't you rather cut it down?"

T126 *Nūwá ā'a, "Ngǔ!"*

*nūwá = ā'a ngǔ*  
 well.M/N/NS = QUOT okay

'And [they answered:] "All right!"'

T127 *"Mái', mái' mái', <ngē... > ngǐ'ā rù <ngē-mà... > ngē-mà ā'a<sup>340</sup> tūmànētū yà nô'ě tū'ú {yà-rù-}tū'u!"*

*mái' (x3) <ngē... > ngǐ'ā rù <ngē-mà... >*  
 sibling~VOC (x3) MED.NS- let's.go and  
*ngē-mà = ā'a tū-mà-nētū yà = nô'ě tū-'ú*  
 MED.NS-ANAPH = QUOT 3S-ANAPH-plant LK.N/S = old.woman 3S-BEN  
*{yà = rù = }tū'u*  
 AM = PCrū\SBJV = fell\SBJV

"Brother, hey brother, let us... let's go and cut down grandmother's tree for her, like she said!"

T128 *"Ñátàgù'ú nūwá ngē'gùmá ā'a tá tāmá'a nūtū-ū nū-ĩ tà-tùkú'ú yá tǎnátū," ñá'ú {ā'a}.*

*ñá-tà-gù-'ú nūwá ngē'gùmá = ā'a = tá*  
 do.thus-3S.SBJ\SBJV-do.thus-SUB well.M/N/NS ANAPH.CIRC = QUOT = FUT  
*tǎ-má'a nū = tū = ū nū.ĩ*  
 4-COM 3M/N/NS.ACC = 3S.SBJ.PCī = say CONJ

<sup>339</sup>This interpretation of *nâ-àné-gù ká'ú-'ú* is uncertain.

<sup>340</sup>The function of this instance of *ā'a* 'QUOT' is not entirely clear. It is tentatively rendered as 'like she said' in the free translation.



*yě'-má = ā'a*                      *nā = nā-ũ-gú-ũ-ũ = ā'a*  
 DIST.PLOC-ANAPH = QUOT    3F.SBJ.SBJV = shatter-off.PL-PL-out.PL?\SBJV-SUB = QUOT

*gá = nò-'rũ = ā'a*                      *yūēmà = ā'a*    < *gá = ...* >  
 LK.F/M/S/NS.PST = 3M-GEN = QUOT    axe = QUOT    LK.F/M/S/NS.PST =

*gá = Yó'ĩ*                      *nǎ-má'a*    *gá = nǎ-énē'e*  
 LK.F/M/S/NS.PST = Yoi    3M-COM    LK.F/M/S/NS.PST = 3M-brother

*gá = ĩpí*  
 LK.F/M/S/NS.PST = Ipi

'They ran there and went to cut down her tree, and bits of metal were chipping down to the ground from Yoi's axe—together with his brother Ipi.<sup>342</sup>

T131 *Yēmá ā'a nũ-ĩ gá, <yě'ũ {ná...}>*

*yě'-má = ā'a*                      *nũ = ĩ = gá*                      < *yě-ũ*    {*ná = ...*} >  
 DIST.NS-ANAPH = QUOT    3M/N/NS.SBJ.PCì = be = PST    DIST.NS-ACC    3M/N/NS.SBJ =

'And then, he...'

T132 *Nô'táá ā'a gá, "Ñōĩ, ñōĩ, ñōĩ, ñōĩ!" nā'ũ ā'a gá nò'rũ ā'a yūēmà inũ-wǎi'māgù, nài-àrũ tũ'rũ'ũ.*

*nô'táá = ā'a = gá*                      *ñōĩ (x4)*  
 outright = QUOT = PST    vibrating.metal.sound (x4)

*nā-ũ = ā'a = gá*                      *nò-'rũ = ā'a*                      *yūēmà*  
 do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT = PST    3M-GEN = QUOT    axe

*ĩ = nũ = wǎi'-māgù*                      *nài-àrũ tũ'rũ'ũ*  
 3F.ACC = 3M/N/NS.SBJ.PC̄ = grind-cutting.edge    tree-GEN fell-PURP

'He made loud noises—"ñōĩ, ñōĩ, ñōĩ, ñōĩ!"—while whetting his axe, the one [they used] for felling the tree.'

T133 *[Yēmá nũ-ĩ gá], ná-tǎ'ĩchì nũwǎ ā'a gá yēmá nài rù ā'a nũ'gù mārē ā'a nũ-ĩ gá nà-tũ'gúá'ũ ā'a...?*

*[yě'-má*                      *nũ = ĩ = gá]*                      *ná = tǎ-ĩchì*  
 DIST.NS-ANAPH    3M/N/NS.SBJ.PCì = be = PST    3M/N/NS.SBJ = be.hard-genuinely

*nũwǎ = ā'a*                      *gá = yě'-má*                      *nài rù = ā'a*  
 well.M/N/NS = QUOT    LK.F/M/S/NS.PST = DIST.NS-ANAPH    tree and = QUOT

<sup>342</sup>As they were cutting down the tree together and regularly resharpening the axe.

*n̄ù'gù = mārē = ā'a n̄î = ĭ*  
 when? = just = QUOT 3M/N/NS.SBJ.PCì = be

*gá = nà = tū'-gú-à-ú' = ā'a*  
 LK.F/M/S/NS.PST = 3M/N/NS.SBJ\SBJV = fell-PL-3M/N/NS.OBJ\SBJV-SUB = QUOT

'So, but the tree was extremely hard: when would they manage to cut it down...?'

T134 *Ñymá tà ā'a gá n̄n̄î-wq r̄ù ná'kq t̄îwá ā'a r̄ù ā'a tà-n̄ù'ú ā'a gá n̄âekūgú gá ēr̄ú*  
 < *t̄î-dōrā n̄î-ĭ gá... > t̄âu < t̄înà-... > < tà-... > t̄înà-chî'èwēgú'úkq ā'a n̄î-ĭ*  
*gá... < n̄t̄à-m̄'ú n̄î-ĭ gá yēmá n̄î tà-yà-t... > t̄îmànētū ā'a n̄t̄à-tū'è'è'ú.*

*n̄ymá = tà = ā'a = gá*                      *n̄ū' = n̄î = wq*                      *r̄ù*  
 present.time = ADD = QUOT = PST 3M/N/NS.BEN = 3M/N/NS.SBJ.PCì = tip.over and

*ná-'kq*                      *t̄îwá = ā'a*                      *r̄ù = ā'a*  
 3N/NS-CAUSE well.s = QUOT and = QUOT

*tà = n̄ù-'ú = ā'a*  
 3S.SBJ\SBJV = get.mad\SBJV-SUB = QUOT

*gá = n̄â-ekū-gú = gá*                      *ēr̄ú*                      < *t̄î = dōrā*  
 LK.F/M/S/NS.PST = 3N/NS-grandmother-PL = PST because 3S.SBJ.PCì = tell.lies

*n̄î.ĭ gá = ... >*                      *t̄âu < t̄î = nà = ... >*                      < *tà = ... >*  
 CONJ LK.F/M/S/NS.PST = NEG 3S.ACC = 3M/N/NS.SBJ\SBJV = 3S.SBJ\SBJV =

*t̄î = nà = chî'è-wē-gú-'ú-kq = ā'a*  
 3S.ACC = 3M/N/NS.SBJ\SBJV = be.bad-convenience-PL\SBJV-SUB-CAUSE = QUOT

*n̄î = ĭ*  
 3M/N/NS.SBJ.PCì = be

*gá = < n̄ū' = tà = m̄-'ú*                      *n̄î.ĭ*  
 LK.F/M/S/NS.PST = 3M/N/NS.ACC = 3S.SBJ\SBJV = send\SBJV-SUB CONJ

*gá = yē-má*                      *n̄î tà = yà = t... >*  
 LK.F/M/S/NS.PST = DIST.NS-ANAPH tree 3S.SBJ\SBJV = AM =

*t̄î-mà-nētū = ā'a*                      *n̄ū' = tà = tū'-é'è-'ú*  
 3S-ANAPH-plant = QUOT 3M/N/NS.ACC = 3S.SBJ\SBJV = fell-CAUS\SBJV-SUB

'So it lasted until they managed to have it fall down to the ground, and because of that their grandmother got mad, because she had not really meant to... —it was [just] to get rid of... of them<sup>343</sup> that she had sent them to cut down the... —that she had asked them to cut down her tree.'

<sup>343</sup>Lit. 'so that they would not bother her'.

T135 *Nûwǎ nû-ĩ gá dùũ'ũ gá ùũnè-è'ũ tà nûwǎ yì-ĩ'ũ gá nûmàgú rù < ná'kq rù... > ná'kq rù ná-dó nûwǎ gá yémá nâi.*

*nûwǎ nû.ĩ gá = dùũ-'ũ*  
well.M/N/NS CONJ LK.F/M/S/NS.PST = be.a.human\SBJV-REL.NS

*gá = ùũnè-è-'ũ = tà nûwǎ*  
LK.F/M/S/NS.PST = be.supernatural-INTR.PL\SBJV-REL.NS = ADD? well.M/N/NS

*yì = ì-'ũ gá = nû-mà-gú = rù*  
PCì.3F/M/N/NS.SBJ.SBJV = be\SBJV-SUB LK.F/M/S/NS.PST = 3N/NS-ANAPH-PL = TOP

< *ná-'kq = rù... > ná-'kq = rù ná = dó nûwǎ*  
3N/NS-CAUSE = TOP 3N/NS-CAUSE = TOP 3M/N/NS.SBJ = be.soft well.M/N/NS

*gá = yé-má nâi*  
LK.F/M/S/NS.PST = DIST.NS-ANAPH tree

'Since they were supernatural beings, to them... to them the tree was soft.'

T136 *Yémá nû-ĩ rù ã'a nû-wq rù ã'a gè'tà ã'a nà-tè'nágú'ũ, gá yémàámá.*

*yé-má nû = ĩ rù = ã'a nû = wq*  
DIST.NS-ANAPH 3M/N/NS.SBJ.PCì = be and = QUOT 3M/N/NS.SBJ.PCì = tip.over

*rù = ã'a gè'tà = ã'a nà = tè'nágú-'ũ*  
and = QUOT where?.PLOC = QUOT 3M/N/NS.SBJ\SBJV = get.stuck-on\SBJV-SUB

*gá = yé-mà-ámá*  
LK.F/M/S/NS.PST? = DIST.ALOC-ANAPH-DIR

'So, it tipped over but it got stuck hanging from [the branches of] some [neighboring tree] right after that.'

T137 *"Mārũ nû-ĩ, pà nô'ě, tǔyà-wǎ'ũ ì ngēmà kúnētũ!" ñâ'ũ ã'a.*

*mārũ nû = ĩ pà = nô'ě*  
PRF 3M/N/NS.SBJ.PCì = be VOC = old.woman

*tǔ = yà = wǎ-'ũ ì = ngē-mà*  
1PL.BEN = PCì.3F/M/N/NS.SBJ.SBJV = tip.over\SBJV-SUB LK.NS = MED.NS-ANAPH

*kú-nētũ ñâ-'ũ = ã'a*  
2SG-plant do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT

'"That's it, grandmother, we've had your tree fall down to the ground!" they said.'

T138 *"Kú ñumá wâ'í tōmá'a nũ-ũ ěrú mārũ kúnētũ tã-tũ'u!"*



*kú* = *ñumá*                      *wá'í*    *tō-má'a*    *nū* = *ī* = *ū*                      *ērú*  
 come.on = present.time    CONTR    1PL-COM    3M/N/NS.ACC = PCī = say    because  
*mārū*    *kú-nētū*    *tā* = *tū'u*  
 PRF    2SG-plant    1PL.SBJ = fell

“Now tell us, since we’ve cut down your tree!”

T139 “*Ákúrú'ú* ì *chápēnā-tū'ù'ú* ì *chàunētū* rù <*pē'...*> *tāu pēchānā-tū'é'e* rù *chī-dōrā nū-ī* *pē*{*chàyà-*}*tū'é'è'ú'...*?”

*ákú-rú'ú*                      ì = *chá* = *pē* = *nā* = *tū'ù-ú*  
 what?.NS-PURP    LK.NS = 1SG.BEN = 2PL.SBJ.SBJV = 3M/N/NS.OBJ = fell\SBJV-SUB

ì = *chāu-nētū*    rù    <*pē-'*...>    *tāu*  
 LK.NS = 1SG-plant    and    2PL-                      NEG

*pē* = *chà* = *nā* = *tū'é'e*    rù  
 2PL.ACC = 1SG.SBJ\SBJV = 3M/N/NS.OBJ = fell-CAUS\SBJV    and

*chī* = *dōrā*    *nū.ī*  
 1SG.SBJ.PCī.SBJV = tell.lies\SBJV    CONJ

*pē* = {*chà* = *yà* = }*tū'é'è-ú*  
 2PL.ACC = 1SG.SBJ\SBJV = AM.3M/N/NS.OBJ = fell-CAUS\SBJV-SUB

“What did you cut down my tree for, when I hadn’t asked you to cut it down, when I didn’t really mean to have you go and cut it down...?”

T140 “*Mò'o* rù *ngēmà ñákù'ú* *ērú chí ngēmà ā'a* ì-*wá'gú* *nū-ī* *tōmá'a* *tūkū-ù'ú* *yá tōnátū* *nū-ī* *tà-tjikú'ú*, *ákú tū-úpétū'ú*!”

*mò'o* rù    *ngē-mà*                      *ñá-kù-ú*    *ērú* = *chí*  
 ?                      and    MED.NS-ANAPH    do.thus-2SG.SBJ\SBJV-SUB    because = IRR

*ngē-mà* = *ā'a*                      ì = *wá'gú*                      *nū* = *ī*    *tō-má'a*  
 MED.NS-ANAPH = QUOT    PCì = tip.over-CIRC    3M/N/NS.SBJ.PCì = be    1PL-COM

*tū* = *kū* = *ī* = *ù-ú*    *yá* = *tō-nátū*                      *nū.ī*  
 3S.ACC = 2SG.SBJ = PCī = say\SBJV-SUB    LK.M/S = 1PL-father    CONJ

*tà* = *tjikú-ú*    *ákú*  
 3S.SBJ\SBJV = what's.the.matter\SBJV-SUB    what?.NS

*tū* = *ú-pétū-ú*  
 3S.ACC = be.there.SG-across\SBJV-SUB

“But you said it: if it fell down to the ground—you said—then you’d tell us what went on with our father, what happened to him!”

T141 *Yémá nūwá nū-ī* *gá, dú'wá mé'e* *gá nūti-ù'ú* *ā'a* *gá nāekū*: “*Pēnátū* rù, *ná-tá'u* *ērú mārū* *ái nánā-ngo*,” *ñátàgù'ú* *ā'a*.

*yě-má nûwá nû = i̇ = gá*  
 DIST.NS-ANAPH well.M/N/NS 3M/N/NS.SBJ.PCì = be = PST  
*dũ'wá = mé'e = gá nû = tî = ù-'û = ã'a*  
 EVENTUALLY = DUB = PST 3M/N/NS.ACC = 3S.SBJ.PCÌ\SBJV = say\SBJV-SUB = QUOT  
*gá = nã-èkû pē-nátû = rû ná = tâ'u*  
 LK.F/M/S/NS.PST = 3N/NS-grandmother 2PL-father = TOP 3M/N/NS.SBJ = be.absent  
*ērú mārû âi ná = nã = ngo*  
 because PRF wild.felid 3M/N/NS.SBJ = 3M/N/NS.OBJ = bite  
*ñá-tà-gù-'û = ã'a*  
 do.thus-3S.SBJ\SBJV-do.thus-SUB = QUOT

‘And so, in the end I guess the grandmother told [them]: “Your father is not here because a jaguar has eaten him up,” she said.’

T142 “Ngēmàkq nû-î yá pēnátû <ì... > ì... tâ'ugù mārû pē'kq ñnà-gù'û ērú mārû pē-tà'kúē.”

*ngē-mà-kq nû = î yá = pē-nátû <ì = ... >*  
 MED.NS-ANAPH-CAUSE 3M/N/NS.SBJ.PCì = be LK.M/S = 2PL-father LK.NS =  
*ì = tâ'ú-gù mārû pē-'kq*  
 LK.NS = be.absent\SBJV?-PLOC PRF 2PL-CAUSE  
*ĩ = nã = gù-'û ērú mārû*  
 3ALOC = 3M/N/NS.SBJ\SBJV = reach\SBJV-SUB because PRF  
*pē = tà'kú-ē*  
 2PL.SBJ = be.an.orphan-INTR.PL

“That is why your father is no longer coming [back] to you: you are orphans now.”

T143 “Âi nû-î yá pē-tà'kúē'è'èkû,” ñátàgù'û ã'a.

*âi nû = î*  
 wild.felid 3M/N/NS.SBJ.PCì = be  
*yá = pē = tà'kú-ē-'è-è-kû*  
 LK.M/S = 2PL.ACC = be.an.orphan-INTR.PL-CAUS\SBJV-REL.M  
*ñá-tà-gù-'û = ã'a*  
 do.thus-3S.SBJ\SBJV-do.thus-SUB = QUOT

“It’s a jaguar that has orphaned you,” she said.’

T144 “Mái', mái' mái', nûwá ñù' ñãgùgú chí <ìnà-... > ìnà-tù'áchí ì nãànè èkq nû-đâu'û ã ngēmà... tû'û tà'kú'û,” ñâ'û ã'a, “tû'û gēnátû'û?” ñãgù'û ã'a.

*mái'* (x3) *núwá* *nù'* *ńǎ-gǐ-gú = chí*  
 sibling~VOC (x3) well.M/N/NS what.activity? do.thus-do.thus\CIRC-CIRC = IRR

<ì = nà = ... > *ì = nà = tũ-ǎchí*  
 3PLOC = 3M/N/NS.OBJ\SBJV = 3PLOC = 3M/N/NS.OBJ\SBJV = pull-upslope\SBJV

*ì = nà-ànè* *ēkq* *nũ = ì = dǎu-ǎú*  
 LK.NS = 3N/NS-space so.that 3M/N/NS.ACC = PCØ.SBJV = see\SBJV-SUB

*ā = ngē-mà* *tũ-ǎú* *tà'kú-ǎú*  
 LK.NS? = MED.NS-ANAPH 4-ACC be.an.orphan\SBJV-REL.NS

*ńǎ-ǎú = ā'a* *tũ-ǎú* *ǎē-nátù-ǎú*  
 do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT 4-ACC not.have-father\SBJV-SUB

*ńǎ-gú-ǎú = ā'a*  
 do.thus-PL\SBJV-SUB = QUOT

“Brother, hey brother, how could we pull on the [other side of the] world [to make it smaller] so as to find the one who orphaned us,” they pondered, “the one who robbed us of our father?” they pondered.’

T145 “*Ngì'ā* <*rù... >* *rù tǎēyǎē* <*ì... >* *ì-wè'kùgú!*” *ńǎ'ǎú ā'a*.

*ngì'ā* <*rù... >* *rù tǎ-ēyǎ-ǎē* <*ì = ... >* *ì = wè'-kù-gú*  
 let's.go and and 4-sister-hair PCØ.SBJV PCØ.SBJV = bind-in.PL-PL\SBJV

*ńǎ-ǎú = ā'a*  
 do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT

“Let’s bind our sisters’ hairs together [one after the other]!” they decided.’

T146 *Yémá nũ-ǎ rù ā'a ǎpémágù ā'a nárũ-chó, núwá yémá'ǎ yèà nũ-ǎ rù ā'a tũ-mǎyǎē*  
*ā'a gá gũ'émá náēyǎtá rù ā'a tũmà'yǎē ā'a tà nũ-kǎuǎ.*

*yé-má* *nũ = ǎ* *rù = ā'a*  
 DIST.NS-ANAPH 3M/N/NS.SBJ.PCì = be and = QUOT

*ǎpémá-gù = ā'a* *ná = rũ = chó* *núwá*  
 edge.of.the.jungle-PLOC = QUOT 3M/N/NS.SBJ = PCrũ = be.there.PL well.M/N/NS

*yé-má-ǎú* *yé-à* *nũ = ǎ* *rù = ā'a*  
 DIST.NS-ANAPH-STATE DIST.ALOC-EXO 3M/N/NS.SBJ.PCì = be and = QUOT

*tũ = mǎ-yǎē = ā'a* *gá = gũ'è-má*  
 3S.SBJ.PCì = be.long-hair = QUOT LK.F/M/S/NS.PST = DIST.S-ANAPH

*ná-ēyǎ-tá* *rù = ā'a* *tũ-mà-yǎē = ā'a = tà*  
 3N/NS-sister-COLL and = QUOT 3S-ANAPH-hair = QUOT = ADD?

*nũ = kǎuǎ*  
 3M/N/NS.SBJ.PCì = pluck.PL



side of the world.’

T150 *Wâ’í gá ngēmà náyǎē rù ā’a, <á kú mé’e... > ū’kānè-’ú ā’a nū-’í gá ìnà-ñà-’ú ā’a.*

*wâ’í gá = ngē-mà ná-yǎē = rù = ā’a*  
CONTR LK.F/M/S/NS.PST? = MED.NS-ANAPH 3N/NS-hair = TOP = QUOT  
*<á kú = mé’e... > ū’kānè-’ú = ā’a nū = ’í*  
what?.NS = DUB magic.contracting.thread-STATE = QUOT 3M/N/NS.SBJ.PCì = be  
*gá = ì = nà = ñà-’ú = ā’a*  
LK.F/M/S/NS.PST = 3PLOC = 3M/N/NS.SBJ\SBJV = throw-3M/N/NS.OBJ\SBJV-SUB = QUOT

‘But when they cast it, uh... they transformed that hair string into a magic contracting thread.’

T151 *Yēmá nūwǎ nū-’í rù ā’a, nū-’í gá <mārū... > mārū ā’a tò’pèchìnù nà-ñà-’ú ā’a gá, nūgìnà nà-tù-’á-’ú ā’a gá nānè.*

*yē-má nūwǎ nū = ’í rù = ā’a nū. ’í*  
DIST.NS-ANAPH well.M/N/NS 3M/N/NS.SBJ.PCì = be and = QUOT CONJ  
*gá = <mārū... > mārū = ā’a tò-’pèchìnù*  
LK.F/M/S/NS.PST = PRF PRF = QUOT other.NS-bank  
*nà = ñà-’ú = ā’a = gá nū-gù-nà*  
3M/N/NS.SBJ\SBJV = throw-3M/N/NS.OBJ\SBJV-SUB = QUOT = PST 3M-REFL-DAT  
*nà = tù-’á-’ú = ā’a*  
3M/N/NS.SBJ\SBJV = pull-upslope-3M/N/NS.OBJ\SBJV-SUB = QUOT  
*gá = nā-à-nè*  
LK.F/M/S/NS.PST = 3N/NS-space

‘And then, once they had cast it to the other side of the world, they pulled the [other side of the] world towards themselves.’

T152 *Nūmà ā’a gá: “Mái’, mái’ mái’, mārū!”*

*nū-mà = ā’a = gá mái’ (x3) mārū*  
3M-ANAPH = QUOT = PST sibling~VOC (x3) PRF

‘[Ipi said]: “Brother, hey brother, we’re done!”’

T153 *“Chòmà rù tá, kóyà-’ú tá nū-’í ì chàgù {?} tá ì chà-’ú-’ú.”*

*chò-mà = rù = tá kóyà-’ú = tá nū = ’í*  
1SG-ANAPH = TOP = FUT caiman-STATE = FUT 3M/N/NS.SBJ.PCì = be  
*ì = chà-gù {?} = tá ì = chà = ’ú-’ú*  
LK.NS = 1SG-REFL = FUT 3PLOC = 1SG.SBJ\SBJV = put.SG\SBJV-SUB

“For my part, I’ll position myself there under the shape of a caiman.”

T154 “*Nûwǎ tá, ngē’gùmá rù tá, chàutáwǎ tá ná-chópétù tá ì ngēmà gǔ’ú tá ì nâē’ú, gǔ’ú ì dù’ú gá <tǎnátū... > tǎnátū t... nû-í nǔ’à tūnà-gēnátūgǔ’ú,<sup>345</sup> ngēmà tá nû-í ì nû’ú ì-dǎu’ú tá nû-í ákúrū dù’ú tá yì-ì’ú ā tū’ú tà’kú’ú,” nâ’ú ā’a.*

*nûwǎ* = *tá*      *ngē’gùmá* = *rù* = *tá*      *chàutáwǎ* = *tá*  
 well.M/N/NS = FUT    ANAPH.CIRC = TOP = FUT    1SG-thicker.segment?-ALOC = FUT

*ná* = *chó-pétù* = *tá*      *ì* = *ngē-mà*  
 3M/N/NS.SBJ = be.there.PL-across = FUT    LK.NS = MED.NS-ANAPH

*gǔ’ú* = *tá*      *ì* = *nâ-ē’ú*      *gǔ’ú*  
 finish\SBJV-REL.NS = FUT    LK.NS = 3N/NS-animal    finish\SBJV-REL.NS

*ì* = *dù’ú*      *gá* = <*tǎnátū... >*      *tǎnátū t... nû.í*  
 LK.NS = be.a.human\SBJV-REL.NS    LK.F/M/S/NS.PST = 4-father    4-father      CONJ

*nǔ’-à*      *tū = nà = gē-nátū-gǔ’ú*  
 PROX.PLOC-EXO    4ACC = 3M/N/NS.SBJ\SBJV = not.have-father-PL\SBJV-SUB

*ngē-mà* = *tá*      *nû = í*      *ì* = *nû’ú*  
 MED.ALOC-ANAPH = FUT    3M/N/NS.SBJ.PCì = be    LK.NS = 3N/NS-ACC

*ì* = *dǎu’ú* = *tá*      *nû.í ákúrū*  
 PCØ.SBJV = see\SBJV-SUB = FUT    CONJ    what?.NS-kind.of

*dù’ú* = *tá*      *yì = ì’ú*  
 be.a.human\SBJV-REL.NS = FUT    PCì.3F/M/N/NS.SBJ.SBJV = be\SBJV-SUB

*ā = tū’ú*      *tà’kú’ú*      *nâ’ú = ā’a*  
 LK.NS? = 4-ACC    be.an.orphan\SBJV-REL.NS    do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT

“Indeed, this way, all the animals will pass over me, all the creatures<sup>346</sup> who have [harmed] our fath... our... —having robbed us of our father; that’s when we’ll see what sort of creature is the one who orphaned us,” he said.’

T155 *Chópétù-ètānū’ú ā’a gá nâē’ú ā’a, chópétù-ètānū’ú.*

*chó-pétù-ètānū’ú* = *ā’a*  
 be.there.PL-across-DISTR.PL\SBJV-SUB = QUOT

*gá = nâē’ú = ā’a*      *chó-pétù-ètānū’ú*  
 LK.F/M/S/NS.PST = 3N/NS-animal = QUOT    be.there.PL-across-DISTR.PL\SBJV-SUB

<sup>345</sup>The way *nû-í nǔ’à tūnà-gēnátūgǔ’ú* is syntactically integrated within the rest of this utterance is unclear, and probably very loose.

<sup>346</sup>On the extent of the concept of *dù’ú* among the Tikunas, see note 315, p.552.

‘The animals passed by in groups, they passed by in groups.’

T156 “*Nūwá pēmà ì...*”<sup>347</sup>

*nūwá pē-mà ì=*  
well.M/N/NS 2PL-ANAPH LK.NS=

“‘Are you the ones who...’”

T157 *Tû'û ā'a yà-chò'é'e... -[è]tānū'û ā'a gá gú'émá... ũ-gūgúètānū'è, gá tû'írà nà-  
îpé'è'è rù ā'a gá, nāē'û gá ī-ā'pāchī'ǝ'ègú tû-î.*

*tû-'û = ā'a*  
3S-ACC = QUOT

*yà = chò-'é'e-[è]tānū-'û = ā'a*  
PCĪ.3M/N/NS.SBJ\SBJV = open.one's.mouth-CAUS-DISTR.PL\SBJV-SUB = QUOT

*gá = gú'è-má* *ī = ī = gū-gú-ètānū-'è*  
LK.F/M/S/NS.PST = DIST.S-ANAPH 3ALOC = PCĪ = reach-PL-DISTR.PL\SBJV-REL.S

*gá = tû-'írà* *nà = î-pe'è-'è = rù = ā'a = gá*  
LK.F/M/S/NS.PST? = 3S-first PCnà = go.PL-front\SBJV-REL.S = TOP = QUOT = PST

*nā-ē'û* *gá = ī = ā-'pāchī'ǝ-'è-gú* *tû = î*  
3N/NS-animal LK.F/M/S/NS.PST = PCĪ = have-wing\SBJV-REL.S-PL 3S.SBJ.PCĪ = be

‘[The two brothers] had them open their mouth one after the other as they arrived; those at the head of the procession were the winged animals.’

T158 “*Pēmà ì tōpē-tà'kú'û?*” *nā'û.*

*pē-mà ì = tō = pē = tà'kú-'û*  
2PL-ANAPH LK.NS = 1PL.ACC = 2PL.SBJ.SBJV = be.an.orphan\SBJV-SUB

*nā-'û*  
do.thus.3M/N/NS.SBJ.SBJV-SUB

“‘Are you the ones who orphaned us?’ they asked.”

T159 “*Tāu mā nū-î ì < tōmà ì... > tōmà ì pētā-tà'kú'û rù < kú... > kú nūwá ēkà  
tōpī-chópétù'è'eetānū, ērú tāu mā tōmà pētā-tà'kú!*” *nā'tàgùètānū'û ā'a.*

<sup>347</sup>Unfinished utterance.

*Tâu* = *mā*      *nû* = *ĩ*      *ì* = < *tō-mà*      *ì* = ... >      *tō-mà*  
 NEG = precisely    3M/N/NS.SBJ.PCì = be    LK.NS = 1PL-ANAPH    LK.NS =    1PL-ANAPH

*ì* = *pē* = *tā* = *tà'kú-’ú*      *rù* < *kú* = ... >  
 LK.NS = 2PL.ACC = 1PL.SBJ.SBJV = be.an.orphan\SBJV-SUB    and    come.on =

*kú* = *nûwǎ* = *ēkà*  
 come.on = well.M/N/NS = who.knows?

*tō* = *pī* = *chó-pétù-’é’e-ètānū*      *ērú*  
 1PL.ACC = 2PL.SBJ.PCī.SBJV = be.there.PL-across-CAUS-DISTR.PL\SBJV    because

*tâu* = *mā*      *tō-mà*      *pē* = *tā* = *tà'kú*  
 NEG = precisely    1PL-ANAPH    2PL.ACC = 1PL.SBJ = be.an.orphan

*ñǎ-tà-gù-ètānū-’ú* = *ā’a*  
 do.thus-3S.SBJ\SBJV-do.thus-DISTR.PL\SBJV-SUB = QUOT

“No, we didn’t orphan you: please let us move on, because we didn’t orphan you!” they would answer.’

T160 *Yěmá nûwǎ ā’a nû-ĩ gá, tī-chópétùètānū’ú ā’a gá gú’è mā gá i-ā’pāchǐ’è’è.*

*yě-má*      *nûwǎ* = *ā’a*      *nû* = *ĩ* = *gá*  
 DIST.NS-ANAPH    well.M/N/NS = QUOT    3M/N/NS.SBJ.PCì = be = PST

*tī* = *chó-pétù-ètānū-’ú* = *ā’a*  
 1PL.SBJ.PCī.SBJV = be.there.PL-across-DISTR.PL\SBJV-SUB = QUOT

*gá* = *gú-’è* = *mā*  
 LK.F/M/S/NS.PST = finish\SBJV-REL.S = precisely

*gá* = *ī* = *ā-’pāchǐ’è’è*  
 LK.F/M/S/NS.PST = PCī = have-wing\SBJV-REL.S

‘So, all the groups of the winged ones passed by.’

T161 *Yěmá ā’a nû-ĩ gá, ñumá tà ā’a tà-gú.*

*yě-má* = *ā’a*      *nû* = *ĩ* = *gá*      *ñumá* = *tà* = *ā’a*  
 DIST.NS-ANAPH = QUOT    3M/N/NS.SBJ.PCì = be = PST    present.time = ADD = QUOT

*tà* = *gú*  
 3S.SBJ\SBJV = finish\SBJV

‘On it went, until there was none left.’

T162 *Yěmá àkù ā’a.*

*Yě-má-àkù* = *ā’a*.  
 DIST.NS-ANAPH-MAN = QUOT

‘So it was.’



T163 *Tòmà chigù gá nâ-ê'ú ñnú-gūgúètānù ā'a gá, yê'gú má ā'a gá... gá < tâ'úwá nà... > tâ'úwá ā'a nà-gù'ú, kōwú.*

*tò-mà = chigù*                      *gá = nâ-ê'ú*  
 other.NS-ANAPH = DISTR.SG    LK.F/M/S/NS.PST = 3N/NS-animal

*ĩ = nũ = gū-gú-ètānù = ā'a = gá*  
 3ALOC = 3M/N/NS.SBJ.PCī = reach-PL-DISTR.PL = QUOT = PST

*yê'gú má = ā'a = gá*                      *gá = < tâ-'ú-wá*  
 ANAPH.CIRC.PST = QUOT = PST    LK.F/M/S/NS.PST = be.big\SBJV-REL.NS-ALOC

*nà = ... >*                      *tâ-'ú-wá = ā'a*  
 3M/N/NS.SBJ\SBJV = be.big\SBJV-REL.NS-ALOC = QUOT

*nà = gù-'ú*                                      *kōwú*  
 3M/N/NS.SBJ\SBJV = reach\SBJV-SUB    deer

'Other groups of animals arrived, and then it was the turn of the big one, the deer.'

T164 *Ūūchī'ú ā'a rù ā'a, "Nūwá kùmà ì tōkù-tà'kútá'ú," ñâ'ú, "< tô'ú tá k... > tô'ú kù-gēnátù'ú?" ñâ'ú ā'a.*

*ú-ūchī-'ú = ā'a*                      *rù = ā'a*                      *nūwá*                      *kù-mà*  
 go.SG-at\SBJV-SUB = QUOT    and = QUOT    well.M/N/NS    2SG-ANAPH

*ì = tō = kù = tà'kú-tá-'ú*  
 LK.NS = 1PL.ACC = 2SG.SBJ\SBJV = be.an.orphan-?\SBJV-SUB

*ñâ-'ú*                                      *< tô-'ú = tá k... >*                      *tô-'ú*  
 do.thus.3M/N/NS.SBJ.SBJV-SUB    1PL-ACC = FUT                      1PL-ACC

*kù = gē-nátù-'ú*                                      *ñâ-'ú = ā'a*  
 2SG.SBJ\SBJV = not.have-father\SBJV-SUB    do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT

'It came closer and [the two brothers] asked [it]: "So, did you orphan us, did you rob us of our father?" they asked.'

T165 *"Éká'a túrú ì-chô!" ñâ'ú ā'a.*

*éká'a = túrú*                      *ì = chô*  
 let's.see = who.knows?    PCī = open.one's.mouth

*ñâ-'ú = ā'a*  
 do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT

'"Open your mouth and let's see!" they ordered.'

T166 *Chô ā'a gá tî-chô.*

*chô = ā'a = gá*                                      *tî = chô*  
 open.one's.mouth = QUOT = PST    3S.SBJ.PCī = open.one's.mouth

‘It opens its mouth.’<sup>348</sup>

T167 “*Tá’ú’ú̃ mā nû-î̃,*” *ñâ’ú̃ ā’a,* “*kú nà-úpétù!*” *ñâ’ú̃ ā’a.*

*tá’ú-’ú̃ = mā*

be.absent\SBJV-SUB = precisely 3M/N/NS.SBJ.PCì = be

*nû = î̃*

*ñâ-’ú̃ = ā’a*

do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT come.on = PCØ.IMP = be.there.SG-across

*kú = nà = ú-pétù*

*ñâ-’ú̃ = ā’a*

do.thus.3M/N/NS.SBJ.SBJV-SUB = QUOT

“‘There’s nothing,” they said, “move on!” they ordered.’

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<sup>348</sup>A present-tense translation is resorted to here to render the effect of the original repetitive structure (*chô ā’a gá tí-chô*). This stylistically-marked structure apparently makes the scene more vivid than if it were expressed with an unmarked one.



# Appendix B

## Glossary of lexemes

This glossary lists in alphabetical order **all the more lexical-like SMAT morphemes mentioned in this work** together with their variants. Each entry provides the morpheme class of the corresponding lexeme as well as the gloss (or glosses) that it receives in this work, and occasionally a short comment. Bound morphemes whose first syllable features a toneme /<sup>4</sup>/, /<sup>3</sup>/, or /<sup>C</sup>/ are further characterized as being either triggers ([+tr.]) or non-triggers ([-tr.]) of the Pattern 2 tonological alternations (see SECTION 2.6.2.2). Lexemes that refer to particular living species are additionally provided—on an indicative basis—with the binomial name of that (or occasionally those) species (the mention “unidentified” appears in cases where I am unable to provide a binomial identification).<sup>349</sup> Note the following abbreviations:

<i>adv.</i>	adverb	<i>interj.</i>	interjection
<i>b.n.</i>	bound noun	<i>m.i.n.</i>	modifier independent noun
<i>c.i.n.</i>	circumstantial independent noun	<i>onom.</i>	onomatopoeia
<i>conj.</i>	conjunction	<i>part.</i>	particle
<i>dem.</i>	demonstrative	<i>pl.</i>	plural
<i>i.n.</i>	independent noun	<i>pr.n.</i>	proper noun
<i>int.-ind.</i>	interrogative-indefinite	<i>sg.</i>	singular
		<i>v.</i>	verb root

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<sup>349</sup>I have identified these species based on a large number of references from the fields of linguistics, anthropology, and biology that include Nimuendajú (1932:573–580), Kricher (1997), Montes (2002), Rengifo-Salgado et al. (2017), the Red List of Threatened Species (2020), and personal communications with Jean-Pierre Goulard, combined with basic ethnolinguistic research in SMA. For a systematic identification of most of the mammals found in the surroundings of SMA featuring the SMAT and local Spanish names of each species, see Bertet (2019).

- ʼVnè *b.n.* [+tr.] body.  
 â *v.* burn oneself.  
 ă *v.* sing.  
 -a *b.n.* [-tr.] mouth.  
 āchúkàrà *i.n.* sugar.  
 áh *interj.* oh.  
 âʼi *v.* be drunk.  
 âi *i.n.* wild felid.  
 ai- ? all (?).  
 ăiʼkúmá *i.n.* truth.  
 âirú *i.n.* dog.  
 âirúwé *i.n.* manatee, *Trichechus inunguis*.  
 àità *interj.* yell.  
 âiʼtù *i.n.* neotropical otter, *Lontra longicaudis*.  
 âiyà *v.* bathe.  
 âkú *int.-ind. i.n.* what/who? (NS).  
 -ʼākù *b.n.* [+tr.] child; daughter.  
 -ʼākùã *b.n.* [+tr.] children.  
 âkúrū *int.-ind. m.i.n.* what kind of?  
 -amū *b.n.* [?] (bird) down.  
 -ànè *b.n.* space.  
 ārāwīrí *i.n.* fish sp., *Triporthus* sp. (?), local Spanish *sardina*.  
 Āriānà *pr.n.* Ariana, name of a legendary figure.  
 árú *i.n.* plant sp., *Cascabela* or *Thevetia* sp.  
 ārúchù *i.n.* rice.  
 āʼu *v.* cry.  
 àʼü *v.* drink.  
 ā *v.* have.  
 ă *i.n.* mosquito.  
 ăʼākù *v.* have a child.  
 -ăʼè *b.n.* mind.  
 āegākū *i.n.* leader.  
 āēmàkū *i.n.* lightning.
- ăēʼü *v.* succeed at hunting or fishing.  
 āiʼé *i.n.* child (archaic).  
 -ăkù *b.n.* [?] content.  
 ănē *v.* be ashamed.  
 ānétà *v.* shoo away.  
 -ăpüʼü *b.n.* knee.  
 āʼtápē *i.n.* snake.  
 -ătú *b.n.* [?] yard.  
 ău *v.* be evil.  
 ău *v.* stay (sg.).  
 ăʼü *v.* twist.  
 ăwè *i.n.* coal.  
 bā *v.* pour.  
 bāi *part.* not even.  
 báʼi *v.* illuminate.  
 bʼăiʼáchí *v.* get frightened.  
 bè *interj.* let's see.  
 bʼě *v.* flutter.  
 be *v.* uproot.  
 bèʼmà *adv.* quietly.  
 bʼěrú *i.n.* butterfly.  
 bó *v.* be round.  
 bōʼo *i.n.* palm weevil, *Curculionidae* sp.  
 bú *v.* be young.  
 búʼí ~ bíʼí *i.n.* mother.  
 bú *v.* split.  
 -bũ *b.n.* edible plant.  
 búʼbúrí *i.n.* tree sp., *Manilkara* sp.  
 búʼü *v.* bite.  
 châ *v.* swell.  
 chà *v.* stir with water.  
 chă *v.* apply a substance; paint, anoint.  
 chăgúē *v.* fish with poison.  
 chái *onom.* short rattling noise.  
 -chámētù *b.n.* face.  
 chāpātù *i.n.* shoe.

- chátākūrē** *b.n.* [-tr.] antler.  
**chātū** *i.n.* giant anteater,  
*Myrmecophaga tridactyla*.  
**chàu** *v.* be fed up with.  
**chà'ũ** *i.n.* manioc beer.  
**chàwú** *i.n.* corn.  
**chě'e** *v.* light.  
**chê'e** *i.n.* tree sp., unidentified (at least three widely divergent identifications have been proposed for this tree), local Spanish *acapú*.  
**chě'e** *v.* chop.  
**ch'ě'e** *v.* open (a carved tree trunk to make it into a canoe).  
**chí** *v.* bite.  
**chĩ** *v.* stand.  
**chì** *i.n.* *matamatá* tree, *Eschweilera* sp. or spp.  
**ch'ĩ** *v.* give a burning sensation.  
**chĩ** *v.* be tasty.  
**chíbù** *v.* eat.  
**chĩ'è** *v.* be bad.  
**chiégà** *v.* be appealing to the taste.  
**-chìgà** *b.n.* story; meaning.  
**chìgù** *i.n.* black agouti, *Dasyprocta fuliginosa*.  
**-chíkà** *b.n.* spot, room.  
**chĩ'kà** *v.* be transparent.  
**-'chínà'a** *b.n.* bone.  
**-'chíné'e** *b.n.* [-tr.] mouth (of a river).  
**chĩ'nú** *i.n.* pineapple.  
**-chìpà** *b.n.* small concave shape.  
**-chìpānū** *b.n.* sliver.  
**chĩ'rí** *adv.* badly.  
**-'chírù** *b.n.* clothes.
- chirú** *i.n.* *matamatá* tree, *Eschweilera* sp. or spp.  
**-ch'ũ** ~ **-chũ'ũ** *b.n.* liquid.  
**chĩūrà** *i.n.* lady.  
**-chĩ'ũ** *b.n.* home.  
**chó** *v.* be there (pl.).  
**chỏ** *v.* open one's mouth.  
**chỏ** *v.* hook.  
**ch'ỏ** *v.* open (a carved tree trunk to make it into a canoe).  
**chỏ** *v.* be white.  
**chōkà** *i.n.* sack.  
**chó'ní** *i.n.* fish.  
**ch'ũ** *v.* raise its paws up (an animal).  
**chũ'u** *v.* scratch.  
**chũtā** *v.* get dark.  
**chũtākù** *c.i.n.* night time.  
**dả** *v.* chop.  
**dài** *v.* kill (pl.).  
**Dāiyā'è** *pr.n.* Daiyae, name of a legendary figure.  
**dáu** *v.* touch.  
**dáu** *v.* touch.  
**dầu** *v.* be red.  
**dầu** *v.* see.  
**dầu** *v.* bother.  
**dāu'chità** *i.n.* hill.  
**dāu'nà** *c.i.n.* upper part.  
**dāu'ũ** *c.i.n.* upper part.  
**d'ăwè** *v.* be sick.  
**dăwēnū** *v.* watch.  
**dê** *i.n.* liquor.  
**dê** *v.* collect.  
**dê** *v.* stick one's tongue out.  
**dé'à** *v.* speak.  
**dê'á** *i.n.* water.  
**dēchù** *i.n.* handkerchief.  
**dê'e** *v.* be yellow.

- dě'e *v.* whip.  
dè'tù'ù *i.n.* whisk.  
dēyù *v.* cause to feel cold.  
dīērù *i.n.* money.  
Dītíchià *pr.n.* Leticia, city name.  
dó *v.* be soft.  
dōchà *i.n.* spear.  
dōkà *v.* boil.  
Dókì *pr.n.* Rocky, first name.  
dòmà *i.n.* catfish sp., unidentified,  
local Spanish *bocón*.  
dó'ònè *v.* be of recent formation (a  
land in a mythological account).  
dōrā *v.* tell lies.  
dó'ü *v.* be unripe.  
dú *v.?* ripple (?).  
dùã *i.n.* human.  
dùũ *v.* be a human.  
dú *v.* scrape.  
dù *dem.* like this.  
dúrá *v.* be unkind.  
dú'wǎ *part.* eventually.  
é *i.n.* genipap tree, *Genipa americana*.  
-é *b.n.* [-tr.] mother.  
-égà *b.n.* name.  
ēgá ~ gá ~ ngēgá *conj.* if.  
-ekū *b.n.* [+tr.] grandmother.  
= enǎ *part.* on earth.  
-énē'e ~ -éne'e *b.n.* [-tr.] brother.  
ēnèkátú *conj.* or even better (?).  
-ěru *b.n.* head.  
ērú ~ ngērú *conj.* because.  
-étū *b.n.* above.  
-'étù *b.n.* [-tr.] eye.  
ū'e *i.n.* smaller jar.  
-é'ù *b.n.* mixture.  
-ē'ù *b.n.* [+tr.] animal.  
Ėwārè *pr.n.* Eware, place name.  
-ēya *b.n.* [-tr.] sister.  
ě *v.* be dark.  
ěné *i.n.* army ant, unidentified, local  
Spanish *hormiga cazadora*.  
fà *v.* know.  
fà'i *v.* spit.  
fǎ'i *v.* whip.  
fè *v.* shoot.  
fènūē *v.* hunt.  
fěyú *i.n.* fish sp., unidentified, local  
Spanish *pez botella*.  
fláu *onom.* flute sound.  
gǎ *v.* lead (sg.).  
-gà *b.n.* sound, voice; language; fault.  
-gǎ *b.n.* rib.  
gàu *v.* tear.  
gau *v.* be cold (something).  
gô *v.* fly, rush (sg.); grow (sg.).  
gǒ'ü *v.* toast.  
gú *v.* roast.  
gu *v.* finish.  
gú'chà *v.* be difficult.  
-gùnè *b.n.* dart.  
gú'u *v.* be detrimental.  
gù *v.* drop.  
gǎ *v.* lay.  
gà *v.* tie.  
gǎ *v.* get down.  
gà *v.* scold.  
gǎ *v.* put on.  
gǎ *v.* be raw.  
gǎ'i *v.* penetrate.  
gāitè *i.n.* bogeyman.  
Gámè *pr.n.* James, first name.  
gǎnè *i.n.* Spix's night monkey, *Aotus*  
*vociferans*.  
gáu *v.* cover with feathers.  
gàu *v.* join.

**gàikàmà** *c.i.n.* proximity (PLOC).  
**gà'wè** *i.n.* calabash tree, *Crescentia*  
*cujete*.  
**gě** *v.* carry (sg.).  
**gě-** *v.* not have.  
**gê** *v.* be a female.  
**gè'ú** *int.-ind. m.i.n.* which?  
**gē** *v.* drop.  
**gěchà'ú** *v.* miss.  
**gê'e** *i.n.* red howler monkey, *Alouatta*  
*seniculus*.  
**gèè'ú** *v.* fail at hunting or fishing.  
**gè'rí** *i.n.* bag.  
**gè'tá** *int.-ind. c.i.n.* where? (ALOC).  
**gè'tà** *int.-ind. c.i.n.* where? (PLOC);  
 what state?  
**gě'tü'ü** *v.* be pubescent.  
**gō** *v.* be visible.  
**gōbú** *i.n.* turtle sp., *Geochelone*  
*denticulata*.  
**gōjòjō** *i.n.* nocturnal rat sp.,  
 unidentified.  
**g'ō'o** *i.n.* spirit.  
**gù** *i.n.* owl sp., unidentified.  
**gú** *v.* fall (sg.).  
**gū** *v.* reach.  
**gù** *v.* ferment.  
**gũ** *i.n.* macambo tree, *Theobroma*  
*bicolor*.  
**g'ũ** *v.* bristle its hair (an animal),  
 growl.  
**gū** *v.* learn.  
**gū** *v.* hurt.  
**gúchà'ú** *v.* arouse desire.  
**gúē** *i.n.* canoe.  
**gügā** *i.n.* bird sp., *Tinamus* sp.  
**Gūmārīyānà** ~ **ūmārīyānà** *pr.n.?* ?  
**gùnè** *v.* get light.

**gūrūkù** *i.n.* vulture sp., *Cathartidae*  
 sp.  
**Gù'tàpà** *pr.n.* Ngutapa, name of a  
 mythological figure.  
**gūtūmāchà** *i.n.* spinning top.  
**gũ'u** *v.* bark.  
**gú** *interj.* hey.  
**gũ (?)** *v.* slant (?).  
**gūmā** *v.* forget.  
**gūmānāchà** *i.n.?* impure and  
 invisible being (?).  
**gūrā** *v.* be covered with insects.  
**gūrú** *part.* suddenly.  
**gūrúáchí** *part.* maybe.  
**gūrūkārè** *i.n.* mosquito net.  
**ĩ** *v.* be small.  
**Īpí** *pr.n.* Ipi, name of a mythological  
 figure.  
**ÿ'rà** *v.* be small.  
**ÿ'ràrúwá** *adv.* a bit.  
**irú** *i.n.* baby banana.  
**īyà-īyà** *i.n.* plantain variety.  
**Īyà-Īyà** ~ **Īyá-Īyà** *pr.n.* Iya-Iya, name  
 of a mythological figure.  
**í** *i.n.* building.  
**ĩ** *v.* be.  
**ĩ** *v.* quiver (?).  
**î** *v.* go (pl.).  
**ĩ** *i.n.* botfly larva, larva of *Dermatobia*  
*hominis*.  
**ĩ** *v.* climb.  
**īē** *i.n.* blowgun.  
**ìnè** *c.i.n.* day before.  
**īnū** *v.* hear; think.  
**īnūkà** *v.* play.  
**ĩ'pémá** *i.n.* edge of the jungle.  
**kā** *v.* wake.  
**kā** *v.* lie.



**kà** *v.* ask; shout.

**-kà** *b.n.* liver.

**kǎ** *v.* stab.

**kǎ** *conj.* and.

**kǎ** *i.n.* plant sp., unidentified, a wild plant yielding small, sweet red fruits.

**kǎ** = ~ **ēkǎ** *conj.* so that.

**ká'a** = ~ **éká'a** = *part.* let's see.

**-kánà** ~ **-kúnà** *b.n.* time.

**kāpé** *i.n.* coffee.

**kāu** *v.* scrape (an animal's hair off).

**kāuũ** *v.* pluck (pl.).

**kǎ'ũ** *v.* lean; squat.

**kāwē** *v.* pluck (sg.).

**kòí** (?) *i.n.* far away (?).

**kōnērù** *i.n.* fish sp., unidentified, local Spanish *carnero*.

**kōnũ** *i.n.* tongue.

**kōpīwārà** *i.n.* capybara,

*Hydrochoerus hydrochaeris*.

**kōrí** *i.n.* White person.

**kõù** *i.n.* red throated caracara, *Ibycter americanus* (?).

**kõù** *onom.* red throated caracara cry.

**kõwà** *i.n.* cocoi heron, *Ardea cocoi*.

**kōwí** *i.n.* fruit sp., *Garcinia* sp.

**kõwú** *i.n.* deer, *Mazama americana*.

**kóyà** *i.n.* caiman, *Caimaninae* sp.

**kú** *v.* laugh.

**kũ** *i.n.* fish sp., unidentified, local Spanish *pez lisa*.

**kũ** *v.* hide.

**kũ** *v.* push.

**kũchì** *i.n.* pork.

**kũchĩà** *i.n.* cooking shed.

**-kũch'ũ** ~ **-kũch'ũ'ũ** *b.n.* fermented drink.

**kũ'mākà** *i.n.* plant yielding a black dye, unidentified.

**kũpǎ** *i.n.* *compadre*, male member of a *compadrazgo* relationship.

**kũrũrũ** *i.n.* toad.

**-kũtũ** *b.n.* bank.

**-kũtũ** *b.n.* foot.

**kũ'u** *v.* kick.

**kũ** = *part.* come on.

**-kũã** *b.n.* [?] origin; clan.

**kũ'chì** *i.n.* knife.

**-kũmā** *b.n.* [-tr.] custom.

**-kũrũwǎ** *b.n.*? times (?).

**-kũtā** *b.n.* skein.

**-kũwā** *b.n.* [-tr.] side.

**má** *v.* have a tumor.

**má** *v.* be sad.

**mǎ** *v.* chop up.

**-mā** *b.n.* [-tr.] path.

**mǎ** *v.* germinate.

**mǎ** *v.* kill (sg.).

**mǎ** *v.* be long.

**-mǎ** *b.n.* [+tr.] root.

**-'mǎ** (~ **-mǎ** (?) ~ **-mǎ** (?) *b.n.* [-tr.]? wife.

**-'mǎ** *b.n.* cavity.

**-māchĩ** *b.n.* meat.

**má'è** *i.n.* wasp.

**-māgũ** *b.n.* [?] cutting edge.

**māiāgāwà** *i.n.* godmother.

**mái'ě** *i.n.* sibling.

**māmǎ** *i.n.* mum.

**māmà** *i.n.* mommy.

**-'mārũ'ũ** *b.n.* anus.

**mǎ'ũ** *v.* live.

**mā'ũ** *v.* shoot with an arrow.

**m'ǎ'ũ** *v.* bend down.

**mé** *v.* be good.

- mê** *v.* splash.  
**mêà** *adv.* well.  
**mēchà** *i.n.* table.  
**-’mē’e ~ -mē** *b.n.* [-tr.] hand.  
**méégà** *v.* be appealing to the mind.  
**mīgā’ú ~ mīkā’ú** *i.n.* banana soup.  
**mō’è** *v.* say hello or goodbye.  
**mòì ? ?**  
**mò’o ? ?**  
**mōtārākārì** *i.n.* ginger, unidentified,  
 local Spanish *ajengibre*.  
**mô’ũ** *c.i.n.* following day.  
**mũ** *v.* be several.  
**mû** *v.* harpoon.  
**mū** *v.* weave.  
**mũ** *v.* send.  
**mu** *v.* eat (a raw fruit).  
**mūkāwà** *i.n.* rifle.  
**m’ũ’kũ** *i.n.* horsefly.  
**mūrénũ** *i.n.* fly.  
**mūtúrù** *i.n.* motor, motor boat.  
**múũ** *v.* be afraid.  
**-mũ** *b.n.* paste.  
**-mũkũ** *b.n.* companion.  
**mūrāpēwà** *i.n.* plank.  
**nâ** *v.* carry (pl.).  
**nâ** *v.* shatter.  
**nà** *v.* nasal mucus.  
**nà(áchí)** *v.* calm down.  
**-ná’a** *b.n.* [-tr.] neck.  
**nái** *m.i.n.* other (N).  
**nái** *v.* be spicy.  
**nâi** *v.* be hot.  
**nâi** *i.n.* tree.  
**nâi** *v.* fart.  
**nài** *m.i.n.* other (F/M).  
**nai** *v.* tie.  
**nâi’âtũ** *i.n.* tree leaf.  
**nâi’chákú’ü** *i.n.* tree branch.  
**nâi’chí** *i.n.* giant armadillo,  
*Priodontes maximus*.  
**nâi’nēkũ** *i.n.* jungle.  
**nâi’tá** *i.n.* tree trunk.  
**ná’í** *i.n.* younger *chambira* palm,  
*Astrocaryum chambira*.  
**nākũ** *i.n.* tapir, *Tapirus terrestris*.  
**-nátũ** *b.n.* [-tr.] father.  
**-nē** *b.n.* [-tr.] son.  
**-nè** *b.n.* trunk.  
**-’nè** *b.n.* weapon.  
**-nēkà** *b.n.* [-tr.] stomach.  
**-nèpũ** *b.n.* uncle.  
**-nētũ** *b.n.* [-tr.] plant.  
**nô’é** *i.n.* grandmoter, old woman.  
**nô’ré** *v.* be few.  
**nô’rí** *c.i.n.* beginning.  
**nô’táá** *part.* outright.  
**nòtúkámá** *c.i.n.* vain attempt.  
**nú** *i.n.* bat sp., unidentified.  
**nũ** *v.* put (pl.) (at an unstable,  
 temporary, adventitious location).  
**nũ** *v.* get mad.  
**nũ’kúmá** *c.i.n.* past time.  
**nũ’u** *v.* be short.  
**nũwá** *conj.* well (M/N/NS).  
**ñā** *v.* run (sg.).  
**ñà** *v.* throw.  
**ñâàkũ** *dem. adv.* in this manner.  
**ñairu** *i.n.* ?  
**ñâ’tũ** *i.n.* lower part.  
**-ñ’ũ** *b.n.* breast.  
**ñōī** *onom.* vibrating metal sound.  
**ñò’kũ** *c.i.n.* if only; soon.  
**ñù’ ~ ñù’u** *int.-ind. i.n.?* what  
 activity?  
**ñu** *v.* crush.

ñyáchí ~ rüáchí ~ chí *conj.* and.  
 ñù'ákù *int.-ind. adv.* how?  
 ñù'gù *int.-ind. c.i.n.* when?  
 ñumá *c.i.n.* present time; this state.  
 ñù're *int.-ind. m.i.n.* how much?,  
     how many?  
 ngā *i.n.* lowland paca, *Cuniculus paca*.  
 ngā'ü *v.* be full.  
 ngā'ü *i.n.* middle.  
 ngā'ü *v.* answer.  
 ngé'e *v.* be ready for consuming.  
 ngērù ~ ērù *conj.* as for it.  
 ngē'wā *c.i.n.* recent time.  
 ngē'wákà *c.i.n.* recent time.  
 ngî *v.* hold.  
 ngî *v.* steal.  
 ngì'ā *v.* urge; let's go.  
 ngî'i *v.* till.  
 ngî'kà *v.* till.  
 ngo *v.* bite.  
 ngù'ü *i.n.* collared peccary, *Pecari tajacu*.  
 ngû, mmm *interj.* yes.  
 ngù *v.* rest.  
 ngü *interj.* okay.  
 ó *v.* disappear.  
 ô *v.* be unwilling.  
 õ *v.* go out (a fire).  
 ǒ *v.* bear fruits.  
 ɔ *v.* be wounded.  
 óchágù *i.n.* dart.  
 ôégà'è *v.* be worried.  
 ɔí *i.n.* grandfather, old man.  
 òkáyüwà ~ òkáyiwà *i.n.* tree sp.,  
     *Cedrela odorata* (?), local Spanish  
     *cedro*.  
 Òmārīyānà ~ Ğmārīyānà *pr.n.?* ?

òpüyà *i.n.* collared peccary, *Pecari tajacu*.  
 òrāchà *i.n.* guava, *Psidium guajava*.  
 òrāwè *i.n.* cockroach.  
 ǒrì ~ ǒ'rì'i *i.n.* fruit.  
 òtá *i.n.* chicken.  
 ò'tērè *i.n.* zapote fruit, unidentified.  
 óu *interj.* yes.  
 ô'ü (?) ? ?  
 ǒ (?) *v.* fit (?).  
 ò'é *i.n.* mother.  
 òmé *i.n.* brown woolly monkey,  
     *Lagothrix lagotricha*.  
 ǒ'mí *i.n.* worm.  
 ónà *i.n.* food, especially animal flesh.  
 Ònānè *i.n.* name of a legendary tree.  
 Ònátú *pr.n.* name of a legendary  
     river.  
 ò'ǒ *i.n.* little child.  
 ó'wí *v.* tease.  
 òwú *i.n.* older *chambira* palm,  
     *Astrocaryum chambira*.  
 pá *v.* be dry.  
 pā *v.* be full; be nubile.  
 -pà *b.n.* hammock.  
 pà *v.* be tired.  
 pā *v.* cling on.  
 pā'à *v.* be quick.  
 pā'àáchí *adv.* briefly.  
 -'pāchì'i *b.n.* [?] wing.  
 pāi *i.n.* priest.  
 pāi *v.* prick.  
 pānérà *i.n.* pot.  
 pāpá *i.n.* dad.  
 -pārà *b.n.* [-tr.] leg.  
 -pātā *b.n.* [-tr.] house.  
 -pātā'ü *b.n.* building.  
 pā'ü *v.* play; ring.

- pá'ù *b.n.* spine.  
 pǎwú *i.n.* spider.  
 pé(-?) *v.?* clap.  
 pé *v.* sleep.  
 pe *v.* cram.  
 pé'chì *i.n.* basket.  
 -pèchìnù *b.n.* bank.  
 -pe'e *b.n.* [+tr.] front.  
 -pērēmà *b.n.* [-tr.] upper leg.  
 Pērú *pr.n.* Peru.  
 pétà *i.n.* celebration.  
 pētā-pétà *i.n.* axe.  
 pǐ *v.* wipe.  
 pó *v.* bend.  
 pǒ *v.* knock.  
 pō'í *i.n.* plantain.  
 pǒ'kú *v.* punish.  
 pōpērà *i.n.* paper; book.  
 pō'pōyù ~ pō'pāyù *i.n.* papaya.  
 pǒrá *v.* be strong.  
 pōrātù *i.n.* plate.  
 pōrì *i.n.* tobacco.  
 pòrī *i.n.* edible plant sp.,  
*Macrolobium* sp. (?), local Spanish  
*batata*.  
 pǒ'ù, pǒ'o (?) *v.* block (?).  
 póú *i.n.* bread.  
 pǒwí *i.n.* brown-throated sloth,  
*Bradypus variegatus*.  
 pó'wō ~ pó'wā *i.n.* fishhook.  
 pú *v.* be bitter.  
 pû *v.* get used.  
 pū *v.* rain.  
 pù *v.* plant.  
 pù *v.* rob.  
 pu *v.* be filled with air.  
 pūrākú ~ pūrāākú *v.* work.  
 pǔ'u *v.* be white.  
 -pū *b.n.* [-tr.] cloth.  
 -pùtā *b.n.* tooth.  
 -pùtūwē *b.n.* belly.  
 -pü'ü *b.n.* [+tr.] spherical shape.  
 -'pü'ü *b.n.* [+tr.] supernatural hill.  
 -ré (?) *b.n.?* [?] amount (?).  
 rù (~ dù) *conj.* and.  
 -'rū'ü *b.n.* [+tr.] anus.  
 sérò *v.* be absent.  
 tá *v.* be big.  
 -tá *b.n.* [-tr.] thicker segment (?);  
 trunk.  
 ta *v.* drop (sg.); put (sg.) (at a stable,  
 permanent, defining location).  
 -tǎ *b.n.* maternal uncle.  
 -tá'a *b.n.* [+tr.] grandchild.  
 -'tá'a *b.n.* [-tr.] lake.  
 -'ta'a *b.n.* [+tr.] body hair.  
 tàaau *onom.* splash sound.  
 tāchíwà *i.n.* ant.  
 tǎ'ē *v.* trade.  
 tǎgù *part.* never.  
 tǎi *v.* be hard.  
 tǎiyà *v.* be hungry.  
 tǎ'kǔ *v.* be an orphan.  
 tǎmā *part.* NEG.precisely.  
 -tāmà *b.n.* inside.  
 -tānù *b.n.* [-tr.] group.  
 -tànù *b.n.* compensation.  
 -tānū'ú *b.n.* [-tr.] relative.  
 tǎ're *v.* be two; two.  
 = tǎrēé *part.* damn it (?).  
 tǎ'u *v.* be absent; get lost.  
 tāu *v.* be ash-colored.  
 tǎ'u *i.n.* toucan, *Ramphastos tucanus?*  
 tāu'échìgù *i.n.* twisted broom,  
 indirect designation for the  
 jaguar.

- tāukè *i.n.* cemetery.  
 tàunēkū *i.n.* low water season; year.  
 tà'ú *i.n.* abiu fruit, *Pouteria caimito*.  
 -tá'ù *b.n.* [-tr.] bounded flat surface.  
 t'āwà *v.* be thirsty.  
 tàwēmākū *i.n.* moon.  
 -té *b.n.* [-tr.] husband.  
 tē'e *v.* get stuck.  
 tē'ě *int.-ind. i.n.* what/who? (S).  
 tē'è *int.-ind. i.n.* what/who? (F/M).  
 -te'e *b.n.* [+tr.] granular substance.  
 témā *i.n.* moriche palm, *Mauritia flexuosa*.  
 téré *i.n.* parrot sp., unidentified.  
 tīkūnà *i.n.* Tikuna.  
 tó *v.* plant.  
 tô *v.* fetch.  
 tò *m.i.n.* other (NS).  
 tǒ *v.* sit.  
 to *i.n.* kinkajou, *Potos flavus*.  
 to pòu *onom.* splish splash!.  
 tò'mà *c.i.n.* elsewhere (PLOC).  
 tōmáèpū *m.i.n.* three.  
 tó'ónè *i.n.* stairs.  
 tō'ū *i.n.* white-fronted capuchin, *Cebus albifrons*.  
 tò'ū *v.* be twisted.  
 t'ǒ'wé *i.n.* left.  
 tū *v.* pull.  
 tū *v.* perch.  
 tū *v.* choke.  
 tū *i.n.* tree sp., *Cedrelinga cateniformis*.  
 tūkūchí *i.n.* tucuxi, *Sotalia fluviatilis*.  
 Tūpānà *i.n.* God.  
 tūrà *v.* be weak.  
 tū'u *v.* fell.  
 -tú *b.n.* [-tr.] river.  
 tū *i.n.* cotton, *Gossypium* sp.  
 tū *onom.* impact sound.  
 tū *v.* hang.  
 -tū *b.n.* weed.  
 -tū *b.n.* [+tr.] rope.  
 tūákú *int.-ind. i.n.* what? (NS).  
 tūè *i.n.* stomach.  
 tū'è *i.n.* manioc.  
 tūgūnè *i.n.* right.  
 tūkú *int.-ind. v.* what's the matter?  
 -tūkū *b.n.* paternal aunt.  
 tūrè *i.n.* dock.  
 tūtù ? ?  
 -tū'ù *b.n.* [-tr.] space below.  
 tūwá *conj.* well (S).  
 ū *v.* say.  
 ūgú *v.* narrate.  
 ūgúànè *i.n.* story.  
 uh *interj.* oh yes!.  
 ūi *i.n.* manioc flour.  
 ū'kānè *i.n.* magic contracting thread.  
 ūwànū *i.n.* enemy.  
 ū *v.* go (sg.).  
 ū *v.* be there (sg.); cook (by boiling);  
 put (sg.) (at an unstable,  
 temporary, adventitious location).  
 ū *v.* run (pl.).  
 ū *v.* make.  
 ū'à *v.* be dirty.  
 ūágú *v.* try.  
 ūgú *v.* start.  
 ūkú ~ kú *part.* I mean.  
 -ùkú'ü *b.n.*? time.  
 ūtā *i.n.* annatto tree, *Bixa orellana*.  
 ūūnè *v.* be supernatural.  
 ū'ū *v.* cure.  
 -ū *b.n.* feces.

- ’ù *b.n.*? [+tr.] container (typically for a liquid (?)).
- ùkà *i.n.* rat.
- ’ùnūtā *b.n.* bowels.
- ùpā *c.i.n.* formerly.
- ’ùtā *b.n.* immediate vicinity.
- wā *v.* tip over.
- wā (?) *v.* ?
- wā’ā *i.n.* tarantula.
- wāgù *v.* do.
- wā’i *v.* grind.
- wáirā *i.n.* açai palm, *Euterpe* sp.
- wāpúrù *i.n.* larger engine-propelled boat.
- wāwà *i.n.* baby.
- wá’wé *i.n.* Black person.
- wē *b.n.* [?] convenience.
- wē *v.* set straight.
- wē *v.* show.
- wēchì *b.n.* [-tr.] container.
- wēmù *b.n.* [-tr.] food.
- wénà ~ wǎnà *part.* again.
- ’wētā ~ -’wētā’ù *b.n.* bag.
- wē’ú *i.n.* amazon parrot, *Amazona* sp.
- wì *v.* cut.
- wī *v.* be straight.
- wí’á *i.n.* one.
- wìí *i.n.*? beauty (?).
- wīyā *i.n.* song.
- wīyāē *v.* sing.
- wò *v.* drop (pl.); put (pl.) (at a stable, permanent, defining location).
- wōchínè *i.n.* ceiba.tree, *Ceiba pentandra*.
- wòè *part.* evidently (?).
- wōkà *i.n.* cow.
- wōnērà *i.n.* flag.
- wóó *conj.* admittedly, although.
- wù *v.* scratch.
- wǎ’i *v.* saw.
- wǎ’ù *v.* hang.
- wè *v.* untie.
- wè’e *v.* bind.
- wē’e *v.* swim.
- wǐ’i *v.* slip.
- yá *v.* be heavy.
- yǎ *v.* grow.
- yāē *b.n.* hair.
- yá’gùā *i.n.* ancestor.
- yà’nà *c.i.n.* far away.
- yǎ’ú *c.i.n.* remoteness (PLOC).
- yārí *i.n.* tamarin, *Leontocebus* spp.
- yâtù *v.* be a male.
- yá’u *v.* seize.
- yà’u *v.* wash.
- yǎ’u *v.* take.
- y’ǎu *v.* glow.
- yau *v.* be blue or green.
- yáuànèkù *c.i.n.* late afternoon time.
- yāūgārà *i.n.* raft.
- yě *v.* chop down.
- yè’irà *part.* more and more (?).
- yérú *conj.* because (pre-hod. past).
- yè’wákà *c.i.n.* recent time (pre-hod. past).
- yí *v.* sway.
- yì *v.* fall (pl.); grow (pl.).
- yǐ’kù *c.i.n.* later.
- yōi *i.n.* constrictor, *Boinae* sp. or spp.
- Yó’í *pr.n.* Yoi, name of a mythological figure.
- yó’o *v.* chew.
- yōrá *i.n.* master.
- yù *v.* wake up.
- yǔ *v.* die.
- yūēmà *i.n.* axe.

**yūrà** *i.n.* wooden platform.

**yû'u** *v.* jump.

**yūú** *v.* be a shaman.

**yû'ü** *v.* celebrate; dance.

# Appendix C

## Résumé en français

Cette annexe propose un résumé en français du contenu de la présente étude.

Celle-ci consiste en une description de certains aspects de la grammaire d'un parler tikuna abordés depuis une perspective fonctionnelle et typologique. Le tikuna est une langue isolée parlée dans l'ouest de l'Amazonie sur les bords du fleuve Amazone. Le parler tikuna décrit dans cette étude correspond à celui de la communauté de San Martín de Amacayacu, située dans l'extrême sud-est de la Colombie. Les locuteurs de ce parler désignent généralement leur langue du nom de *tāgà*, littéralement 'notre langue (nous inclusif)' ou bien 'langue des gens', y compris dans leurs interactions avec des personnes non tikuna. Les deux principaux domaines de la grammaire de la langue traités dans ce travail sont d'une part son système phonologique, et d'autre part la morphosyntaxe et la sémantique de son syntagme prédicatif. Sont également abordés, avec moins de détail, certains aspects de la morphosyntaxe du syntagme nominal, ainsi que l'expression de la négation dans la langue. Les analyses avancées dans cette étude reposent presque exclusivement sur des données linguistiques de première main que j'ai rassemblées entre 2015 et 2018 à San Martín de Amacayacu avec l'aide de locuteurs natifs de la langue.

La suite de cette annexe esquisse dans un premier temps le profil typologique du tikuna de San Martín de Amacayacu tel que mes recherches m'ont permis de le comprendre, puis présente l'organisation générale de cette thèse, et décrit enfin succinctement le contenu de chacun des sept chapitres de cette dernière.



## Profil typologique du tikuna de San Martín de Amacayacu

La phonétique et la phonologie du tikuna de San Martín de Amacayacu (TSMA) présentent peu de complexité aux niveaux phonétique et phonologique. L'inventaire des phonèmes segmentaux de la langue est relativement réduit (11 consonnes, 6 voyelles), et la réalisation phonétique de ces phonèmes ne présente pas de complexité particulière. La structure syllabique segmentale est simple et peut être schématisée comme suit : /*(C)V(V)(?)*/. Les processus morphophonologiques de la langue n'affectent que rarement les segments. La phonologie du TSMA connaît une complexité bien plus considérable au niveau suprasegmental. La question de la position de l'accent tonique, qui tombe systématiquement sur la première syllabe de certaines catégories de morphèmes libres (pour la plupart d'entre eux) et ne se déplace jamais, ne présente pas de difficulté particulière, pas plus que le trait syllabique de nasalité phonologique, dont la présence dans certaines syllabes est entièrement déterminée lexicalement et ne donne pas lieu à des phénomènes de diffusion phonologique. La langue affiche, en revanche, un inventaire de tonèmes très développé (10 tonèmes d'après l'analyse que je propose ici). Leur réalisation phonétique repose en grande partie sur des propriétés de hauteur mélodique (*pitch*), mais aussi sur des propriétés phonatoires. Chaque syllabe sous-jacente possède son propre tonème lexical, lequel peut se retrouver affecté, dans certains contextes morphosyntaxiques récurrents en discours, par des processus morphotonologiques complexes.

La morphologie du TSMA peut sans doute être qualifiée de principalement agglutinante, bien qu'elle soit aussi, dans une proportion importante, fusionnelle. Autrement dit, une correspondance simple prévaut le plus souvent entre morphèmes et traits grammaticaux, mais il est loin d'être rare qu'un même morphème encode plusieurs traits grammaticaux en même temps (voire, exceptionnellement, qu'une seule fonction grammaticale soit conjointement réalisée au moyen de plusieurs morphèmes ; cf. le cas du verbe déictique ci-après). Les morphèmes sont typiquement syllabiques, c'est-à-dire qu'ils se composent formellement d'une ou plusieurs syllabes complètes, et ne peuvent contenir de segments qui ne sauraient se réaliser qu'en étant syllabifiés avec des morphèmes voisins (à l'exception de la consonne /*ʔ*/, dans certaines circonstances). La forme des morphèmes est généralement un indicateur simple de leur fonction dans la plupart des domaines de la morphologie de la langue (autrement dit, la forme des morphèmes permet le plus souvent une identification aisée de leur fonction par le linguiste), sauf dans le domaine com-

plexe de la morphologie flexionnelle du syntagme prédicatif, où se présentent de nombreux cas de fusion, syncrétisme ou homophonie entre morphèmes divers.

Les substantifs en TSMA se répartissent en deux catégories morphologiques : les substantifs indépendants (qui sont des formes libres accentuées) et les substantifs liés (qui sont des formes liées inaccentuées). La langue possède un système de cinq classes d'accord nominales. L'accord en classe est obligatoire à l'intérieur du syntagme nominal, où il se manifeste sur diverses catégories de morphèmes. Les indices pronominaux attachés au syntagme prédicatif s'accordent également en classe nominale avec le participant qu'ils indexent. Si l'accord en classe est rigide, l'assignation des participants à une classe donnée en discours est pour sa part flexible, y compris au sein d'un même événement de parole, et repose sur une combinaison complexe de critères lexicaux, sémantiques et pragmatiques. Le syntagme nominal en fonction syntaxique de sujet ou d'objet est non marqué morphologiquement (il se présente, autrement dit, sous sa forme au cas zéro). Les fonctions syntaxiques non nucléaires, en revanche, sont le plus souvent marquées au moyen d'un inventaire étendu de suffixes casuels et de noms relationnels qui s'attachent au syntagme nominal concerné. Cette tendance au marquage des fonctions syntaxiques sur le constituant dépendant cohabite avec une tendance opposée à leur marquage sur le constituant tête dans le cas où un syntagme nominal suit (au lieu de précéder) le syntagme prédicatif. Dans ce cas précis, sa fonction syntaxique est manifestée, de préférence, par un indice correspondant attaché au syntagme prédicatif, le syntagme nominal lui-même ne portant pas, de son côté, de marquage morphologique de sa fonction.

Il n'existe pas de classe d'adjectifs en TSMA. C'est la proposition relative ayant son antécédent en fonction de sujet d'un syntagme prédicatif d'aspect interne statif qui, en TSMA, assure le plus souvent le type de fonction assuré dans d'autres langues par des modificateurs adjectivaux. La langue dispose en revanche d'une catégorie réduite d'adverbes, dont l'unique fonction est de servir directement de modificateur du syntagme prédicatif.

Le syntagme prédicatif en TSMA peut être verbal (c'est-à-dire être construit sur une racine verbale, qui sera typiquement monosyllabique) ou bien non verbal. La racine verbale, qui peut être fléchie telle quelle comme un syntagme prédicatif fini, a accès – facultativement – à un riche paradigme de suffixes dérivationnels qui, pour la plupart, spécifient le type de relation spatiale qui existe entre une figure (correspondant à l'argument sujet ou objet) et un fond (*ground*) lors de la phase culminante du procès. De plus, la racine verbale incorpore fréquemment un voire plusieurs constituants nominaux. Le syntagme prédicatif, qu'il soit verbal ou non

verbal, peut recevoir en sus un ou plusieurs suffixes dérivationnels appartenant à un riche inventaire de morphèmes dont les valeurs ont trait à des catégories telles que l'aspect interne ou externe, le mode, l'intensité, ou encore le nombre. La morphologie flexionnelle – passablement complexe – du syntagme prédicatif fini comprend des positions structurelles dont la fonction est d'indexer l'argument sujet, l'argument objet, ou le participant en fonction accusative (une fonction syntaxique distincte de celle d'objet (nucléaire)), bénéfactive, locative, ou d'objet partitif. La morphologie flexionnelle du syntagme prédicatif permet également l'encodage de la classe prédicative (une propriété fondamentalement lexicale des syntagmes prédicatifs, qui se répartissent en cinq classes prédicatives) et, facultativement, du mouvement associé (c'est-à-dire l'encodage de l'existence d'un événement secondaire de mouvement ou de déplacement qui précède immédiatement la réalisation du procès). La catégorie grammaticale du temps est entièrement absente du domaine morphosyntaxique que représente le syntagme prédicatif. L'encodage de valeurs grammaticales temporelles ne peut se réaliser que depuis l'intérieur du syntagme nominal (« temps nominal », *nominal tense*) ou bien au moyen d'enclitiques dont la portée est propositionnelle.

On peut considérer le TSMA comme une langue de type nominatif-accusatif. On peut dire, en effet, que l'argument unique du syntagme prédicatif intransitif (U) s'aligne avec l'argument agent du syntagme prédicatif transitif (A, et non pas avec son argument patient P) du point de vue de l'encodage de la fonction syntaxique de ces arguments (bien qu'en pratique cet alignement ne puisse s'observer que dans la manière dont ces arguments sont indexés au syntagme prédicatif, et non pas dans la manière dont ces arguments sont marqués morphologiquement lorsqu'ils sont représentés par des constituants nominaux indépendants, puisque ces constituants ne portent alors aucun marquage, ce qui empêche d'identifier quelque alignement que ce soit entre U, A et P). On notera cependant que certains suffixes dérivationnels de la racine verbale ou du syntagme prédicatif ont un effet dont l'application présente un alignement de type ergatif-absolutif (ainsi, l'allomorphe pluriel de certains de ces suffixes peut spécifier la pluralité soit de U soit de P, mais jamais de A).

Il n'est pas certain qu'un ordre des constituants principaux non marqué d'un point de vue pragmatique (*Basic Word Order*) puisse être identifié en TSMA. Les positions relatives du sujet (S) et de l'objet (O) sont contraintes syntaxiquement dans le cas (rare) où les deux sont représentés par des constituants nominaux indépendants et se trouvent précéder le syntagme prédicatif (V) (✓SOV, mais pas \*OSV). Cependant, à l'exception donc de \*OSV, toutes les séquences possibles sont attestées

dans – semble-t-il – quelque type de proposition que ce soit (impliquant selon les cas des structures morphosyntaxiques légèrement variables) sans qu'on puisse le plus souvent déterminer clairement que l'une d'entre elles soit pragmatiquement moins marquée que les autres. D'un point de vue purement morphosyntaxique, en revanche, on peut avec plus de fondement considérer l'ordre S(O)V comme le moins marqué, dans la mesure où c'est celui de tous qui requiert pour se produire le moins de matériel morphosyntaxique.

Les catégories grammaticales de temps, aspect, mode, évidentialité et polarité (entre autres) sont encodées au moyen d'un système relativement riche de particules et d'enclitiques de portée propositionnelle.

Parmi les aspects de la grammaire du TSMA qui pourraient présenter actuellement un intérêt particulier pour les typologues, on peut mentionner son système tonologique très développé (décrit dans les SECTIONS 2.4, 2.6.2, et 2.7.3), son système de classes d'accord nominales dans lequel l'accord en classe est obligatoire mais l'assignation à une classe est flexible (*cf.* Bertet *to appear*), son système de suffixes dérivationnels de la racine verbale spécifiant des configurations figure-fond (SECTION 4.2.3), sa construction passive non marquée morphologiquement (SECTION 4.5.3.1), la présence dans la langue d'encodage grammatical du mouvement associé (SECTION 5.8), la variété des stratégies morphosyntaxiques dont la langue dispose pour spécifier au sein du syntagme prédicatif le nombre grammatical des participants de troisième personne (SECTION 5.10), et enfin son verbe déictique (SECTION 6).

## Organisation de la thèse

Cette thèse est organisée comme suit. Le CHAPITRE 1 introduit le lecteur au contexte général de la langue tikuna puis au contexte spécifique de la communauté de San Martín de Amacayacu où j'ai mené mes recherches. Il présente les locuteurs qui ont collaboré à ces recherches et les données que ceux-ci m'ont permis de recueillir, puis recense les principales ressources publiées actuellement disponibles sur la langue tikuna et en langue tikuna, avant d'esquisser un portrait typologique du TSMA.

Le CHAPITRE 2 décrit en détail la phonétique et la phonologie du TSMA, en commençant par l'inventaire de ses phonèmes segmentaux, puis en passant à son riche inventaire suprasegmental, sa phonotactique (c'est-à-dire la manière dont ses phonèmes peuvent être combinés pour former des syllabes et des morphèmes) et

sa morphophonologie (c'est-à-dire la manière dont ses morphèmes peuvent être combinés pour former des mots). Ce chapitre explore également des aspects de la phonologie du TSMA qui découlent de contacts passés ou présents avec d'autres langues (phonologie des mots d'emprunt et du mélange codique – *code-mixing*) ainsi que des aspects de sa diachronie. Il se termine sur une présentation du système orthographique pratique dans lequel est transcrit le TSMA dans les autres parties de cette étude.

Les CHAPITRES 3 à 7 traitent de la morphosyntaxe de la langue. Le CHAPITRE 3 commence avec une introduction générale à la structure du syntagme nominal, puis analyse en détail la morphologie et la distribution syntaxique de quelques-uns de ses éléments constitutifs (substantifs indépendants et substantifs liés, pronoms, démonstratifs non locatifs, et joncteur). Il s'achève sur une brève introduction au système de marquage des fonctions syntaxiques des syntagmes nominaux en TSMA.

Les CHAPITRES 4 à 6 examinent en détail la morphosyntaxe du syntagme prédicatif (SP). Le CHAPITRE 4 commence par présenter la structure générale du SP. Sont ensuite décrits par le menu, d'une part, la morphologie non flexionnelle à laquelle seul le SP verbal a accès (suffixes dérivationnels de la racine verbale et incorporation nominale), puis, d'autre part, la composition morphologique des divers types de SP non verbaux. Pour finir, ce chapitre analyse un par un les suffixes dérivationnels auxquels ont accès aussi bien le SP verbal que le SP non verbal.

Le CHAPITRE 5 poursuit avec l'examen de la morphologie flexionnelle complexe du SP fini en TSMA. Une introduction générale à la structure formelle de la « matrice flexionnelle » (*inflectional template*) du SP est proposée dans un premier temps, accompagnée d'une présentation succincte du type de fonctions grammaticales qu'assurent les morphèmes (des proclitiques pour l'essentiel) qui occupent les huit positions structurelles de cette matrice (indexation de participants aux fonctions syntaxiques diverses, encodage du mouvement associé et encodage de la classe prédicative – ou « conjugaison » ; noter au passage qu'aucune de ces fonctions n'a trait au temps, à l'aspect ou au mode). La distribution fonctionnelle des trois tiroirs verbaux de la langue (tiroirs Indicatif, Impératif et Subjonctif), lesquels représentent les trois valeurs de la dernière dimension flexionnelle du SP en TSMA, est exposée dans un second temps. L'encodage de la valeur du tiroir verbal ne se réalise pas à un emplacement précis et unique de la matrice flexionnelle du SP, mais procède indirectement à travers la sélection de l'un ou l'autre des trois paradigmes de morphèmes légèrement distincts dont disposent certaines positions structurelles de la matrice. Le chapitre se poursuit avec un exposé formel détaillé des morphèmes occupant les positions structurelles de la matrice qui disposent de paradigmes dif-

férents en fonction du tiroir verbal, suivi d'un exposé des morphèmes occupant les positions de la matrice qui présentent un paradigme unique commun aux trois tiroirs verbaux. La fin du chapitre est consacrée à l'exploration, depuis une perspective fonctionnelle, de deux des catégories grammaticales (mouvement associé et classe prédicative) que permet d'encoder la morphologie flexionnelle du SP en TSMA, puis à l'exposition des diverses stratégies – flexionnelles ou non – auxquelles peut avoir recours la langue pour spécifier à l'intérieur du SP le nombre grammatical des participants.

Le CHAPITRE 6 traite de la morphologie et de la distribution fonctionnelle du verbe déictique du TSMA, lequel a approximativement le sens de 'faire comme ça'. Bien que la flexion du verbe déictique s'organise selon les mêmes catégories grammaticales que le SP régulier, son paradigme morphologique est unique et entièrement irrégulier. C'est là la principale raison pour laquelle ce verbe est examiné dans un chapitre à part.

Le CHAPITRE 7, pour finir, analyse en détail l'un des aspects de la morphosyntaxe de la phrase en TSMA, à savoir l'expression de la négation.

Cette étude comprend par ailleurs trois annexes. L'ANNEXE A consiste en la transcription contextualisée et accompagnée d'une analyse linguistique intégrale d'un enregistrement de 22 minutes dans lequel Loida Ángel Ruiz narre en TSMA quelques épisodes du cycle mythologique de Ngutapa et ses enfants. Les chapitres centraux de cette étude font régulièrement référence à des passages de ce texte. Ceci est conçu pour permettre au lecteur d'observer dans toute la richesse d'un contexte naturel les phénomènes grammaticaux analysés dans ces chapitres.

L'ANNEXE B est un glossaire qui recense, à toutes fins utiles, la totalité des lexèmes mentionnés en un point ou un autre de cette étude.

Le présent résumé en français constitue la troisième annexe de cette étude.

On notera pour finir qu'un index exhaustif des morphèmes grammaticaux mentionnés où que ce soit dans cette étude est joint à la fin du présent volume.

## **CHAPITRE 1 – Introduction**

Je présente dans ce chapitre la langue qui constitue l'objet de cette étude ainsi que les données sur lesquelles cette étude s'appuie. La SECTION 1.1 brosse une esquisse du contexte géographique, sociolinguistique, généalogique et dialectologique

de la langue tikuna prise dans son ensemble. La SECTION 1.2 s'intéresse plus spécifiquement au contexte de San Martín de Amacayacu. Elle développe également les raisons pour lesquelles j'ai choisi de mener mes recherches dans cette communauté en particulier et expose la manière dont j'ai procédé dans ces recherches. La SECTION 1.3 présente les vingt-deux locuteurs qui ont participé à l'étude dont les résultats sont consignés dans ce travail et explicite la nature des données que leur collaboration m'a permis de rassembler. La SECTION 1.4 dresse un inventaire des principales ressources sur la langue tikuna et en langue tikuna publiées à ce jour, qu'il s'agisse de travaux scientifiques de date relativement récente ou bien de témoignages non scientifiques de la langue recueillis à des dates plus anciennes. La SECTION 1.5 décrit le profil typologique du tikuna de San Martín de Amacayacu. La SECTION 1.6, pour finir, expose l'organisation générale de la suite du présent travail.

## CHAPITRE 2 – Phonétique et phonologie

Ce chapitre est consacré à la phonétique et à la phonologie du TSMA. Les unités segmentales sous-jacentes de la langue et leur réalisation sont décrites dans la SECTION 2.1. Celles-ci forment un inventaire relativement réduit de 11 phonèmes consonantiques (dont aucune nasale ni aucune liquide) et 6 phonèmes vocaliques. Une seule consonne, à savoir l'occlusion glottale, peut apparaître en position de coda syllabique, auquel cas sa réalisation de surface est régie par des règles d'une complexité moyenne.

Les sections suivantes sont consacrées à l'exposition des unités sous-jacentes suprasegmentales du TSMA. L'accent tonique est traité dans la SECTION 2.2. Sa présence et sa position sont fixées sur la première syllabe de certains types de morphèmes (parmi lesquels les racines verbales et les substantifs indépendants, notamment), de sorte que sa fonction peut être considérée comme non pas contrastive, mais démarcative. La SECTION 2.3 traite de la nasalité, qui représente un trait phonologique s'exprimant à l'échelle de la syllabe. L'inventaire exceptionnellement développé des tonèmes du TSMA, qui constitue l'un des aspects les plus singuliers de la langue, fait l'objet d'un examen approfondi, aussi bien d'un point de vue descriptif que d'un point de vue typologique et aréal, dans la SECTION 2.4.

La SECTION 2.5 expose la phonotactique du TSMA, c'est-à-dire les modalités selon lesquelles les unités sous-jacentes présentées dans les SECTIONS 2.1–2.4 peuvent ou ne peuvent pas se combiner pour former des syllabes.

La SECTION 2.6 décrit les principaux phénomènes de morphophonologie attestés dans la langue. Des phénomènes de cette nature se produisent en TSMA aussi bien au niveau segmental qu'au niveau suprasegmental. Cette section expose notamment en détail les patrons complexes d'alternances tonologiques morphologiquement conditionnées qui ont lieu dans la langue.

La SECTION 2.7 explore des aspects de la phonologie segmentale et suprasegmentale du TSMA qui ont rapport à des situations de contact dans lesquelles s'est trouvée – ou se trouve encore aujourd'hui – la langue avec diverses autres langues parlées à une époque ou à une autre dans l'ouest amazonien. Cette section expose, en particulier, la manière dont les mots d'emprunt, et même les mots espagnols insérés par mélange codique dans un énoncé en TSMA, se voient attribuer des tonèmes de telle sorte que chacune de leurs syllabes sous-jacentes possède son propre tonème lexical sur le modèle des mots natifs.

La SECTION 2.8 sonde brièvement quelques aspects de la diachronie du système phonologique du TSMA.

La SECTION 2.9, pour finir, expose l'orthographe pratique dans laquelle est transcrit le TSMA dans la suite de cette étude.

## CHAPITRE 3 – Syntagme nominal

Ce chapitre commence par une introduction générale à la morphosyntaxe du syntagme nominal (SN) en TSMA (SECTION 3.1), puis explore plus en détail quatre points présentant un intérêt particulier à l'intérieur de ce domaine, à savoir la question de la distinction entre substantifs indépendants et substantifs liés (SECTION 3.2), le système pronominal (SECTION 3.3), le système des démonstratifs non locatifs (SECTION 3.4) et enfin la morphosyntaxe du joncteur, un morphème à la distribution unique dans la langue (SECTION 3.5). Le chapitre s'achève sur une brève introduction au système de marquage des fonctions syntaxiques des syntagmes nominaux (SECTION 3.6).

Les principaux éléments qui entrent dans la composition morphosyntaxique interne du SN en TSMA sont :

1. les substantifs indépendants, qui sont des formes libres ;
2. les substantifs liés, qui sont des formes liées ;



3. les racines pronominales et les mots pronominaux indépendants dérivés de celles-ci ;
4. les racines démonstratives non locatives et les mots démonstratifs non locatifs indépendants dérivés de celles-ci ;
5. les racines démonstratives locatives et les mots démonstratifs locatifs indépendants dérivés de celles-ci ;
6. les nominalisations sans marque morphologique, c'est-à-dire des syntagmes prédicatifs directement employés en fonction de constituants nominaux sans marquage morphologique associé ;
7. une poignée de morphèmes dérivationnels – peu fréquents – qui ne peuvent s'attacher qu'à des mots nominaux ;
8. la proposition relative, formée au moyen du suffixe relativeur, et la proposition subordonnée en /-'û/ 'SUB', c'est-à-dire des propositions occupant une fonction de constituant nominal et dont le référent est respectivement un participant ou un procès ;
9. le déterminant indéfini *wí'á* 'INDF' ;
10. et enfin le joncteur, qui a pour fonction prototypique de marquer explicitement la relation de constituance liant entre eux deux constituants nominaux dont l'un sert de modifieur à l'autre et qui forment ensemble un unique SN complexe.

Il est important de noter, au sujet de la distribution syntaxique du joncteur, que certains types de modifieurs précèdent presque toujours directement le SN qu'ils modifient, c'est-à-dire sans l'intervention du joncteur. Il s'agit avant tout des mots démonstratifs non locatifs, d'une part, et des syntagmes génitifs (qui sont des syntagmes nominaux portant le suffixe de cas /-ârû/ 'GEN'), d'autre part. *Wí'á* 'INDF' est sujet à de la variation intergénérationnelle : alors que chez les locuteurs âgés, *wí'á* requiert la présence du joncteur (entre lui et le SN qu'il détermine) quel que soit le contexte, chez les locuteurs moins âgés, en revanche, il a tendance à ne déclencher la présence du joncteur qu'en contexte passé.

Les éléments 1. à 4. de la liste ci-dessus sont traités en détail dans les SECTIONS 3.2–3.5. Les éléments 5. à 8. ne sont pas examinés en profondeur dans cette étude. On pourra cependant les observer à l'œuvre dans une partie importante des exemples présentés tout au long de ce travail.

## CHAPITRE 4 – Syntagmes prédicatifs verbal et non-verbal et leur morphologie non-flexionnelle

La FIGURE 1 représente de façon schématique la structure générale du syntagme prédicatif (SP) en TSMA. Ce chapitre traite des divers types de structures morphologiques qui peuvent se rencontrer à l'intérieur du niveau structurel entouré en rouge dans cette figure. Plus concrètement, on y présente les différents types de SP attestés dans la langue, qui se répartissent en SP verbaux et SP non verbaux. On y décrit par ailleurs, d'une part, la morphologie dérivationnelle propre au SP verbal (qui est subdivisée en dérivation proprement dite et incorporation nominale) et, d'autre part, la morphologie dérivationnelle à laquelle ont accès aussi bien le SP verbal que le SP non verbal. Les opérations morphologiques dont le domaine d'action correspond au niveau structurel entouré en pointillé noir dans la FIGURE 1 relèvent de la morphologie flexionnelle du SP fini. Elles font l'objet d'un traitement à part dans le CHAPITRE 5.

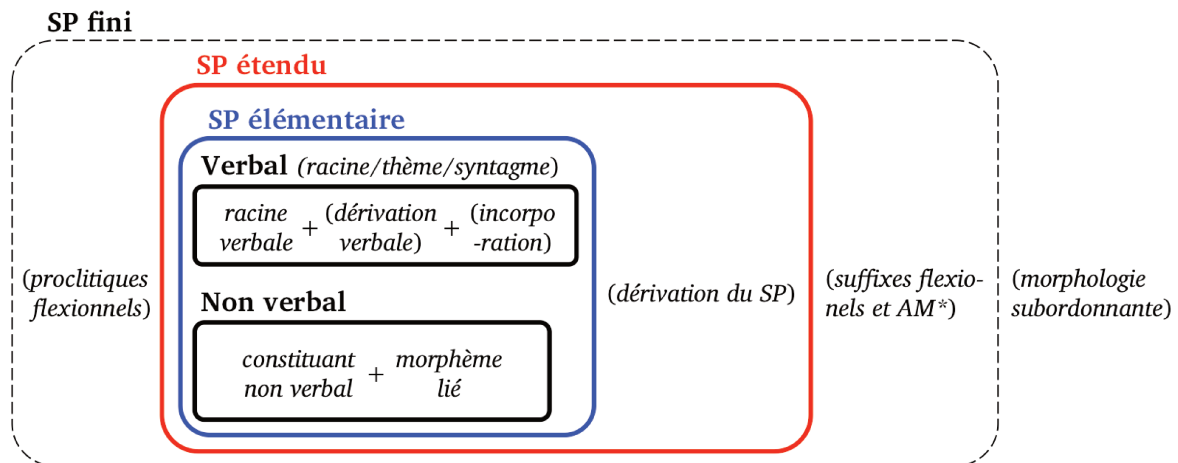
Comme mentionné ci-dessus, les SP en TSMA se répartissent en deux grands types, le SP verbal et le SP non verbal (qui correspondent respectivement à chacune des deux zones entourées d'un trait noir épais dans la FIGURE 1).

Le SP verbal peut être formé d'une racine verbale seule, comme dans l'exemple suivant :

- (1) *chā = ná = chí*  
 1SG.ACC = 3M/N/NS.SBJ = **piquer**  
 'elle m'a piqué'

Il peut également consister en un thème verbal morphologiquement complexe, fait de la combinaison d'une racine verbale avec un (et un seul) suffixe dérivationnel de la racine verbale. Le SP montré dans l'exemple suivant consiste ainsi en un thème verbal composé de la même racine verbale que le SP contenu dans l'exemple précédent, auquel s'adjoint cependant le suffixe dérivationnel de la racine verbale /-ǎ/, qui indique qu'une figure (en l'occurrence un dard ou des piqûres de guêpe) est dans une relation spatiale plurielle avec un fond (en l'occurrence le locuteur) :

- (2) *chā = ná = chí-ǎ*  
 1SG.ACC = 3M/N/NS.SBJ = **piquer-PLLOC**  
 'elle m'a piqué à plusieurs endroits (de mon corps)'



\*AM : alternances morphotonologiques de Type 1 (cf. SECTION 2.6.2.1)

FIGURE 1. Schéma structurel du syntagme prédicatif (SP) en TSMA

Un constituant nominal – substantif lié ou SN entier – peut également s’incorporer à la racine verbale ou au thème verbal. En fonction de la construction morphosyntaxique et du contexte sémantique dans lesquels ils apparaît, le constituant nominal incorporé peut recevoir un large éventail de rôles sémantiques dans le procès. Les exemples (3a–3b) montrent comment un substantif lié peut être incorporé aux SP verbaux présentés en (1–2) ci-dessus. Dans ce contexte, le constituant nominal incorporé est interprété comme faisant référence à la partie (en l’occurrence une partie du corps) de l’objet grammatical qui correspond en pratique au patient directement affecté par le procès :

- (3) a. *chā = ná = chí-kùtũ*  
 1SG.ACC = 3M/N/NS.SBJ = piquer-pied  
 ‘elle m’a piqué le(s) pied(s)’
- b. *chā = ná = chí-à-kútũ*  
 1SG.ACC = 3M/N/NS.SBJ = piquer-PLLOC-pied  
 ‘elle m’a piqué à plusieurs endroits de mon pied (ou mes pieds)’

Le SP non verbal, de son côté, est formé de la combinaison de certains types de constituants non verbaux avec certains types de morphèmes liés. L’exemple suivant présente un cas de SP non verbal, composé en l’occurrence d’un SN auquel est suffixé le marqueur possessif /-ã/ :

- (4) *ná = kūchì-ã*  
 3M/N/NS.SBJ = cochon-POSS  
 ‘il possède un cochon (ou des cochons)’

Enfin, le SP verbal ou non verbal « élémentaire » tel qu'il vient d'être décrit (niveau structurel entouré en bleu dans la FIGURE 1) peut par ailleurs recevoir un ou plusieurs suffixes dérivationnels du SP, et ainsi former un SP « étendu » (niveau structurel entouré en rouge dans la FIGURE 1). À titre d'exemple, la totalité des SP élémentaires présentés jusqu'ici en (1–4) peuvent recevoir le suffixe dérivationnel du SP /-gú/, qui marque la pluralité de l'un des participants du procès :

- (5) a. *chā = ná = chí-gú*  
 1SG.ACC = 3M/N/NS.SBJ = **piquer-PL**  
 'elles m'ont piqué'
- b. *chā = ná = chí-à-gú*  
 1SG.ACC = 3M/N/NS.SBJ = **piquer-PLLOC-PL**  
 'elles m'ont piqué à plusieurs endroits (de mon corps)'
- c. *chā = ná = chí-kútū-gú*  
 1SG.ACC = 3M/N/NS.SBJ = **piquer-pied-PL**  
 'elles m'ont piqué le(s) pied(s)'
- d. *chā = ná = chí-à-kútū-gú*  
 1SG.ACC = 3M/N/NS.SBJ = **piquer-PLLOC-pied-PL**  
 'elles m'ont piqué à plusieurs endroits de mon pied (ou mes pieds)'
- e. *ná = kūchì-ā-gú*  
 3M/N/NS.SBJ = **cochon-POSS-PL**  
 'ils possèdent un cochon (ou des cochons)'

Ce chapitre s'organise comme suit. La SECTION 4.2 traite du SP verbal, c'est-à-dire de la racine verbale, de l'essentiel de sa morphologie dérivationnelle propre, et enfin de l'incorporation de constituants nominaux. Les divers sous-types de SP non verbal sont exposés dans la SECTION 4.3. La morphologie dérivationnelle du SP, c'est-à-dire l'ensemble des suffixes dérivationnels qui peuvent généralement s'attacher aussi bien au SP verbal qu'au SP non verbal, est examinée en majeure partie dans la SECTION 4.4. Enfin, les morphèmes dérivationnels qui opèrent spécifiquement sur la valence du SP (à savoir les deux derniers suffixes dérivationnels de la racine verbale et les deux derniers suffixes dérivationnels du SP) sont traités séparément dans la SECTION 4.5, aux côtés de deux constructions qui affectent également la valence du SP mais sans impliquer aucun marquage morphologique associé.

## CHAPITRE 5 – Morphologie flexionnelle du syntagme prédicatif

Ce chapitre décrit la morphologie flexionnelle du SP fini. La quasi-totalité des morphèmes dont il est question ici sont des proclitiques qui sont directement préposés au SP. La seule exception à cette généralisation est un suffixe qui s'attache à l'autre extrémité du SP. Bon nombre de ces morphèmes ont pour fonction d'indexer des participants ayant des fonctions syntaxiques diverses : sujet, objet, participant en fonction accusative (lequel se distingue de l'objet (nucléaire) au niveau morphosyntaxique et, dans une certaine mesure, au niveau sémantique), participant bénéfactif(-maléfactif), participant locatif et participant objet partitif. D'autres parmi ces proclitiques encodent la classe prédicative (ou « conjugaison », si l'on veut) du SP auquel ils sont préposés. D'autres encore indiquent que le procès s'accompagne d'un mouvement associé. Un certain nombre de ces morphèmes sont des morphèmes fusionnels, qui accomplissent plusieurs de ces fonctions à la fois. Ceux-ci contribuent à rendre jusqu'à un certain point fusionnelle la morphologie principalement agglutinante du TSMA. Enfin, l'une des valeurs flexionnelles encodées dans le SP – à savoir le tiroir verbal Subjonctif – compte parmi ses exposants un processus d'alternance tonologique. Sa réalisation morphologique est, en d'autres termes, de nature partiellement suprasegmentale.

On remarquera que la morphologie flexionnelle du SP ne compte pas parmi ses fonctions l'encodage explicite de valeurs de type temporel, aspectuel, modal ou évidentiel (à l'exception, d'après l'analyse que je propose, d'une valeur d'aspect progressif ; cf. SECTION 5.7.2.1, p.462). Ce type de valeurs grammaticales est pour l'essentiel encodé au moyen de suffixes dérivationnels du SP (cf. SECTION 4.4) ou bien d'enclitiques ou particules de portée propositionnelle, ou encore, pour ce qui concerne la catégorie du temps spécifiquement, à l'intérieur des constituants nominaux à travers l'utilisation de formes spécifiques de certaines classes de mots qui se fléchissent en temps nominal.

Les deux exemples qui suivent illustrent une partie de ces remarques préliminaires concernant les propriétés formelles et fonctionnelles de la morphologie flexionnelle du SP en TSMA :

(6) *í-gù tūnárū-chó'é'e*

*í-gù*                    *tū = ná = rū = chó-'é'e*

bâtiment-PLOC    3S.ACC = 3M/N/NS.SBJ = PCrū = se.trouver.PL-CAUS

'il les fit rester à la maison' [LAR T96]

(7) *yà-nâ-kâwē-à-’ù-’ā’a*

*yà = nâ = kâwē-à-’ù = ā’a*

AM = 3M/N/NS.SBJ\SBJV = cueillir.SG-3M/N/NS.OBJ(\SBJV)-SUB = QUOT

‘il alla le cueillir’ [LAR T43]

L'exemple (6) montre un SP fléchi au tiroir verbal Indicatif. On peut considérer le tiroir Indicatif comme non marqué d'un point de vue morphologique (par rapport aux deux autres tiroirs verbaux de la langue, à savoir le tiroir Subjonctif et, dans une moindre mesure, le tiroir Impératif). C'est là la raison pour laquelle la glose de cet exemple ne mentionne pas la valeur Indicatif. Les proclitiques flexionnels représentés dans cet exemple – où ils forment une chaîne de morphèmes typiquement agglutinante – ont successivement pour fonction d'indexer un participant en fonction accusative (/tū = / '3S.ACC'), d'indexer un argument sujet (/nâ = / '3M/N/NS.SBJ'), et d'encoder la classe prédicative (ou « conjugaison ») du SP (/rū = / 'PCrū'). Cette dernière est en l'occurrence héritée par le SP /chó-'é'e/ (se.trouver.PL-CAUS) 'faire être quelque part (un complément pluriel)' de la classe prédicative lexicale de la racine verbale *chó* 'se trouver (un sujet pluriel)' sur laquelle il est formé.

L'exemple (7) montre quant à lui un SP fléchi au tiroir verbal Subjonctif. La flexion dans ce tiroir verbal se manifeste de manière suprasegmentale au niveau de l'un des proclitiques (en l'occurrence, au niveau de l'indice de troisième personne sujet /nâ = / '3M/N/NS.SBJ\SBJV', dont le tonème /<sup>1</sup>/ peut s'interpréter comme un exposant du tiroir Subjonctif) ainsi que, de façon générale, dans la dernière syllabe du SP lui-même (en l'occurrence, sur l'indice de troisième personne objet /-à/ '3M/N/NS.OBJ' – le seul élément de la morphologie flexionnelle du SP à être un suffixe –, qui se trouve ne pas changer de tonème sous l'effet des alternances morphotonologiques qui affectent en temps normal la dernière syllabe des SP au tiroir Subjonctif, d'où les parenthèses que comprend sa glose : '3M/N/NS.OBJ(\SBJV)'). On notera que les traits grammaticaux dont l'exposant est de nature exclusivement suprasegmentale sont précédés dans la ligne de glose d'une barre oblique inversée <\>. Enfin, le proclitique flexionnel /yà = / 'AM' en (7) indique que le procès principal ('il le cueillit') est précédé par un événement de mouvement associé ('il alla le cueillir').

Ce chapitre s'organise comme suit. La SECTION 5.1 donne un aperçu général de l'ensemble de la matrice flexionnelle du SP fini ainsi que des diverses catégories morphosyntaxiques que ses huit positions structurelles ont pour fonction d'encoder. La SECTION 5.2 introduit, depuis une perspective formelle et fonctionnelle, la division fondamentale qui sous-tend ce que j'appelle les trois tiroirs verbaux de la

langue, à savoir les tiroirs Indicatif (IND), Impératif (IMP) et Subjonctif (SBJV). Bien que la morphologie de ces trois tiroirs opère à peu de chose près au sein d'une seule et même matrice flexionnelle, leurs paradigmes spécifiques diffèrent au niveau des positions 4 à 8 de cette matrice. Les SECTIONS 5.3, 5.4 et 5.5 décrivent tour à tour la morphologie flexionnelle propre à IND, IMP et SBJV dans ces positions. La SECTION 5.6 contient une série de tableaux de flexion qui résument les descriptions détaillées développées dans les SECTIONS 5.3–5.5. La SECTION 5.7 poursuit avec la description de la morphologie correspondant aux positions 1 à 3 de la matrice flexionnelle du SP, lesquelles présentent des paradigmes qui ne varient pas d'un tiroir verbal à l'autre. Les SECTIONS 5.3 à 5.7 offrent ainsi une description complète (positions 1 à 8) – mais dans une large mesure purement formelle – du matériel morphologique ayant pour fonction l'encodage de traits flexionnels dans le SP du TSMA. Les SECTIONS 5.8 et 5.9 examinent quant à elles de plus près, et avec une approche principalement fonctionnelle, deux des catégories grammaticales que ce matériel morphologique a pour fonction d'encoder, à savoir le mouvement associé (qui se réalise dans la position 5 de la matrice) et la classe prédicative (position 6). La SECTION 5.10 s'intéresse pour finir aux diverses stratégies morphologiques dont dispose la langue pour spécifier le nombre grammatical des participants depuis la morphologie du SP lui-même, que ces stratégies fassent usage de matériel morphologique strictement flexionnel (appartenant aux positions 1 à 8 de la matrice) ou bien qu'elles fassent usage de matériel morphologique autre.

## CHAPITRE 6 – Le verbe déictique /ñǎ-/ñâ- + -((rũ)gù)/ 'faire comme ça'

Le verbe déictique de manière<sup>350</sup> /ñǎ-/ñâ- + -((rũ)gù)/, dont 'faire comme ça' peut faire office de traduction approximative, est l'un des verbes les plus fréquents de la langue en discours, notamment dans le genre narratif. Il mérite une attention particulière tant d'un point de vue fonctionnel que d'un point de vue formel. Ses spécificités, qui le distinguent de quelque autre type de syntagme prédicatif que ce soit, et en particulier des racines verbales régulières, sont en effet tout aussi frappantes de l'un de ces deux points de vue que de l'autre.

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<sup>350</sup>Ou *manner demonstrative verb* dans la terminologie proposée par Guérin (2015) dans une étude typologique consacrée à ce type de mot déictique relativement rare dans les langues du monde.

On remarquera notamment sa nature morphologique bipartite, un cas unique dans la langue (d'où le fait que je le désigne par une étiquette bipartite : /ñǎ-/ñâ- + -((rũ)gù)/). Dans la plupart de ses formes flexionnelles – à quelques exceptions près –, sa composante lexicale est représentée par deux éléments morphologiques séparés. Dans ces formes, un premier morphème /ñǎ-/ñâ-/ et un second morphème /-gù/-rũgù/, qui remplissent conjointement une seule et même fonction, sont séparés par un indice pronominal sujet (p. ex. /ñǎ-chā-rũgù/ ['faire.comme.ça-1SG.SBJ-faire.comme.ça'] 'je fais comme ça' ; la distribution morphologique des allomorphes /ñǎ-/ vs /ñâ-/, d'une part, et /-gù/ vs /-rũgù/, d'autre part, est corrélée pour l'essentiel à la personne de l'indice sujet et à la valeur du tiroir verbal).

Les propriétés sémantiques et syntaxiques particulières du verbe déictique sont traitées dans la SECTION 6.1, sa morphologie flexionnelle exceptionnelle, dans la SECTION 6.2, et la morphologie dérivationnelle limitée à laquelle il a accès, dans la SECTION 6.3.

## CHAPITRE 7 – Négation

Ce chapitre traite des morphèmes et constructions qui servent à rendre négative la polarité de la proposition. Le TABLEAU 49 (p.518) résume les constructions morphosyntaxiques qui servent à la réalisation de chacune des principales fonctions ayant trait à la polarité négative. Ces constructions et les fonctions qui leur sont associées sont décrites en détail dans les sections qui suivent (les numéros entre parenthèses dans le TABLEAU 49 indiquent la section dans laquelle est analysée chaque fonction). La plupart des fonctions listées dans le TABLEAU 49 sont examinées depuis une perspective typologique dans van der Auwera & Krasnoukhova (2020). L'organisation générale de ce chapitre est en grande partie fondée sur les classifications typologiques proposées par Miestamo (2017) et van der Auwera & Krasnoukhova (2020).





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# Index of grammatical morphemes

This index lists in alphabetical order all the more grammatical-like SMAT morphemes mentioned in this work together with all their allomorphs and lectal variants, if any. The numbers under each entry are references to all the pages where the corresponding morpheme is mentioned, whether within a grammatical discussion in the main text, within an elicited or extrapolated numbered example, within a spontaneous numbered example, or within the spontaneous interlinearized text in APPENDIX A.

This index is intended to serve three main purposes:

- provide a **general list of the morphemes** of the language;
- allow readers to easily **use this grammatical description as a corpus** of textual data for the study of these morphemes (and, in particular, for the study of those morphemes that are *not* explicitly described in this work);
- and give a **rough indication of the frequency** of these morphemes in my elicited and spontaneous data (beware, however, that the number of page references under a given entry does *not* directly reflect the number of textual occurrences of the corresponding morpheme in this work, as these page references also include main-text discussions of the morphemes as well as a handful of occurrences of the morphemes in extrapolated examples).

Recall that in most PDF viewers, the unabbreviated form of any gloss may be consulted by hovering over it with the mouse pointer. Page references are clickable.

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**-áchí ‘TEL’**

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**-áchí, -óchí ‘upslope’**

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Version Nov 4, 2020